

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

**Amendment No. 1**  
 to  
**FORM S-3**  
**REGISTRATION STATEMENT**  
**UNDER**  
**THE SECURITIES ACT OF 1933**

**FIVE PRIME THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

Delaware  
 (State or other jurisdiction of incorporation or organization)

26-0038620  
 (I.R.S. Employer Identification Number)

111 Oyster Point Boulevard  
 South San Francisco, California 94080  
 (415) 365-5600  
 (Address, including zip code, and telephone number, including area code of registrant's principal executive offices)

Aron M. Knickerbocker  
 President and Chief Executive Officer  
 Five Prime Therapeutics, Inc.  
 111 Oyster Point Boulevard  
 South San Francisco, California 94080  
 (415) 365-5600  
 (Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies to:*

Laura A. Berezin  
 Jaime L. Chase  
 Cooley LLP  
 3175 Hanover Street  
 Palo Alto, CA 94304  
 (650) 843-5000

Francis W. Sarena  
 Chief Strategy Officer and Secretary  
 Five Prime Therapeutics, Inc.  
 111 Oyster Point Boulevard  
 South San Francisco, California 94080  
 (415) 365-5600

**From time to time after the effective date of this registration statement**  
 (Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

## Explanatory Note

This Pre-Effective Amendment No. 1 (this "Amendment") to the Registration Statement on Form S-3 of Five Prime Therapeutics, Inc. (File No. 333-228206), initially filed on November 6, 2018 (the "Registration Statement"), is being filed as an exhibit-only filing to file an updated consent of Ernst & Young LLP, filed herewith as Exhibit 23.1 (the "Consent"). Accordingly, this Amendment consists only of the facing page, this explanatory note, Item 16 of Part II of the Registration Statement, the signature pages to the Registration Statement, and the Consent filed herewith as Exhibit 23.1. The prospectus and the balance of Part II of the Registration Statement are unchanged and have been omitted.

### Item 16. Exhibits and Financial Statement Schedules

<u>Exhibit Number</u>	<u>Description of Document</u>
3.1*	<a href="#"><u>Amended and Restated Certificate of Incorporation (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-36070), filed with the SEC on September 23, 2013).</u></a>
3.2*	<a href="#"><u>Amended and Restated Bylaws (incorporated herein by reference to Exhibit 3.4 to the Company's Registration Statement on Form S-1 (File No. 333-190194), filed with the SEC on July 26, 2013).</u></a>
4.1*	<a href="#"><u>Form of Common Stock Certificate of the Company (incorporated herein by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1/A (File No. 333-190194), filed with the SEC on September 4, 2013).</u></a>
5.1*	<a href="#"><u>Opinion of Cooley LLP.</u></a>
23.1	<a href="#"><u>Consent of Independent Registered Public Accounting Firm.</u></a>
23.2*	<a href="#"><u>Consent of Cooley LLP (included in Exhibit 5.1).</u></a>
24.1*	<a href="#"><u>Power of Attorney (included on signature page).</u></a>

\* Previously filed.

## SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on the 19th day of August, 2019.

### FIVE PRIME THERAPEUTICS, INC.

By: /s/ Aron M. Knickerbocker  
Aron M. Knickerbocker  
President and Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Aron M. Knickerbocker and Francis W. Sarena, and each of them, his true and lawful agent, proxy and attorney-in-fact, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to (i) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (ii) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (iii) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (iv) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Aron M. Knickerbocker</u> Aron M. Knickerbocker	Chief Executive Officer, President and Director (Principal Executive Officer)	August 19, 2019
<u>/s/ David V. Smith</u> David V. Smith	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	August 19, 2019
<u>*</u> William R. Ringo	Chairman of the Board	August 19, 2019
<u>*</u> Franklin M. Berger	Director	August 19, 2019
<u>*</u> Kapil Dhingra, M.B.B.S.	Director	August 19, 2019
<u>*</u> Peder K. Jensen, M.D.	Director	August 19, 2019
<u>/s/ Lori Lyons-Williams</u> Lori Lyons-Williams	Director	August 19, 2019

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>*</u> Garry Nicholson	Director	August 19, 2019
<u>/s/ Carol Schafer</u> Carol Schafer	Director	August 19, 2019
<u>*</u> Lewis T. Williams, M.D., Ph.D.	Director	August 19, 2019

\*By: /s/ Francis W. Sarena  
Francis W. Sarena  
Attorney-in-Fact

**Consent of Independent Registered Public Accounting Firm**

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of Five Prime Therapeutics, Inc. for the registration of up to \$250,000,000 of common stock and to the incorporation by reference therein of our report dated February 26, 2019 with respect to the financial statements of Five Prime Therapeutics included in its Annual Report (Form 10-K) for the year ended December 31, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Francisco, California  
August 19, 2019