

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

1. Name and Address of Reporting Person* <u>Leschly Nick</u>			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) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) President and CEO			
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <u>11/11/2021</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person			
2SEVENTY BIO, INC. 60 BINNEY STREET			4. If Amendment, Date of Original Filed (Month/Day/Year)						
(Street)	(City)	(State)	(Zip)						

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 Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock ⁽¹⁾⁽²⁾⁽³⁾	11/11/2021		A		2,461	A	\$0	2,461	D	
Common Stock ⁽²⁾⁽³⁾⁽⁴⁾	11/11/2021		A		4,102	A	\$0	6,563	D	
Common Stock ⁽²⁾⁽³⁾⁽⁵⁾	11/11/2021		A		7,999	A	\$0	14,562	D	
Common Stock ⁽²⁾⁽³⁾⁽⁶⁾	11/11/2021		A		11,591	A	\$0	26,153	D	
Common Stock ⁽²⁾⁽³⁾⁽⁷⁾	11/11/2021		A		33,038	A	\$0	59,191	D	
Common Stock ⁽²⁾⁽³⁾⁽⁸⁾	11/11/2021		A		50,425	A	\$0	191,301 ⁽⁹⁾	D	
Common Stock								15,233 ⁽¹⁰⁾	I	Nick Leschly 2001 Trust
Common Stock								41,000 ⁽¹¹⁾	I	Nick Leschly Irrevocable GST Trust of 2019

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	Amount or Number of Shares				
Stock Option (right to buy)	\$38	11/11/2021		A		54,149 ⁽¹²⁾		(13)	03/03/2024	Common Stock	54,149	\$0	54,149	D	
Stock Option (right to buy)	\$151.25	11/11/2021		A		54,149 ⁽¹²⁾		(13)	03/02/2025	Common Stock	54,149	\$0	54,149	D	
Stock Option (right to buy)	\$78.44	11/11/2021		A		29,535 ⁽¹²⁾		(13)	03/01/2026	Common Stock	29,535	\$0	29,535	D	
Stock Option (right to buy)	\$117.4	11/11/2021		A		36,099 ⁽¹²⁾		(13)	02/01/2027	Common Stock	36,099	\$0	36,099	D	
Stock Option (right to buy)	\$318.73	11/11/2021		A		39,381 ⁽¹²⁾		(14)	02/01/2028	Common Stock	39,381	\$0	39,381	D	
Stock Option (right to buy)	\$209.06	11/11/2021		A		32,817 ⁽¹²⁾		(15)	02/01/2029	Common Stock	32,817	\$0	32,817	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)	\$114.67	11/11/2021		A		21,331 ⁽¹²⁾		(16)	03/02/2030	Common Stock	21,331	\$0	21,331	D	
Stock Option (right to buy)	\$44.17	11/11/2021		A		57,957 ⁽¹²⁾		(17)	02/16/2031	Common Stock	57,957	\$0	57,957	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 footnote 16). This restricted stock unit award vests over a four-year period at a rate of 25% on 01/04/2019, 25% on 01/04/2020, 25% on 01/04/2021, and 25% on 01/04/2022.
- 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 a grant of 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 four-year period at a rate of 25% on 01/04/2020, 25% on 01/04/2021, 25% on 01/04/2022, and 25% on 01/04/2023.
- In connection with the Separation, the reporting person received a grant of 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 four-year period at the rate of 25% on 01/04/2021, 25% on 01/04/2022, 25% on 01/04/2023, and 25% on 01/04/2024.
- In connection with the Separation, the reporting person received a grant of 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 four-year period at the rate of 25% on 01/04/2022, 25% on 01/04/2023, 25% on 01/04/2024, and 25% on 01/04/2025.
- In connection with the Separation, the reporting person received a grant of 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 08/02/2022 and 60% on 08/02/2023.
- In connection with the Separation, the reporting person received a grant of 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 upon the satisfaction of certain performance criteria.
- Includes 81,685 shares of 2seventy's common stock received in a pro rata distribution by bluebird as a result of the Separation.
- Represents 15,233 shares of 2seventy's common stock received by the Nick Leschly 2001 Trust in a pro rata distribution by bluebird as a result of the Separation.
- Represents 41,000 shares of 2seventy's common stock received by the Nick Leschly Irrevocable GST Trust of 2019 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 is fully vested and exercisable as of the date hereof (see footnotes 2 and 3).
- This option vests over a four-year period, at a rate of 25% on 01/04/2019 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 01/04/2020 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 01/04/2021 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 01/04/2022 and in 36 equal monthly installments thereafter (see footnotes 2 and 3).

Remarks:

/s/ Teresa Jurgensen, Attorney-
in-Fact

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).

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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