

**UNITED STATES SECURITIES AND EXCHANGE  
COMMISSION**

Washington, D.C. 20549

**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF  
SECURITIES**

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>Samayoa Phillip</u>  (Last) (First) (Middle) <u>C/O GENERATION BIO CO.</u> <u>301 BINNEY STREET, SUITE 401</u>  (Street) <u>CAMBRIDGE MA 02142</u>  (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>09/16/2022</u>	3. Issuer Name and Ticker or Trading Symbol <u>Generation Bio Co. [ GBIO ]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>CHIEF STRATEGY OFFICER</u>	5. If Amendment, Date of Original Filed (Month/Day/Year)  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

**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>Common Stock</u>	<u>92,905</u>	<u>D</u>	

**Table II - Derivative Securities Beneficially Owned  
(e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
<u>Stock Option (right to buy)</u>	<u>(1)</u>	<u>04/01/2028</u>	<u>Common Stock</u>	<u>6,750</u>	<u>4.5924</u>	<u>D</u>	
<u>Stock Option (right to buy)</u>	<u>(2)</u>	<u>03/04/2030</u>	<u>Common Stock</u>	<u>21,406</u>	<u>5.1576</u>	<u>D</u>	
<u>Stock Option (right to buy)</u>	<u>(3)</u>	<u>03/04/2030</u>	<u>Common Stock</u>	<u>31,138</u>	<u>5.1576</u>	<u>D</u>	
<u>Stock Option (right to buy)</u>	<u>(4)</u>	<u>01/21/2031</u>	<u>Common Stock</u>	<u>22,000</u>	<u>30.25</u>	<u>D</u>	
<u>Stock Option (right to buy)</u>	<u>(5)</u>	<u>03/31/2031</u>	<u>Common Stock</u>	<u>5,500</u>	<u>29.38</u>	<u>D</u>	
<u>Stock Option (right to buy)</u>	<u>(6)</u>	<u>05/02/2031</u>	<u>Common Stock</u>	<u>30,000</u>	<u>35.66</u>	<u>D</u>	
<u>Stock Option (right to buy)</u>	<u>(7)</u>	<u>01/20/2032</u>	<u>Common Stock</u>	<u>58,706</u>	<u>6.49</u>	<u>D</u>	
<u>Restricted Stock Units</u>	<u>(8)</u>	<u>(8)</u>	<u>Common Stock</u>	<u>24,750</u>	<u>(9)</u>	<u>D</u>	

**Explanation of Responses:**

- The option to purchase 36,007 shares was granted on April 2, 2018. The shares underlying the option vest over four years, with 25% of the shares vested on April 2, 2019 and the remaining shares vesting in equal quarterly installments thereafter.
- The option to purchase 31,138 shares was granted on March 5, 2020. The shares underlying the option vest over four years, with 25% of the shares vested on March 5, 2021 and the remaining shares vesting in equal quarterly installments thereafter.
- The option to purchase 31,138 shares was granted on March 5, 2020. The shares underlying the option vest in full upon the date on which the Board of Directors of the Issuer determines that the Issuer has dosed the initial patient in its first clinical trial, provided that such event occurs on or before July 1, 2023.
- The option to purchase 22,000 shares was granted on January 22, 2021. The shares underlying the option vest over four years, with 25% of the shares vested on January 22, 2022 and the remaining shares vesting in equal quarterly installments thereafter.
- The option to purchase 5,500 shares was granted on April 1, 2021. The shares underlying the option vest over two years, with 25% of the shares vested on October 1, 2021 and the remaining shares vesting in equal quarterly installments thereafter.
- The option to purchase 30,000 shares was granted on May 3, 2021. The shares underlying the option vest over four years, with 25% of the shares vested on May 3, 2022 and the remaining shares vesting in equal quarterly installments thereafter.
- The option to purchase 58,706 shares was granted on January 21, 2022. The shares underlying the option vest over four years, with 25% of the shares vesting on January 21, 2023 and the remaining shares vesting in equal quarterly installments thereafter.
- The grant of 33,000 restricted stock units was made on January 21, 2022. 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.
- Each restricted stock unit represents the right to receive one share of the company's common stock.

/s/ Benjamin Waters,  
Attorney-in-Fact

09/20/2022

\*\* 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 5 (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.**

## LIMITED POWER OF ATTORNEY FOR SECTION 16 REPORTING OBLIGATIONS

Know all by these presents, that the undersigned hereby makes, constitutes and appoints each of Geoff McDonough, M.D., Matthew Norkunas, M.D., MBA, Jennifer Elliott, Ph.D., J.D., Shawna-Gay White, J.D. and Benjamin Waters, J.D. (each an "Attorney-in-Fact"), signing singly and each acting individually, as the undersigned's true and lawful attorney-in-fact with full power and authority as hereinafter described to:

(1) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer, director and/or stockholder of Generation Bio Co. (the "Company"), Forms 3, 4, and 5 (including any amendments thereto) in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder (the "Exchange Act");

(2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to prepare, complete and execute any such Form 3, 4, or 5, prepare, complete and execute any amendment or amendments thereto, and timely deliver and file such form with the United States Securities and Exchange Commission (the "SEC") and any stock exchange or similar authority, including, without limitation, the filing of a Form ID, Update Passphrase, or any other application materials to enable the undersigned to gain or maintain access to the Electronic Data Gathering, Analysis and Retrieval system of the SEC;

(3) seek or obtain, as the undersigned's representative and on the undersigned's behalf, information regarding transactions in the Company's securities from any third party, including brokers, employee benefit plan administrators and trustees, and the undersigned hereby authorizes any such person to release any such information to such attorney-in-fact and approves and ratifies any such release of information; and

(4) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming nor relieving, nor is the Company assuming nor relieving, any of the undersigned's responsibilities to comply with Section 16 of the Exchange Act. The undersigned acknowledges that neither the Company nor the foregoing attorneys-in-fact assume (i) any liability for the undersigned's responsibility to comply with the requirement of the Exchange Act, (ii) any liability of the undersigned for any failure to comply with such requirements, or (iii) any obligation or liability of the undersigned for profit disgorgement under Section 16(b) of the Exchange Act.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact. Notwithstanding the foregoing, all power and authorities granted under this Power of Attorney to an Attorney-in-Fact shall be automatically withdrawn and revoked, for that Attorney-in-Fact only, without any further action by the undersigned, if such Attorney-in-Fact is no longer employed by the Company.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 6th day of September, 2022.

/s/ Phillip Samayoa