FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL 3235-0287 OMB Number:

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 or Section 30(h) of the Investment Company Act of 1940

| | | | | | | | • | <i>'</i> | | | | | | | | | | | | | |
|--|---|---|---|--|---|---|--|----------|----|------------------------------------|------|----------------------------|---|--|--|---|---|-------------------------------|--|--|--|
| Name and Address of Reporting Person* Kerr Douglas | | | | | | 2. Issuer Name and Ticker or Trading Symbol Generation Bio Co. [GBIO] | | | | | | | | | | Relationship of eck all applion Director | cable) | g Pers | son(s) to Iss 10% Ov | | |
| (Last) (First) (Middle) C/O GENERATION BIO CO., 301 BINNEY | | | | ST | 3. Date of Earliest Transaction (Month/Day/Year) 01/15/2024 | | | | | | | | | | helow) | Officer (give title below) CHIEF MEDIC | | Other (s below) OFFICER | · | | |
| | | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable | | | | |
| (Street) CAMBRIDGE MA 02142 | | | | | | Line) X Form filed by One Repor Form filed by More than of Person | | | | | | | | | | | • | - 1 | | | |
| (City) (State) (Zip) | | | | | Rule 10b5-1(c) Transaction Indication | | | | | | | | | | | | | | | | |
| | | Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10. ivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | d to | | | | |
| | | Tab | le I - Nor | n-Deriv | ative | Se | curit | ies Ad | qı | uired, I | Dis | posed o | of, or | Ber | neficial | ly Owned | t . | | | | |
| 1. Title of Security (Instr. 3) | | | | 2. Transaction Date (Month/Day/Year) | | ar) | 2A. Deemed Execution Date, if any (Month/Day/Year | | | 3. Transac Code (Ir 8) | | 4. Securi Dispose 5) | s. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and Disposed Of (D) (Instr. 3) | | | Benefici Owned F | es ally Following | Form (D) o | : Direct r Indirect str. 4) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | | Code | v | Amount | (| A) or D) | Price | Reporte Transac (Instr. 3 | tion(s) | | | Instr. 4) | |
| Common Stock | | | | | 01/15/2024 | | | | | M | | 7,43 | 7 | A | (1) | 380, | 286(2) | D | | | |
| Common Stock | | | | 01/15 | 01/15/2024 | | | | | F | | 2,57 | 7 | D | \$1.9 | 1 377 | 377,709 | | D | | |
| Common Stock 0 | | | | | 15/2024 | | | | | M | | 6,694 | 4 | A | (1) | 384 | ,403 | D | | | |
| Common Stock 01/15 | | | | | 5/2024 | 1 | | | | F | | 2,320 | 0 | D | \$1.9 | 1 382 | 2,083 | | D | | |
| | | Т | | | | | | | | | | osed of onverti | | | | Owned | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deeme Execution if any (Month/Da | Date, | 4. Transactior Code (Instr 8) | | | | Ex | Date Exe cpiration lonth/Day | Date | | Amou Secur Unde Deriv | 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 (Instr. 4) | ly | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | v | (A) | (D) | | ate cercisable | | xpiration ate | Title | | Amount or Number of Shares | | | | | | |
| Restricted Stock Units | (1) | 01/15/2024 | | | M | | | 7,437 | | (3) | | (3) | Comr | | 7,437 | \$0 | 7,437 | | D | | |
| Restricted Stock Units | (1) | 01/15/2024 | | | M | | | 6,694 | | (4) | | (4) | Comr | | 6,694 | \$0 | 20,081 | | D | | |

Explanation of Responses:

- 1. Each restricted stock unit represents the right to receive one share of the company's common stock.
- 2. Includes 2,445 shares acquired under the company's employee stock purchase plan since October 17, 2023.
- 3. On January 21, 2022, the reporting person was granted 59,500 restricted stock units. The shares underlying the restricted stock units vest over two years, with 25% of the shares vested on July 15, 2022 and the remaining shares vesting in equal quarterly installments thereafter.
- 4. On January 20, 2023, the reporting person was granted 26,775 restricted stock units. The shares underlying the restricted stock units vest over four years, with 25% of the shares vested on January 15, 2024 and the remaining shares vesting in equal quarterly installments thereafter.

/s/ Benjamin Waters, Attorney- 01/17/2024 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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.