

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ Complete all entries in accordance with the instructions to the Form 5500.	OMB Nos. 1210-0110 1210-0089 2023 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information
For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023	
A	This return/report is for: ☐ a multiemployer plan ☐ a multiple-employer plan (Filers checking this box must provide participating employer information in accordance with the form instructions.) ☒ a single-employer plan ☐ a DFE (specify) _____ ☐ the first return/report ☐ the final return/report ☐ an amended return/report ☐ a short plan year return/report (less than 12 months)
C	If the plan is a collectively-bargained plan, check here. ▶ ☐
D	Check box if filing under: ☒ Form 5558 ☐ automatic extension ☐ the DFVC program ☐ special extension (enter description)
E	If this is a retroactively adopted plan permitted by SECURE Act section 201, check here. ▶ ☐

Part II	Basic Plan Information—enter all requested information
1a	Name of plan GENERATION BIO 401(K) PLAN
1b	Three-digit plan number (PN) ▶ 001
1c	Effective date of plan 01/01/2019
2a	Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) GENERATION BIO CO. 301 BINNEY STREET SUITE 401 CAMBRIDGE, MA 02142
2b	Employer Identification Number (EIN) 81-4301284
2c	Plan Sponsor's telephone number 949-878-0061
2d	Business code (see instructions) 325410

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/10/2024	BETH CARRIUOLO
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

3a Plan administrator's name and address ☒ Same as Plan Sponsor	3b Administrator's EIN 3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: a Sponsor's name c Plan Name	4b EIN 4d PN
5 Total number of participants at the beginning of the plan year	5 193
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d). a(1) Total number of active participants at the beginning of the plan year a(2) Total number of active participants at the end of the plan year b Retired or separated participants receiving benefits c Other retired or separated participants entitled to future benefits d Subtotal. Add lines 6a(2) , 6b , and 6c e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits f Total. Add lines 6d and 6e g(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item) g(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	6a(1) 153 6a(2) 174 6b 0 6c 53 6d 227 6e 0 6f 227 6g(1) 180 6g(2) 214 6h 0
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	7

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:
 2E 2G 2F 2J 2K 3D 2T

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☒ Code section 412(e)(3) insurance contracts (3) ☐ Trust (4) ☐ General assets of the sponsor
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10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- (1) ☒ **R** (Retirement Plan Information)
- (2) ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3) ☐ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary
- (4) ☐ **DCG** (Individual Plan Information) – Number Attached _____
- (5) ☐ **MEP** (Multiple-Employer Retirement Plan Information)

b General Schedules

- (1) ☒ **H** (Financial Information)
- (2) ☐ **I** (Financial Information – Small Plan)
- (3) ☐ **A** (Insurance Information) – Number Attached 0
- (4) ☒ **C** (Service Provider Information)
- (5) ☐ **D** (DFE/Participating Plan Information)
- (6) ☐ **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2023 Form M-1 annual report. If the plan was not required to file the 2023 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

SCHEDULE C (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Service Provider Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110
		2023
		This Form is Open to Public Inspection.

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan GENERATION BIO 401(K) PLAN	B Three-digit plan number (PN) ▶ 001
C Plan sponsor's name as shown on line 2a of Form 5500 GENERATION BIO CO.	D Employer Identification Number (EIN) 81-4301284

Part I

Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1

Information on Persons Receiving Only Eligible Indirect Compensation

- a

Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).....

X

YesNo
- b

If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b)

Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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04-2647786

(b)

Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

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04-2647786

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
64	RECORDKEEPER	100	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☐ No ☒

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
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(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

SCHEDULE H (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500.	OMB No. 1210-0110
		2023
		This Form is Open to Public Inspection

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023		
A Name of plan GENERATION BIO 401(K) PLAN	B Three-digit plan number (PN) ►	001
C Plan sponsor's name as shown on line 2a of Form 5500 GENERATION BIO CO.	D Employer Identification Number (EIN) 81-4301284	

Part I	Asset and Liability Statement
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1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a	0	0
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)	60845	311702
(2) Participant contributions	1b(2)	59947	82620
(3) Other	1b(3)	0	0
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)	108600	154850
(2) U.S. Government securities	1c(2)	0	0
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)	0	0
(B) All other	1c(3)(B)	0	0
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)	0	0
(B) Common	1c(4)(B)	0	0
(5) Partnership/joint venture interests	1c(5)	0	0
(6) Real estate (other than employer real property)	1c(6)	0	0
(7) Loans (other than to participants)	1c(7)	0	0
(8) Participant loans	1c(8)	4647	103142
(9) Value of interest in common/collective trusts	1c(9)	0	0
(10) Value of interest in pooled separate accounts	1c(10)	0	0
(11) Value of interest in master trust investment accounts	1c(11)	0	0
(12) Value of interest in 103-12 investment entities	1c(12)	0	0
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	8573139	15142447
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)	0	0
(15) Other	1c(15)	0	0

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)	0	0
(2) Employer real property	1d(2)	0	0
e Buildings and other property used in plan operation	1e	0	0
f Total assets (add all amounts in lines 1a through 1e)	1f	8807178	15794761
Liabilities			
g Benefit claims payable	1g	0	0
h Operating payables	1h	0	0
i Acquisition indebtedness	1i	0	0
j Other liabilities	1j	0	0
k Total liabilities (add all amounts in lines 1g through 1j)	1k	0	0
Net Assets			
l Net assets (subtract line 1k from line 1f)	1l	8807178	15794761

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: (A) Employers	2a(1)(A)	1295244	
(B) Participants	2a(1)(B)	2344332	
(C) Others (including rollovers)	2a(1)(C)	1798496	
(2) Noncash contributions	2a(2)	0	
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		5438072
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	5096	
(B) U.S. Government securities	2b(1)(B)	0	
(C) Corporate debt instruments	2b(1)(C)	0	
(D) Loans (other than to participants)	2b(1)(D)	0	
(E) Participant loans	2b(1)(E)	2481	
(F) Other	2b(1)(F)	0	
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		7577
(2) Dividends: (A) Preferred stock	2b(2)(A)	0	
(B) Common stock	2b(2)(B)	0	
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	302170	
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		302170
(3) Rents	2b(3)		0
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)	0	
(B) Aggregate carrying amount (see instructions)	2b(4)(B)	0	
(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)		
(5) Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)	0	
(B) Other	2b(5)(B)	0	
(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)		

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts.....	2b(6)		0
(7) Net investment gain (loss) from pooled separate accounts.....	2b(7)		0
(8) Net investment gain (loss) from master trust investment accounts.....	2b(8)		0
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		0
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		2042539
c Other income	2c		3166
d Total income. Add all income amounts in column (b) and enter total	2d		7793524

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	804701	
(2) To insurance carriers for the provision of benefits.....	2e(2)	0	
(3) Other	2e(3)	0	
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		804701
f Corrective distributions (see instructions)	2f		0
g Certain deemed distributions of participant loans (see instructions)	2g		0
h Interest expense	2h		0
i Administrative expenses:			
(1) Salaries and allowances	2i(1)	0	
(2) Contract administrator fees.....	2i(2)	0	
(3) Recordkeeping fees.....	2i(3)	1240	
(4) IQPA audit fees.....	2i(4)	0	
(5) Investment advisory and investment management fees	2i(5)	0	
(6) Bank or trust company trustee/custodial fees	2i(6)	0	
(7) Actuarial fees	2i(7)	0	
(8) Legal fees	2i(8)	0	
(9) Valuation/appraisal fees	2i(9)	0	
(10) Other trustee fees and expenses	2i(10)	0	
(11) Other expenses	2i(11)	0	
(12) Total administrative expenses. Add lines 2i(1) through (11)	2i(12)		1240
j Total expenses. Add all expense amounts in column (b) and enter total	2j		805941

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		6987583
l Transfers of assets:			
(1) To this plan	2l(1)		0
(2) From this plan	2l(2)		0

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☒ Unmodified (2) ☐ Qualified (3) ☐ Disclaimer (4) ☐ Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) ☒ DOL Regulation 2520.103-8 (2) ☐ DOL Regulation 2520.103-12(d) (3) ☐ neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: **CARON & BLETZER, PLLC**

(2) EIN: **04-3499945**

d The opinion of an independent qualified public accountant is **not attached** as part of Schedule H because:

(1) ☐ This form is filed for a CCT, PSA, DCG or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l. DCGs do not complete lines 4e, 4f, 4k, 4l, and 5, and DCGs generally complete the rest of Part IV collectively for all plans in the DCG, except as otherwise provided (see instructions).

During the plan year:

	Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)	☒	☐	1654
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)	☐	☒	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	☐	☒	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	☐	☒	
e Was this plan covered by a fidelity bond?	☒	☐	500000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	☐	☒	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	☐	☒	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	☐	☒	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	☒	☐	
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)	☐	☒	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	☐	☒	
l Has the plan failed to provide any benefit when due under the plan?	☐	☒	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	☒	☐	
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.	☒	☐	

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) ☐ Yes ☐ No ☐ Not determined

If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year _____.

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2023 This Form is Open to Public Inspection.
--	--	---

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023		
A Name of plan GENERATION BIO 401(K) PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 GENERATION BIO CO.	D Employer Identification Number (EIN) 81-4301284	

Part I	Distributions
--------	---------------

All references to distributions relate only to payments of benefits during the plan year.

1	Total value of distributions paid in property other than in cash or the forms of property specified in the instructions.....	
2	Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): 45-0404698 04-6568107 Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.	
3	Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year	

Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)
---------	--

4	Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)?	☐ Yes	☐ No	☐ N/A
If the plan is a defined benefit plan, go to line 8.				
5	If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month _____ Day _____ Year _____ If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.			
6	a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)	6a		
	b Enter the amount contributed by the employer to the plan for this plan year	6b		
	c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)	6c		
If you completed line 6c, skip lines 8 and 9.				
7	Will the minimum funding amount reported on line 6c be met by the funding deadline?	☐ Yes	☐ No	☐ N/A
8	If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change?	☐ Yes	☐ No	☐ N/A

Part III	Amendments
----------	------------

9	If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box.	☐ Increase	☐ Decrease	☐ Both	☐ No
---	--	-----------------------------------	-----------------------------------	-------------------------------	-----------------------------

Part IV	ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.
---------	--

10	Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?	☐ Yes	☐ No
11	a Does the ESOP hold any preferred stock?	☐ Yes	☐ No
	b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.)	☐ Yes	☐ No
12	Does the ESOP hold any stock that is not readily tradable on an established securities market?	☐ Yes	☐ No

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:		
a The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment)	14a	
b The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14b	
c The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	14c	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:		
a The corresponding number for the plan year immediately preceding the current plan year	15a	
b The corresponding number for the second preceding plan year	15b	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:		
a Enter the number of employers who withdrew during the preceding plan year	16a	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	16b	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI	Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans
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18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

19 If the total number of participants is 1,000 or more, complete lines (a) and (b):

a Enter the percentage of plan assets held as:

Public Equity: _____% Private Equity: _____% Investment-Grade Debt and Interest Rate Hedging Assets: _____%

High-Yield Debt: _____% Real Assets: _____% Cash or Cash Equivalents: _____% Other: _____%

b Provide the average duration of the Investment-Grade Debt and Interest Rate Hedging Assets:

☐ 0-5 years ☐ 5-10 years ☐ 10-15 years ☐ 15 years or more

20 PBGC missed contribution reporting requirements. If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.

a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☐ No

b If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☐ Yes.

☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

☐ No. Other. Provide explanation. _____

Part VII	IRS Compliance Questions
-----------------	---------------------------------

21a Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules? ☐ Yes ☒ No

21b If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).

☒ Design-based safe harbor method

☐ "Prior year" ADP test

☒ "Current year" ADP test

☐ N/A

22 If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter 06 / 30 / 2020 (MM/DD/YYYY) and the Opinion Letter serial number Q702438A.

GENERATION BIO 401(k) PLAN

FINANCIAL STATEMENTS

December 31, 2023 and 2022 and
For the year ended December 31, 2023



CARON & BLETZER, PLLC

Certified Public Accountants and Business Consultants

GENERATION BIO 401(k) PLAN
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Certain supplemental schedules have been omitted because they are either not required or not applicable.



Independent Auditor's Report

To the Plan Administrator of the Generation Bio 401(k) Plan:

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We have performed audits of the financial statements of the Generation Bio 401(k) Plan ("the Plan"), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 ("ERISA"), as permitted by ERISA Section 103(a)(3)(C) (ERISA Section 103(a)(3)(C) audit). The financial statements comprise the statements of net assets available for benefits as of December 31, 2023 and 2022, and the related statement of changes in net assets available for benefits for the year ended December 31, 2023, and the related notes to the financial statements.

Management, having determined it is permissible in the circumstances, has elected to have the audits of the financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's ("DOL") Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the plan (investment information) by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the DOL's Rules and Regulations for Reporting and Disclosure under ERISA ("qualified institution").

Management has obtained certifications from qualified institutions as of December 31, 2023 and 2022, and for the year ended December 31, 2023, stating that the certified investment information, as described in Note F to the financial statements, is complete and accurate.

Opinion

In our opinion, based on our audits and on the procedures performed as described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report:

- the amounts and disclosures in the accompanying financial statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America ("GAAP").
- the information in the accompanying financial statements related to assets held by and certified to by qualified institutions agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Other Matter – Prior Period Adjustment

As discussed in Note I to the financial statements, the statement of net assets available for benefits as of December 31, 2022 has been restated to correct a misstatement. Our opinion is not modified with respect to this matter.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America ("GAAS"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our ERISA Section 103(a)(3)(C) audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with GAAP, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern within one year after the date that the financial statements are issued or available to be issued.

Management is also responsible for maintaining a current plan instrument, including all plan amendments, administering the plan, and determining that the plan's transactions that are presented and disclosed in the financial statements are in conformity with the plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Financial Statements

Except as described in the Scope and Nature of the ERISA Section 103(a)(3)(C) Audit section of our report, our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if, there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audits did not extend to the certified investment information, except for obtaining and reading the certifications, comparing the certified investment information with the related information presented and disclosed in the financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of GAAP.

Accordingly, the objective of an ERISA Section 103(a)(3)(C) audit is not to express an opinion about whether the financial statements as a whole are presented fairly, in all material respects, in accordance with GAAP.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matter - Supplemental Schedules Required by ERISA

The supplemental Schedule H, Line 4(a) - Schedule of Delinquent Participant Contributions for the year ended December 31, 2023 and the Schedule H, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2023, are presented for purposes of additional analysis and are not a required part of the financial statements but are supplementary information required by the DOL's Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information included in the supplemental schedules, other than that agreed to or derived from the certified investment information, has been subjected to auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. For information included in the supplemental schedules that agreed to or is derived from the certified investment information, we compared such information to the related certified investment information.

In forming our opinion on the supplemental schedules, we evaluated whether the supplemental schedules, other than the information agreed to or derived from the certified investment information, including their form and content, are presented in conformity with the DOL's Rules and Regulations for Reporting and Disclosure under ERISA.

In our opinion:

- the form and content of the supplemental schedules, other than the information in the supplemental schedules that agreed to or is derived from the certified investment information, are presented, in all material respects, in conformity with the DOL's Rules and Regulations for Reporting and Disclosure under ERISA.
- the certified information in the supplemental schedules related to assets held by and certified to by qualified institutions agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Caron & Blazer, PLLC

Kingston, NH
October 8, 2024

GENERATION BIO 401(k) PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
December 31, 2023 and 2022

	<u>2023</u>	<u>2022</u>
Investments, at fair value:		
Mutual funds	\$ 15,297,297	\$ 8,681,739
Receivables:		
Notes receivable from participants	103,142	4,647
Participant contributions	82,620	59,947
Employer contributions	<u>311,702</u>	<u>165,308</u>
Total receivables	<u>497,464</u>	<u>229,902</u>
Net assets available for benefits	<u>\$ 15,794,761</u>	<u>\$ 8,911,641</u>

The accompanying notes are an integral
part of the financial statements.

GENERATION BIO 401(k) PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
For the year ended December 31, 2023

	<u>2023</u>
Additions:	
Investment income:	
Net appreciation in fair value of investments	\$ 2,045,756
Dividends and interest	<u>309,696</u>
	2,355,452
Contributions:	
Employer contributions	1,190,781
Rollover contributions	1,798,496
Participant contributions	<u>2,344,332</u>
	<u>5,333,609</u>
Total additions	7,689,061
Deductions:	
Distributions to participants	804,701
Administrative expenses	<u>1,240</u>
Total deductions	<u>805,941</u>
Net increase	6,883,120
Net assets available for benefits:	
Beginning of year	<u>8,911,641</u>
End of year	<u>\$ 15,794,761</u>

The accompanying notes are an integral
part of the financial statements.

GENERATION BIO 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS

A. DESCRIPTION OF PLAN:

The following description of the Generation Bio 401(k) Plan (the "Plan") provides only general information. Participants should refer to the plan document for a complete description of the Plan's provisions.

General

The Plan is a defined contribution plan covering substantially all employees of Generation Bio, Co. (the "Company") who have attained the age of 21. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA").

Contributions

Upon meeting eligibility requirements participants may contribute up to 100% of their plan compensation on a pre-tax or after-tax Roth basis, subject to Internal Revenue Code ("IRC") limitations. Participants who are at least age 50 may make an additional "catch up" contribution subject to IRC limitations. Participants may also contribute funds from another qualified plan ("rollover contributions"), subject to certain requirements.

The Company makes a safe harbor matching contribution equal to 100% of employees' contributions up to a maximum of 4% of compensation. The Company may also elect to make a discretionary profit sharing contribution. To be eligible for the profit sharing contribution participants must be employed on the last day of the plan year. The Company did not make a profit sharing contributions for the year ended December 31, 2023.

Participant Accounts

Each participant's account is credited or charged with contributions, investment income, and administrative expenses. Investment income, including realized and unrealized gains and losses, and expenses are allocated to participants' accounts based on each participant's account balance within each fund. Participants determine the percentage in which contributions are to be invested in each fund. Participants may change their investment options as set forth in the plan document. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting

Participants are fully vested in that portion of their account which represents their contributions, safe harbor contributions and the income earned thereon. Participants become 100% vested in the Company's contributions, other than safe harbor contributions, and earnings thereon upon death, total and permanent disability, or attainment of normal retirement age. Otherwise, a participant's interest in the Company's contributions, other than safe harbor contributions, and earnings thereon vests after 1 year of service. Effective October 1, 2023, all company contributions are immediately vested.

GENERATION BIO 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS

Forfeitures

When certain terminations of participation in the Plan occur, the nonvested portion of a participant's account represents a forfeiture, as defined by the Plan. Forfeited balances are first used to restore re-employed participants' accounts. Any remaining forfeitures may be used to pay plan expenses or to reduce company contributions. During 2023, \$84,248 of forfeitures were used to reduce Company contributions. Unallocated forfeitures at December 31, 2023 and 2022 were \$36,348 and \$101,077, respectively.

Distribution of Benefits

Benefits may be distributed to participants upon termination of employment by reason of retirement, disability, death or other separation from service. Distributions under the Plan may be made in lump sums or partial payment distributions.

A participant may also request a withdrawal upon attainment of age 59 ½, upon attainment of normal retirement age, or upon demonstration by the participant to the plan administrator that the participant is suffering from "hardship", as defined in the plan document. A participant may also request a withdrawal from rollover funds at any time.

Notes Receivable from Participants

Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 or 50 percent of their vested account balance. The loans are secured by the balance in the participant's account. Loans bear an interest rate of prime plus 1%. All loans must be repaid within five years unless the proceeds are used to acquire a principal residence, in which case a longer repayment period is allowed. No more than one loan may be outstanding at any time. Principal and interest is generally paid ratably through payroll deductions each pay period.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Basis of Accounting

The accompanying financial statements have been prepared using the accrual basis of accounting.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

GENERATION BIO 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS

Investment Valuation and Income Recognition

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. See Note C for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation (depreciation) includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income is recorded on the accrual basis. No allowance for credit losses has been recorded as of December 31, 2023 or 2022. Delinquent participant loans are reclassified as distributions based upon the terms of the plan document.

Expenses of the Plan

Participant transaction fees are paid by participants initiating the transaction. The Company pays for recordkeeping and other expenses incurred by the Plan. Expenses that are paid by the Company are excluded from these financial statements. Investment related expenses are included in net appreciation (depreciation) in fair value of investments.

Payment of Benefits

Benefits are recorded when paid.

C. FAIR VALUE MEASUREMENTS:

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy under FASB ASC 820 are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 - Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in inactive markets; inputs other than quoted prices that are observable for the asset or liability; inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

GENERATION BIO 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Following is a description of the valuation methodologies used by the Plan. There have been no changes in the methodologies used at December 31, 2023 and 2022.

Mutual funds - Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the SEC. These funds are required to publish their daily net asset value (NAV) and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

The following table sets forth by level and by investment class, within the fair value hierarchy, the Plan's assets at fair value as of December 31:

	2023			
	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Mutual funds	<u>\$ 15,297,297</u>	<u>\$ 15,297,297</u>	<u>\$ -</u>	<u>\$ -</u>
Total investments in the fair value hierarchy	<u>\$ 15,297,297</u>	<u>\$ 15,297,297</u>	<u>\$ -</u>	<u>\$ -</u>

	2022			
	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Mutual funds	<u>\$ 8,681,739</u>	<u>\$ 8,681,739</u>	<u>\$ -</u>	<u>\$ -</u>
Total investments in the fair value hierarchy	<u>\$ 8,681,739</u>	<u>\$ 8,681,739</u>	<u>\$ -</u>	<u>\$ -</u>

D. PARTIES-IN-INTEREST:

Section 3(14) of ERISA defines a party-in-interest to include, among others, fiduciaries or employees of the Plan, any person who provides services to the Plan or an employer whose employees are covered by the Plan. Accordingly, loans to participants and the management of investments held by the trustees are considered party-in-interest transactions.

E. TAX STATUS:

The Company adopted the pre-approved plan document of Ascensus LLC. The pre-approved plan document sponsor received a favorable opinion letter dated June 30, 2020, in which the Internal Revenue Service ("IRS") stated that the pre-approved plan document was in compliance with the applicable requirements of the IRC. Although the Plan has been amended since receiving the opinion letter, the plan administrator believes that the Plan is designed, and is currently being operated, in compliance with the applicable requirements of the IRC and, therefore believes that the Plan is qualified and the related trust is tax-exempt.

GENERATION BIO 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS

Effective October 1, 2023, the Company adopted a restated pre-approved plan document of FMR, LLC, and the IRS has determined and informed the sponsor of the pre-approved plan document by a letter dated June 30, 2020 that the pre-approved plan document is designed in accordance with applicable sections of the IRC. Although the Plan has been amended since receiving the opinion letter, the plan administrator believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC and therefore believes that the Plan is qualified and the related trust is tax exempt.

Accounting principles generally accepted in the United States of America require plan management to evaluate tax positions taken by the plan and recognize a tax liability if the plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

F. CERTIFIED INVESTMENTS:

Certain information related to investments and notes receivable from participants disclosed in the accompanying financial statements and ERISA-required supplemental schedule, including investments and notes receivable from participants held at December 31, 2023 and 2022, and net appreciation (depreciation) in fair value of investments and interest and dividends for the year ended December 31, 2023, was obtained by management and agreed to or derived from information certified as complete and accurate by Ascensus, LLC on behalf of Ascensus Trust Company, a trustee through September 29, 2023, and Fidelity Management Trust Company, a trustee of the Plan effective September 29, 2023.

G. PLAN TERMINATION:

Although the Plan was established with the intention that it will continue indefinitely, the Company retains the right to discontinue its contributions at any time or to terminate the Plan, subject to the provisions of ERISA. In the event of plan termination, all participants will become 100% vested in their accounts.

H. RISKS AND UNCERTAINTIES:

The Plan invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Market risks include global events which could impact the value of investment securities. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the value of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

GENERATION BIO 401(k) PLAN
NOTES TO FINANCIAL STATEMENTS

I. PRIOR PERIOD ADJUSTMENT:

In the December 31, 2022 financial statements, employer contributions receivable was understated by \$104,463. This resulted in an understatement of net assets available for benefits as of December 31, 2022. Accordingly, the Plan has restated the net assets available for benefits as of December 31, 2022 from \$8,807,178 to \$8,911,641. The error was discovered in 2023, after the issuance of the December 31, 2022 financial statements, and the Plan's reporting was updated to properly reflect employer contributions.

J. SUBSEQUENT EVENTS:

The Company has evaluated subsequent events through October 8, 2024, the date these financial statements were available for issuance.

K. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500:

The following is a reconciliation of net assets available for benefits on the financial statements to the Form 5500 as of December 31, 2022:

Net assets available for benefits on the financial statements	\$ 8,911,641
Employer contributions receivable not on the Form 5500	<u>(104,463)</u>
Net assets available for benefits on the Form 5500	<u>\$ 8,807,178</u>

The following is a reconciliation of employer contributions on the financial statements to the Form 5500 as of December 31, 2023:

Employer contributions on the financial statements	\$ 1,190,781
Receivable not on the December 31, 2022 Form 5500	<u>104,463</u>
Employer contributions on the Form 5500	<u>\$ 1,295,244</u>

GENERATION BIO 401(k) PLAN

EIN: 81-4301284

Plan Number: 001

SCHEDULE H, LINE 4(a) - SCHEDULE OF DELINQUENT PARTICIPANT CONTRIBUTIONS
for the year ended December 31, 2023

Total that Constitute Nonexempt Prohibited Transactions

Plan Year	Participant Contributions Transferred Late to Plan		Contributions Not Corrected	Contributions Corrected Outside VFCP	Contributions Pending Correction in VFCP	Total Fully Corrected Under VFCP and PTE 2002-51
2023	\$ 1,654 *		\$ 1,654	\$ -	\$ -	\$ -

* Indicates late participant loan repayments are included.

GENERATION BIO 401(k) PLAN

EIN: 81-4301284

Plan Number: 001

SCHEDULE H, LINE 4(i) - SCHEDULE OF ASSETS (HELD AT END OF YEAR)
December 31, 2023

(a)	(b)	(c)	(d)	(e)
	Identity of issue, borrower, lessor or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Cost	Current Value
*	Holding Account	Mutual fund	**	\$ 2,995
	American Century Small Cap Growth Fund R6	"	**	336
	Delaware Small Cap Value Fund R6	"	**	118,782
	Lord Abbett High Yield Fund Class R6	"	**	296,335
	Columbia Balanced Fund I3	"	**	30,424
	Blackrock Large Cap Focus Growth Fund K	"	**	401,261
	American Funds New World Fund R6	"	**	243,177
	JPMorgan Equity Income Fund R6	"	**	188,440
	Voya Intermediate Bond Fund Class R6	"	**	46,312
	MFS Mid Cap Growth Fund R6	"	**	152,629
*	Fidelity US Bond Index Fund	"	**	793,248
*	Fidelity 500 Index Fund	"	**	2,464,641
*	Fidelity Mid Cap Index Fund	"	**	185,685
*	Fidelity Small Cap Index Fund	"	**	318,730
*	Fidelity Inflation Protected Bond Index Fund	"	**	69,565
*	Fidelity Freedom Index Income Fund Investor	"	**	66,726
*	Fidelity Freedom Index 2025 Fund Investor	"	**	290,162
*	Fidelity Freedom Index 2030 Fund Investor	"	**	389,625
*	Fidelity Freedom Index 2035 Fund Investor	"	**	1,095,411
*	Fidelity Freedom Index 2040 Fund Investor	"	**	2,242,385
*	Fidelity Freedom Index 2045 Fund Investor	"	**	770,087
*	Fidelity Freedom Index 2050 Fund Investor	"	**	1,859,883
*	Fidelity Freedom Index 2055 Fund Investor	"	**	1,215,488
*	Fidelity Freedom Index 2060 Fund Investor	"	**	757,703
*	Fidelity Total International Index Fund	"	**	445,719
*	Fidelity U.S. Sustainability Index Fund	"	**	85,278
*	Fidelity Government Money Market Fund K6	"	**	154,388
*	Fidelity Mid Cap Value Index Fund	"	**	375,655
*	Fidelity Small Cap Growth Index Fund	"	**	28,646
*	Fidelity Freedom Index 2065 Fund Investor	"	**	205,615
*	Fidelity International Bond Index Fund	"	**	1,966
	Total investments on the statement of net assets available for benefits			15,297,297
*	Participant Loans	(5.75% - 9.50%)	-	103,142
	Total investments on the Form 5500			<u>\$ 15,400,439</u>

** Cost omitted for participant directed investments.

* Denotes a party-in-interest to the Plan.

