

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

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

GENERATION BIO CO.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

81-4301284
(I.R.S. Employer
Identification No.)

**301 Binney Street
Cambridge, MA 02142
(617) 655-7500**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Geoff McDonough, M.D.
President and Chief Executive Officer
Generation Bio Co.
301 Binney Street
Cambridge, MA 02142
(617) 655-7500**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Stuart M. Falber, Esq.
Molly W. Fox, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, Massachusetts 02109
Telephone: (617) 526-6000**

**Jennifer Elliott, Ph.D., Esq.
Chief Legal Officer
Generation Bio Co.
301 Binney Street
Cambridge, MA 02142
(617) 655-7500**

**Deanna Kirkpatrick, Esq.
Yasin Keshvargar, Esq.
Davis Polk & Wardwell LLP
450 Lexington Avenue
New York, NY 10017
(212) 450-4000**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

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, 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, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. 333-238608

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 post-effective amendment filed pursuant to Rule 462(d) 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.

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

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 Each Class of Securities to Be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock, \$0.0001 par value per share	605,263 shares	\$19.00	\$11,499,997	\$1,493

(1) Includes 78,947 shares of common stock the underwriters have the option to purchase.

(2) Calculated pursuant to Rule 457(a) under the Securities Act of 1933, as amended, based on the initial public offering price.

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This registration statement is being filed with respect to the registration of additional shares of common stock, par value \$0.0001 per share, of Generation Bio Co., a Delaware corporation, pursuant to Rule 462(b) under the Securities Act of 1933, as amended. The contents of the earlier registration statement on Form S-1 (File No. 333-238608), which was declared effective by the Securities and Exchange Commission on June 11, 2020, are incorporated in this registration statement by reference.

The required opinions and consents are listed on an Exhibit Index attached hereto and filed herewith.

EXHIBIT INDEX

<u>Exhibit number</u>	<u>Description of exhibit</u>
5.1	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
23.1	Consent of Ernst & Young LLP
23.2	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
24.1	Power of Attorney (incorporated by reference to the signature page to the Registrant's Registration Statement on Form S-1 (File No. 333-238608) filed with the Commission on May 22, 2020)

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant 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 this 11th day of June, 2020.

GENERATION BIO CO.

By:

Geoff McDonough, M.D.
President and Chief Executive Officer

/s/ Geoff McDonough

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/ Geoff McDonough</u> Geoff McDonough, M.D.	President, Chief Executive Officer and Director (principal executive officer)	June 11, 2020
<u>/s/ Stephen DiPalma</u> Stephen DiPalma	Interim Chief Financial Officer (principal financial officer)	June 11, 2020
* <u>Catherine Stehman-Breen, M.D.</u>	Director	June 11, 2020
* <u>Gustav Christensen</u>	Director	June 11, 2020
* <u>Jeffrey Jonas, M.D.</u>	Director	June 11, 2020
* <u>Donald Nicholson, Ph.D.</u>	Director	June 11, 2020
* <u>Jason Rhodes</u>	Director	June 11, 2020
* <u>Charles Rowland</u>	Director	June 11, 2020
* <u>Anthony Quinn, M.B. Ch.B., Ph.D.</u>	Director	June 11, 2020

*By: /s/ Geoff McDonough
Geoff McDonough, M.D.
Attorney-in-fact

June 11, 2020

Generation Bio Co.
301 Binney Street
Cambridge, MA 02142

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Re: Registration Statement on Form S-1

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-1 (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Rule 462(b) of the Securities Act, for the registration of 605,263 shares of Common Stock, \$0.0001 par value per share (the "Shares"), of Generation Bio Co., a Delaware corporation (the "Company"), including 78,947 Shares issuable upon exercise of an option to purchase additional shares granted by the Company.

The Shares are to be sold by the Company pursuant to an underwriting agreement (the "Underwriting Agreement") to be entered into by and among the Company and J.P. Morgan Securities LLC, Jefferies LLC and Cowen and Company LLC, as representatives of the several underwriters named in the Underwriting Agreement, the form of which has been incorporated by reference into the Registration Statement.

We are acting as counsel for the Company in connection with the issue and sale by the Company of the Shares. We have examined signed copies of the Registration Statement as filed with the Commission. We have also examined and relied upon the Underwriting Agreement, minutes of meetings and actions of the stockholders and the Board of Directors of the Company as provided to us by the Company, stock record books of the Company as provided to us by the Company, the Certificate of Incorporation and Bylaws of the Company, each as restated and/or amended to date, and such other documents as we have deemed necessary for purposes of rendering the opinions hereinafter set forth.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Underwriting Agreement, the Shares will be validly issued, fully paid and nonassessable.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

June 11, 2020

Page 2

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related Prospectus under the caption "Legal matters." In giving such consent, we do not hereby 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 of the Commission.

Very truly yours,

WILMER CUTLER PICKERING
HALE AND DORR LLP

By: /s/ Stuart M. Falber

Stuart M. Falber, a Partner

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption “Experts” and to the incorporation by reference of our report dated April 9, 2020 (except for Note 13(d), as to which the date is June 8, 2020), with respect to the consolidated financial statements of Generation Bio Co. included in Amendment No. 2 to the Registration Statement (Form S-1 No. 333-238608) and the related Prospectus of Generation Bio Co. for the registration of its common stock.

/s/ Ernst & Young LLP

Boston, Massachusetts
June 11, 2020