

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

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

LOGICBIO THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

47-1514975
(I.R.S. Employer
Identification No.)

66 Hayden Avenue, 2nd Floor
Lexington, MA
(Address of Principal Executive Offices)

02421
(Zip Code)

2018 Equity Incentive Plan
2018 Employee Stock Purchase Plan
(Full titles of the plans)

Frederic Chereau
President and Chief Executive Officer
LogicBio Therapeutics, Inc.
66 Hayden Avenue, 2nd Floor
Lexington, MA 02421
(Name and address of agent for service)

(617) 245-0399
(Telephone number, including area code, of agent for service)

Please send copies of all communications to:

Marc A. Rubenstein
Ropes & Gray LLP
Prudential Tower
800 Boylston Street
Boston, MA 02199-3600
617-951-7000

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

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
LogicBio Therapeutics, Inc. 2018 Equity Incentive Plan – Common Stock, \$0.0001 par value per share	1,272,547 shares(2)	\$7.87(3)	\$10,014,944.89	\$ 1,092.63

LogicBio Therapeutics, Inc. 2018 Employee Stock Purchase Plan – Common Stock, \$0.0001 par value per share	318,136 shares(4)	\$7.87(5)	\$ 2,503,730.32	\$ 273.16
TOTAL	1,590,683 shares		\$12,518,675.21	\$ 1,365.79

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, this Registration Statement also covers such additional shares of Common Stock as may issued to prevent dilution from stock splits, stock dividends and similar transactions.
- (2) Represents shares of Common Stock automatically added to the shares authorized under the LogicBio Therapeutics, Inc. 2018 Equity Incentive Plan (the “2018 Incentive Plan”) on January 1, 2021 pursuant to an “evergreen” provision contained in the 2018 Incentive Plan. The “evergreen” provision provides that on each January 1st through January 1, 2028, the number of shares of Common Stock available for issuance under the 2018 Incentive Plan will automatically increase annually in an amount equal to the lesser of 4% of outstanding shares of the registrant’s Common Stock as of the close of business on the immediately preceding December 31st or the number of shares determined by the registrant’s board of directors.
- (3) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(h) based on the average of the high and low prices of the registrant’s Common Stock as reported on the Nasdaq Global Market on March 8, 2021 to be \$8.13 and \$7.60, respectively.
- (4) Represents shares of Common Stock that were automatically added to the shares authorized under the LogicBio Therapeutics, Inc. 2018 Employee Stock Purchase Plan (the “2018 ESPP”) on January 1, 2021 pursuant to an “evergreen” provision contained in the 2018 ESPP. The “evergreen” provision provides that on each January 1st through January 1, 2028, the number of shares of Common Stock available for issuance under the 2018 ESPP will automatically increase annually in an amount equal to the lesser of 1% of outstanding shares of the registrant’s Common Stock as of the close of business on the immediately preceding December 31st or the number of shares determined by the registrant’s board of directors.
- (5) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(h) based on the average of the high and low prices of the registrant’s Common Stock as reported on the Nasdaq Global Market on March 8, 2021 to be \$8.13 and \$7.60, respectively.

EXPLANATORY NOTE

This Registration Statement has been filed by LogicBio Therapeutics, Inc. (the “Registrant”) to register 1,272,547 additional shares of common stock to be offered pursuant to the LogicBio Therapeutics, Inc. 2018 Equity Incentive Plan and 318,136 additional shares of common stock to be offered pursuant to the LogicBio Therapeutics, Inc. 2018 Employee Stock Purchase Plan.

This Registration Statement relates to securities of the same class as those that were previously registered by the Registrant on [Form S-8](#) (File No. 333-230689), filed with the Securities and Exchange Commission on April 2, 2019 (the “2019 Registration Statement”). Pursuant to General Instruction E to Form S-8 regarding registration of additional securities, the entire contents of the 2019 Registration Statement are incorporated herein by reference.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

Exhibit

- 4.1 [Fourth Amended and Restated Certificate of Incorporation \(previously filed as Exhibit 3.1 to the current report Form 8-K filed on October 29, 2018 \(File No. 001-38707\) and incorporated herein by reference\).](#)
- 4.2 [Amended and Restated Bylaws \(previously filed as Exhibit 3.2 to the current report Form 8-K filed on October 29, 2018 \(File No. 38707\) and incorporated herein by reference\).](#)
- 4.3 [LogicBio Therapeutics, Inc. 2018 Equity Incentive Plan \(previously filed as Exhibit 10.11 to the registration statement on Form S-1 \(File No. 333-227523\) and incorporated herein by reference\).](#)
- 4.4 [LogicBio Therapeutics, Inc. 2018 Employee Stock Purchase Plan \(previously filed as Exhibit 10.9 to the registration statement on Form S-1 \(File No. 333-227523\) and incorporated herein by reference\).](#)
- 5.1 [Opinion of Ropes & Gray LLP.](#)
- 23.1 [Consent of Independent Registered Public Accounting Firm.](#)
- 23.2 [Consent of Ropes & Gray LLP \(included in the opinion filed as Exhibit 5.1\).](#)
- 24.1 [Powers of Attorney \(included on the signature page in Part II\).](#)

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Lexington, Commonwealth of Massachusetts, on this 15th day of March, 2021.

LOGICBIO THERAPEUTICS, INC.

By: /s/ Frederic Chereau

Name: Frederic Chereau

Title: President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Frederic Chereau, Kyle Chiang and Cecilia Jones, and each of them acting individually, his or her true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 to be filed by LogicBio Therapeutics, Inc., 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 full power and authority to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitutes, may lawfully do or cause to be done by virtue hereof.

* * * *

Pursuant to the requirements of the Securities Act of 1933, 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/ Frederic Chereau</u> Frederic Chereau	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	March 15, 2021
<u>/s/ Cecilia Jones</u> Cecilia Jones	Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	March 15, 2021
<u>/s/ Leon Chen</u> Leon Chen, Ph.D.	Director	March 15, 2021
<u>/s/ Mark Enyedy</u> Mark Enyedy	Director	March 15, 2021
<u>/s/ Jeff Goater</u> Jeff Goater	Director	March 15, 2021
<u>/s/ Daphne Karydas</u> Daphne Karydas	Director	March 15, 2021
<u>/s/ Mark Kay</u> Mark Kay, M.D., Ph.D.	Director	March 15, 2021

/s/ Richard Moscicki
Richard Moscicki, M.D.

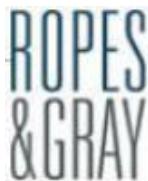
Director

March 15, 2021

/s/ Michael Wyzga
Michael Wyzga

Director

March 15, 2021



ROPES & GRAY LLP
PRUDENTIAL TOWER
800 BOYLSTON STREET
BOSTON, MA 02199-3600
WWW.ROPESGRAY.COM

March 15, 2021

LogicBio Therapeutics, Inc.
66 Hayden Avenue, 2nd Floor
Lexington, MA 02421

Ladies and Gentlemen:

This opinion letter is furnished to you in connection with the registration statement on Form S-8 (the "Registration Statement"), filed by LogicBio Therapeutics, Inc., a Delaware corporation (the "Company"), on the date hereof, with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of 1,590,683 shares of common stock, \$0.0001 par value, of the Company (the "Shares"). The Shares are issuable under the LogicBio Therapeutics, Inc. 2018 Equity Incentive Plan and the LogicBio Therapeutics, Inc. 2018 Employee Stock Purchase Plan (each, a "Plan," and collectively, the "Plans").

We are familiar with the actions taken by the Company in connection with the adoption of the Plans. We have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the Delaware General Corporation Law.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued and sold in accordance with the terms of the applicable Plan, will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement. In giving such consent, we do not thereby 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/ Ropes & Gray LLP

Ropes & Gray LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 15, 2021, relating to the financial statements of LogicBio Therapeutics, Inc. appearing in the Annual Report on Form 10-K of LogicBio Therapeutics, Inc. for the year ended December 31, 2020.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 15, 2021