

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL	
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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Heffron Nicola</u> (Last) (First) (Middle) 60 BINNEY STREET (Street) CAMBRIDGE MA 02142 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>2seventy bio, Inc. [TSVT]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) Chief Operating Officer
	3. Date of Earliest Transaction (Month/Day/Year) 11/11/2021	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock ⁽¹⁾⁽²⁾⁽³⁾	11/11/2021		A		2,953	A	\$0	2,953	D	
Common Stock ⁽²⁾⁽³⁾⁽⁴⁾	11/11/2021		A		2,461	A	\$0	5,414	D	
Common Stock ⁽²⁾⁽³⁾⁽⁵⁾	11/11/2021		A		8,854	A	\$0	14,268	D	
Common Stock ⁽²⁾⁽³⁾⁽⁶⁾	11/11/2021		A		21,210	A	\$0	35,478	D	
Common Stock ⁽²⁾⁽³⁾⁽⁷⁾	11/11/2021		A		21,209	A	\$0	57,783 ⁽⁸⁾	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 Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Stock Option (right to buy)	\$135.6	11/11/2021		A		11,486 ⁽⁹⁾		(10)	02/03/2030	Common Stock	11,486	\$0	11,486	D	
Stock Option (right to buy)	\$71.23	11/11/2021		A		4,922 ⁽⁹⁾		(11)	12/01/2030	Common Stock	4,922	\$0	4,922	D	
Stock Option (right to buy)	\$44.17	11/11/2021		A		17,709 ⁽⁹⁾		(12)	02/16/2031	Common Stock	17,709	\$0	17,709	D	

Explanation of Responses:

- 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 four years in annual installments commencing on February 3, 2021.
- 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 "2seventy VWAP") multiplied by the distribution ratio 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").
- 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.
- 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 ratably over four years in annual installments commencing on December 1, 2021.
- 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 ratably over four years in annual installments commencing on January 4, 2022.
- 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 over a two-year period at the rate of 40% on August 2, 2022 and 60% on August 2, 2023.
- 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 shall vest upon the satisfaction of certain performance criteria.
- Includes 1,096 shares of 2seventy's common stock received in a pro rata distribution by bluebird as a result of the Separation.
- 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).
- This option vests over a four-year period, at a rate of 25% on February 3, 2021 and in 36 equal monthly installments thereafter (see footnotes 2 and 3).
- This option vests over a four-year period, at a rate of 25% on December 1, 2021 and in 36 equal monthly installments thereafter (see footnotes 2 and 3).
- This option vests over a four-year period, at a rate of 25% on January 4, 2022 and in 36 equal monthly installments thereafter (see footnotes 2 and 3).

Remarks:

/s/ Teresa Jurgensen, Attorney- 11/16/2021
in-Fact

** 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).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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