FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL | | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | | |
| Estimated average burden | | | | | | | | | |
| hours per response: | 0.5 | | | | | | | | |

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

| 1. Name and Address of Reporting Person* Torres Denice (Last) (First) (Middle) 2SEVENTY BIO, INC. 60 BINNEY STREET (Street) CAMBRIDGE MA 02142 (City) (State) (Zip) | | | | | | 2. Issuer Name and Ticker or Trading Symbol 2seventy bio, Inc. [TSVT] 3. Date of Earliest Transaction (Month/Day/Year) 11/11/2021 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | S. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner Officer (give title Delow) 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
|---|--|--|--|------------------|---|--|---|--------|--|-------------------------|------------|--|-------------------|--|---|--|----------------|--|---------------------------------------|
| 1. Title of S | Security (Inst | nsactio | action 2A. Deemed Execution Date, if any | | | 3. Transa Code (| Disposed of, or Benefic 4. Securities Acquired (A) Disposed of (D) (Instr. 3, (Instr. 5) | | | |) or | r 5. Amount of | | | : Direct Indirect | 7. Nature of Indirect Beneficial | | | |
| | | | | (Month/Day/Year) | | | v | Amount | Amount (A) or (D) | | rice | | d tion(s) | | str. 4) | Ownership (Instr. 4) | | | |
| Common Stock ⁽¹⁾⁽²⁾⁽³⁾ 11/11 | | | | | | | /2021 | | A | | 492 | A | | \$ <mark>0</mark> | 4 | 92 | | D | |
| Common Stock ⁽²⁾⁽³⁾⁽⁴⁾ 11/1 | | | | | | /2021 | | A | | 2,002 | 2 A | | \$ <mark>0</mark> | 2,910(5) | | D | | | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution D if any (Month/Day/ | Date, | 4. Transaction Code (Instr. 8) | | Derivative I | | 6. Date Exercisa Expiration Date (Month/Day/Year | | • | 7. Title and Amount of Securities Underlying Derivative Secu (Instr. 3 and 4) | | urity | 8. Price of Derivative Security (Instr. 5) | 9. Numbe derivative Securities Beneficial Owned Following Reported | e S Illy | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) |
| | | | | | Code | . V (A) (D | | (D) | Date Exercisal | Date E Exercisable C | | Title | or Nu of | nount mber ares | | Transaction(s) (Instr. 4) | | | |
| Stock Option (right to buy) | \$102.14 | 11/11/2021 | | | A | | 1,476 ⁽⁶⁾ | | (7) | | 08/10/2030 | Commo Stock | 1, | 476 | \$0 | 1,476 | 5 | D | |
| Stock Option (right to buy) | \$50.98 | 11/11/2021 | | | A | | 3,219 ⁽⁶⁾ | | (8) | | 06/15/2031 | Commo Stock | 3, | 219 | \$0 | 3,219 |) | D | |

Explanation of Responses:

- 1. In connection with the separation (the "Separation") of seventy bio, Inc. ("2seventy") from bluebird bio, Inc. ("bluebird"), the reporting person received restricted stock units, each representing the right to receive a share of 2seventy's common stock, as a result of the adjustment of existing bluebird restricted stock units prior to the Separation (see footnotes 2 and 3). This restricted stock unit award vests ratably over three years in annual installments commencing on August 10, 2020.
- 2. bluebird equity awards granted prior to January 1, 2021 were converted into equity awards of both bluebird and 2seventy. The number of shares underlying the converted bluebird equity awards was determined by multiplying the number of shares underlying the existing bluebird equity award by a fraction, the numerator of which is the volume-weighted average trading price of bluebird common stock (trading "regular way") on the five trading days immediately prior to the distribution date (the "bluebird Pre-Distribution VWAP"), the denominator of which is the sum of (1) the volume-weighted average trading price of 2seventy common stock (trading "regular way") on the five trading days immediately following the distribution date (the "Distribution tratio and (2) the volume-weighted average trading price of bluebird common stock (trading "regular way") on the five trading days immediately following the distribution date (the "bluebird Post-Distribution VWAP").
- 3. The number of shares underlying the converted 2seventy equity awards was determined by multiplying the number of shares underlying the existing bluebird equity awards by a fraction, the numerator of which is the bluebird Pre-Distribution VWAP and the denominator of which is the sum of (1) the 2seventy VWAP multiplied by the distribution ratio and (2) the quotient obtained by dividing the bluebird Post-Distribution VWAP by the distribution ratio. bluebird equity awards granted on or after January 1, 2021, such equity awards were converted into 2seventy equity awards. The number of shares of 2seventy common stock underlying such converted equity awards is equal to the number of shares of bluebird common stock subject to the equity award immediately prior to the distribution multiplied by a fraction, the numerator of which is the bluebird Pre-Distribution VWAP and the denominator of which is the 2seventy VWAP.
- 4. In connection with the Separation, the reporting person received restricted stock units, each representing the right to receive a share of 2seventy's common stock, as a result of the adjustment of existing bluebird restricted stock units prior to the Separation (see footnotes 2 and 3). This restricted stock unit award vests 100% on the earlier of June 15, 2022 or the date of the next annual meeting of stockholders.
- 5. Includes 416 shares of 2seventy's common stock received in a pro rata distribution by bluebird as a result of the Separation.
- 6. Represents options to purchase shares of 2seventy's common stock granted to the reporting person in connection with the Separation (see footnotes 2 and 3).
- 7. This option vests ratably over three years in annual installments commencing on August 10, 2020 (see footnotes 2 and 3).
- 8. This option vests 100% on the earlier of June 15, 2022 or the date of the next annual meeting of stockholders (see footnotes 2 and 3).

Remarks:

**Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a). Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

/s/ Teresa Jurgensen, Attorney-

11/16/2021

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

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