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

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

MAGENTA THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

81-0724163
(I.R.S. Employer
Identification No.)

**100 Technology Square
Cambridge, Massachusetts 02139
(857) 242-0170**
(Address of Principal Executive Offices)

MAGENTA THERAPEUTICS, INC. 2018 STOCK OPTION AND INCENTIVE PLAN
(Full title of the plan)

**Jason Gardner
President and Chief Executive Officer
Magenta Therapeutics, Inc.
100 Technology Square
Cambridge, Massachusetts 02139**
(Name and address of agent for service)

(857) 242-0170
(Telephone number, including area code, of agent for service)

Copies to:

**Mitchell S. Bloom, Esq.
William D. Collins, Esq.
Goodwin Procter LLP
100 Northern Avenue
Boston, Massachusetts 02210
(617) 570-1000**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an 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

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

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 pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price per Share(2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share	1,332,201 shares(3)	\$13.92	\$18,544,237.92	\$2,247.56

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall also cover any additional shares of common stock which become issuable under the Registrant's 2018 Stock Option and Incentive Plan (the "Plan") by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of common stock.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) of the Securities Act, and based on the average of the high and low sale prices of the Registrant's common stock, as quoted on the Nasdaq Global Market, on March 14, 2019.
- (3) Represents an automatic increase of 1,332,201 shares of Common Stock to the number of shares available for issuance under the Plan, effective January 1, 2019. Shares available for issuance under the Plan were previously registered on a registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2018 (Registration No. 333-225838).

EXPLANATORY NOTE

This Registration Statement on Form S-8 registers 1,332,201 additional shares of Common Stock under the Registrant's 2018 Stock Option and Incentive Plan (the "Plan"). The number of shares of Common Stock reserved and available for issuance under the Plan is subject to an automatic annual increase on each January 1, beginning in 2019, by an amount equal to four percent of the number of shares of Common Stock issued and outstanding on the immediately preceding December 31 or such lesser number of shares of Common Stock as determined by the Administrator (as defined in the Plan). Accordingly, on January 1, 2019, the number of shares of Common Stock reserved and available for issuance under the Plan increased by 1,332,201. The additional shares are of the same class as other securities relating to the Plan for which the Registrant's registration statement filed on Form S-8 (Registration No. 333-225838) on June 22, 2018, is effective. The information contained in the Registrant's registration statement on Form S-8 (Registration No. 333-225838) is hereby incorporated by reference pursuant to General Instruction E.

Part II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
4.1	<u>Amended and Restated Certificate of Incorporation of the Registrant (Incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38541) filed with the Securities and Exchange Commission on June 25, 2018).</u>
4.2	<u>Amended and Restated By-laws of the Registrant (Incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-38541) filed with the Securities and Exchange Commission on June 25, 2018).</u>
4.3	<u>Form of common stock certificate of the Registrant (Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-225178) filed with the Securities and Exchange Commission on May 24, 2018).</u>
4.4	<u>Second Amended and Restated Investors' Rights Agreement by and among the Registrant and certain of its stockholders dated April 2, 2018 (Incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-225178) filed with the Securities and Exchange Commission on May 24, 2018).</u>
5.1*	<u>Opinion of Goodwin Procter LLP.</u>
23.1*	<u>Consent of KPMG LLP, independent registered public accounting firm.</u>
23.2*	<u>Consent of Goodwin Procter LLP (included in Exhibit 5.1).</u>
24.1*	<u>Power of Attorney (included on signature page).</u>
99.1	<u>2018 Stock Option and Incentive Plan and forms of option agreements thereunder (Incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1/A (File No. 333-225178) filed with the Securities and Exchange Commission on June 8, 2018).</u>

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on March 19, 2019.

Magenta Therapeutics, Inc.

By: /s/ Jason Ryan

Jason Ryan
Chief Operating and Financial Officer
(Principal Financial and Accounting Officer)

POWER OF ATTORNEY AND SIGNATURES

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jason Gardner and Jason Ryan, and each of them, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them, for such person in such person's, place and stead, in any and all capacities, to sign for us and in our names in the capacities indicated below the Registration Statement on Form S-8 of Magenta Therapeutics, Inc., and any or all amendments (including post-effective amendments), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-8 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/ Jason Gardner</u> Jason Gardner, D.Phil.	President, Chief Executive Officer and Director (Principal Executive Officer)	March 19, 2019
<u>/s/ Jason Ryan</u> Jason Ryan	Chief Operating and Financial Officer (Principal Financial and Accounting Officer)	March 19, 2019
<u>/s/ Jeffrey Albers</u> Jeffrey Albers	Director	March 19, 2019
<u>/s/ Michael W. Bonney</u> Michael W. Bonney	Director	March 19, 2019
<u>/s/ Bruce Booth</u> Bruce Booth, D.Phil.	Director	March 19, 2019
<u>/s/ Alexis A. Borisy</u> Alexis A. Borisy	Director	March 19, 2019
<u>Blake Byers, Ph.D.</u>	Director	March 19, 2019
<u>/s/ Thomas O. Daniel</u> Thomas O. Daniel, M.D.	Director	March 19, 2019
<u>/s/ Amy L. Ronneberg</u> Amy L. Ronneberg	Director	March 19, 2019
<u>/s/ David T. Scadden</u> David T. Scadden, M.D.	Director	March 19, 2019

March 19, 2019

Magenta Therapeutics, Inc.
100 Technology Square
Cambridge, MA 02139

Re: Securities Being Registered under Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 1,332,201 shares (the "Shares") of common stock, \$0.001 par value per share (the "Common Stock"), of Magenta Therapeutics, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2018 Stock Option and Incentive Plan (the "Plan").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

For purposes of the opinion set forth below, we have assumed that no event occurs that causes the number of authorized shares of Common Stock available for issuance by the Company to be less than the number of then unissued Shares.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Plan, will be validly issued, fully paid and nonassessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Magenta Therapeutics, Inc.:

We consent to the use of our report dated March 19, 2019 with respect to the consolidated balance sheets of Magenta Therapeutics, Inc. as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the years in the three year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"), incorporated herein by reference.

/s/ KPMG LLP

Cambridge, Massachusetts
March 19, 2019