

---

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

---

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

---

**2seventy bio, Inc.**

(Exact Name of Registrant as Specified in its Charter)

---

**Delaware**  
(State or Other Jurisdiction  
of Incorporation or Organization)

**86-3658454**  
(I.R.S. Employer  
Identification No.)

**2seventy bio, Inc.**  
**60 Binney Street**  
**Cambridge, MA 02142**  
**(339) 499-9300**  
(Address of Principal Executive Offices)  
**2021 Stock Option and Incentive Plan**  
**2021 Employee Stock Purchase Plan**  
(Full Title of the Plan)

---

**Nick Leschly**  
**President and Chief Executive Officer**  
**2seventy bio, Inc.**  
**60 Binney Street**  
**Cambridge, MA 02142**  
**(339) 499-9300**  
(Name and Address of Agent For Service)

*Copy to:*

**Michael H. Bison, 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, small reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "small reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

|                         |                                     |                           |                                     |
|-------------------------|-------------------------------------|---------------------------|-------------------------------------|
| Large accelerated filer | <input type="checkbox"/>            | Accelerated filer         | <input type="checkbox"/>            |
| Non-accelerated filer   | <input checked="" type="checkbox"/> | Smaller reporting company | <input 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 13(a) of the Exchange Act.

---

---

**CALCULATION OF REGISTRATION FEE**

| Title of Securities<br>to be Registered    | Amount<br>to be<br>Registered <sup>(1)</sup> | Proposed Maximum<br>Offering Price<br>per Share | Proposed Maximum<br>Aggregate<br>Offering Price | Amount of<br>Registration<br>Fee |
|--|--|---|---|----------------------------------|
| Common Stock, \$0.0001 par value per share | 6,046,124 shares <sup>(2)</sup>              | \$2.08 <sup>(4)</sup>                           | \$12,597,074                                    | \$1,167.75                       |
| Common Stock, \$0.0001 par value per share | 233,302 shares <sup>(3)</sup>                | \$1.77 <sup>(5)</sup>                           | \$413,172                                       | \$38.30                          |
| <b>TOTAL</b>                               | 6,279,426 shares                             |   | \$13,010,246                                    | \$1,206.05                       |

- (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 the Registrant’s common stock, par value \$0.0001 per share (the “Common Stock”), that become issuable under the 2seventy bio, Inc. 2021 Stock Option and Incentive Plan (the “Incentive Plan”) or the 2seventy bio, Inc. 2021 Employee Stock Purchase Plan (the “ESPP”) by reason of any stock dividend, stock split, recapitalization or any other similar transactions.
- (2) Represents shares of Common Stock authorized for issuance under the Incentive Plan, including the estimated number of shares of Common Stock underlying 2seventy Options and 2seventy RSUs (each as defined in the Employee Matters Agreement to be entered into by and between bluebird bio, Inc. and the Registrant concurrently with or prior to the distribution of all of the issued and outstanding shares of Common Stock to the holders of record, as of October 19, 2021, of bluebird bio, Inc. common stock (the “Employee Matters Agreement”)) to be issued pursuant to the adjustment of bluebird Options and bluebird RSUs (each as defined in the Employee Matters Agreement) in accordance with the terms of the Employee Matters Agreement.
- (3) Represents shares of Common Stock authorized for issuance under the ESPP. In addition, pursuant to Rule 416(c) under the Securities Act, this Registration Statement also covers an indeterminate amount of interests to be offered or sold pursuant to the ESPP. In accordance with Rule 457(h) (2), no separate fee calculation is made for plan interests.
- (4) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(a) of the Securities Act. Given that there is no proposed maximum offering price per share of Common Stock, the Registrant calculates the proposed maximum aggregate offering price by analogy to Rule 457(f)(2), based on the book value of the Common Stock the Registrant registers, which was calculated from its unaudited balance sheet as of June 30, 2021. Because there is no market for the Common Stock as of the date hereof, the registrant did not use the market prices of its Common Stock in accordance with Rule 457(c).
- (5) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(a) of the Securities Act. Given that there is no proposed maximum offering price per share of Common Stock, the Registrant calculates the proposed maximum aggregate offering price by analogy to Rule 457(f)(2), based on the book value of the Common Stock the Registrant registers, which was calculated from its unaudited balance sheet as of June 30, 2021. Because there is no market for the Common Stock as of the date hereof, the registrant did not use the market prices of its Common Stock in accordance with Rule 457(c). Pursuant to the ESPP, the purchase price of the shares of Common Stock reserved for issuance thereunder will be at least 85% of the lower of the fair market value of a share of Common Stock on the first trading day of the offering period or on the exercise date.

**PART I**  
**INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS**

**Item 1. Plan Information.**

The documents containing the information specified in this Item 1 will be sent or given to participants as specified by Rule 428(b)(1) under the Securities Act. In accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission") and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act.

**Item 2. Registrant Information and Employee Plan Annual Information.**

The documents containing the information specified in this Item 2 will be sent or given to participants as specified by Rule 428(b)(1) under the Securities Act. In accordance with the rules and regulations of the Commission and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act.

**PART II**  
**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference.**

The following documents filed with the Commission by the Registrant are incorporated by reference into this Registration Statement:

- (a) The Registrant's Registration Statement on [Form 10](#), as filed with the SEC under the Securities Exchange Act of 1934, as amended (File No. 001-40791) (the "Form 10"); and
- (b) The Registrant's Current Report on [Form 8-K](#) (File No. 001-40791) filed with the SEC on October 18, 2021;
- (c) The description of the Registrant's Common Stock contained in the Information Statement filed with the SEC as [Exhibit 99.1 to the Form 10](#), including any amendments or reports filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the filing of a post-effective amendment to the Registration Statement which indicates that all of the shares registered hereunder have been sold or which deregisters all of such shares then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the respective dates of filing of such documents; provided, however, that documents or information deemed to have been furnished and not filed in accordance with Commission rules shall not be deemed incorporated by reference into this Registration Statement. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such earlier statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

**Item 4. Description of Securities.**

Not applicable.

**Item 5. Interests of Named Experts and Counsel.**

Not applicable.

**Item 6. Indemnification of Directors and Officers.**

Section 145 of the Delaware General Corporation Law authorizes a corporation's board of directors to grant, and authorizes a court to award, indemnity to officers, directors and other corporate agents.

The Registrant's amended and restated certificate of incorporation and amended and restated bylaws contain provisions that limit the liability of the Registrant's directors and officers for monetary damages to the fullest extent permitted by Delaware law. Consequently, a director will not be personally liable to the Registrant or its stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for the following:

- any breach of their duty of loyalty to the Registrant or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which they derived an improper personal benefit.

Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment or repeal. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of a director will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, the Registrant's amended and restated bylaws provide that the Registrant will indemnify, to the fullest extent permitted by law, any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of its directors or officers or is or was serving at its request as a director or officer of another corporation, partnership, joint venture, trust or other enterprise. The Registrant's amended and restated bylaws provide that it may indemnify to the fullest extent permitted by law any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of its employees or agents or is or was serving at its request as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The Registrant's amended and restated bylaws also provides that it must advance expenses incurred by or on behalf of a director in advance of the final disposition of any action or proceeding, subject to very limited exceptions.

Further, the Registrant has entered into indemnification agreements with each of its directors and executive officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements will require the Registrant, among other things, to indemnify its directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements will also require the Registrant to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding. The Registrant believes that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

The limitation of liability and indemnification provisions included in the Registrant's amended and restated certificate of incorporation, amended restated bylaws and in indemnification agreements that it enters into with its directors and executive officers may discourage stockholders from bringing a lawsuit against its directors and executive officers for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against its directors and executive officers, even though an action, if successful, might benefit the Registrant and other stockholders. Further, a stockholder's investment may be harmed to the extent that the Registrant pays the costs of settlement and damage awards against directors and executive officers as required by these indemnification provisions. At present, the Registrant is not aware of any pending litigation or proceeding involving any person who

is or was one of its directors, officers, employees or other agents or is or was serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, for which indemnification is sought, and the Registrant is not aware of any threatened litigation that may result in claims for indemnification.

The Registrant has or expects to obtain insurance policies under which, subject to the limitations of the policies, coverage is provided to its directors and executive officers against losses arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims relating to public securities matters, and to the Registrant with respect to payments that may be made by the Registrant to these directors and executive officers pursuant to its indemnification obligations or otherwise as a matter of law.

See also the Undertakings set forth in the response to Item 9 herein.

**Item 7. Exemption from Registration Claimed.**

Not applicable.

**Item 8. Exhibits.**

| Exhibit Number | Exhibit Title  | Form     | Incorporated by Reference |         |             | Filed Herewith |
|----------------|--|----------|---------------------------|---------|-------------|----------------|
|                |  |          | File No.                  | Exhibit | Filing Date |                |
| 4.1            | <a href="#">Amended and Restated Certificate of Incorporation.</a>                               | 10-12B/A | 001-40791                 | 3.1     | 10/8/21     |                |
| 4.2            | <a href="#">Amended and Restated Bylaws.</a>   | 10-12B/A | 001-40791                 | 3.2     | 10/8/21     |                |
| 5.1            | <a href="#">Opinion of Goodwin Procter LLP.</a>  |          |                           |         |             | X              |
| 23.1           | <a href="#">Consent of Ernst &amp; Young LLP, Independent Registered Public Accounting Firm.</a> |          |                           |         |             | X              |
| 23.2           | <a href="#">Consent of Goodwin Procter LLP (included in Exhibit 5.1).</a>                        |          |                           |         |             |                |
| 24.1           | <a href="#">Power of Attorney (contained on signature page hereto).</a>                          |          |                           |         |             |                |
| 99.1           | <a href="#">2021 Stock Option and Incentive Plan, and forms of agreements thereunder.</a>        | 10-12B/A | 001-40791                 | 10.8    | 10/8/21     |                |
| 99.2           | <a href="#">2021 Employee Stock Purchase Plan.</a>   | 10-12B/A | 001-40791                 | 10.9    | 10/8/21     |                |

**Item 9. Undertakings.**

- (a) The undersigned Registrant hereby undertakes:
  - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
    - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
    - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

*Provided, however,* that paragraphs (a)(1)(i) and (a)(1)(ii) of this section shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

## 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 November 1, 2021.

**2seventy bio, Inc.**

By:

/s/ Nick Leschly

---

Nick Leschly

President and Chief Executive Officer

## POWER OF ATTORNEY

We, the undersigned officers and directors of 2seventy bio, Inc., hereby severally constitute and appoint Nick Leschly and William D. Baird III, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign for us and in our names in the capacities indicated below any and all amendments (including post-effective amendments) to this registration statement, 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 and about the premises, as full 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 their or his substitute or substitutes, 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 has been signed by the following persons in the capacities indicated below on November 1, 2021.

| <u>Name</u>   | <u>Title</u>   |
|---|--|
| <u>/s/ Nick Leschly</u><br>Nick Leschly                   | President, Chief Executive Officer and Director<br><i>(Principal Executive Officer)</i>          |
| <u>/s/ William D. Baird</u><br>William D. Baird III       | Chief Financial Officer<br><i>(Principal Financial Officer and Principal Accounting Officer)</i> |
| <u>/s/ Daniel S. Lynch</u><br>Daniel S. Lynch             | Director   |
| <u>/s/ Sarah Glickman</u><br>Sarah Glickman               | Director   |
| <u>/s/ Ramy Ibrahim</u><br>Ramy Ibrahim, M.D.             | Director   |
| <u>/s/ Denice Torres</u><br>Denice Torres                 | Director   |
| <u>/s/ Marcela Maus</u><br>Marcela Maus, M.D., Ph.D.      | Director   |
| <u>/s/ William R. Sellers</u><br>William R. Sellers, M.D. | Director   |



November 1, 2021

2seventy bio, Inc.  
60 Binney Street  
Cambridge, MA 02142

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

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 6,279,426 shares (the "Shares") of Common Stock, \$0.0001 par value per share ("Common Stock"), of 2seventy bio, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Company's 2021 Stock Option and Incentive Plan, and 2021 Employee Stock Purchase Plan (collectively, the "Plans").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions 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 Plans, 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.

yours,

Procter LLP

PROCTER LLP

Very truly

/s/ Goodwin

GOODWIN

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2021 Stock Option and Incentive Plan and 2021 Employee Stock Purchase Plan of 2seventy bio, Inc. of our report dated May 11, 2021 with respect to the combined financial statements of 2seventy bio, Inc. included in its Registration Statement (Form 10), filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts  
November 1, 2021