

Form 5500-SF

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration
Pension Benefit Guaranty Corporation

Short Form Annual Return/Report of Small Employee Benefit Plan

This form is required to be filed 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-SF.**

OMB Nos. 1210-0110
1210-0089

2023

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2023 or fiscal plan year beginning 12/31/2023 and ending 12/30/2024

- A** This return/report is for: a single-employer plan a multiple-employer plan (not multiemployer) (Pension Plan filers checking this box must attach Schedule MEP. Other plans must attach a list of participating employer information in accordance with the form instructions.)
- B** This return/report is the first return/report the final return/report
 an amended return/report a short plan year return/report (less than 12 months)
- C** Check box if filing under: Form 5558 automatic extension DFVC program
 special extension (enter description)
- D** If the plan is a collectively-bargained plan, check here ▶
- 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 <u>X-GENE INC DEFINED BENEFIT PLAN</u>		1b Three-digit plan number (PN) ▶ <u>002</u>
		1c Effective date of plan <u>12/31/2021</u>
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) <u>X-GENE INC</u> <u>5330 SPECTRUM DR, SUITE K</u> <u>FREDERICK, MD 21131</u>		2b Employer Identification Number (EIN) <u>46-1535164</u>
		2c Sponsor's telephone number <u>443-520-8668</u>
		2d Business code (see instructions) <u>541700</u>
3a Plan administrator's name and address <input checked="" type="checkbox"/> 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
5a Total number of participants at the beginning of the plan year	5a	<u>4</u>
b Total number of participants at the end of the plan year.....	5b	<u>4</u>
c(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)	5c(1)	
c(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	5c(2)	
d(1) Total number of active participants at the beginning of the plan year.....	5d(1)	<u>3</u>
d(2) Total number of active participants at the end of the plan year.....	5d(2)	<u>3</u>
e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....	5e	<u>1</u>

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, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, 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.	10/12/2025	XIAO BING WANG
	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

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.)..... Yes No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.)..... Yes No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.**
- c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? Yes No Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year _____ (See instructions.)

Part III Financial Information			
7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	865266	938885
b Total plan liabilities	7b	0	0
c Net plan assets (subtract line 7b from line 7a)	7c	865266	938885
8 Income, Expenses, and Transfers for this Plan Year		(a) Amount	(b) Total
a Contributions received or receivable from:			
(1) Employers	8a(1)	92305	
(2) Participants	8a(2)	0	
(3) Others (including rollovers)	8a(3)	0	
b Other income (loss)	8b	-18686	
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		73619
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	0	
e Certain deemed and/or corrective distributions (see instructions) .	8e	0	
f Administrative service providers (salaries, fees, commissions)	8f	0	
g Other expenses	8g	0	
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		0
i Net income (loss) (subtract line 8h from line 8c)	8i		73619
j Transfers to (from) the plan (see instructions)	8j	0	

Part IV Plan Characteristics	
9a	If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions: 1A 3D
b	If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions: 4B

Part V Compliance Questions				
10 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)	10a		X	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b		X	
c Was the plan covered by a fidelity bond?	10c		X	
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d		X	
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e	X		8712
f Has the plan failed to provide any benefit when due under the plan?	10f		X	
g Did the plan have any participant loans? (If "Yes," enter amount as of year-end.)	10g		X	
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below. Yes No

a Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 **11a** 0

b PBGC missed contribution reporting requirements. If the plan is covered by PBGC and the amount reported on line 11a is greater than \$0, 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 _____

12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? Yes No
 (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above.

a 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 letter ruling granting the waiver. Month _____ Day _____ Year _____

If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.

b Enter the minimum required contribution for this plan year **12b**

c Enter the amount contributed by the employer to the plan for this plan year **12c**

d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount) **12d**

e Will the minimum funding amount reported on line 12d be met by the funding deadline? Yes No N/A

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year? Yes No

a If "Yes," enter the amount of any plan assets that reverted to the employer this year..... **13a**

b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? Yes No

c 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.)

13c(1) Name of plan(s):	13c(2) EIN(s)	13c(3) PN(s)

Part VIII IRS Compliance Questions

14a 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

14b 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

15 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 03/30/2018 (MM/DD/YYYY) and the Opinion Letter serial number J301395A.

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	<small>OMB No. 1210-0110</small> 2023 This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 12/31/2023 and ending 12/30/2024

▶ **Round off amounts to nearest dollar.**
 ▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan <u>X-GENE INC DEFINED BENEFIT PLAN</u>	B Three-digit plan number (PN) ▶	<u>002</u>
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>X-GENE INC</u>	D Employer Identification Number (EIN) <u>46-1535164</u>	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

Part I Basic Information

1 Enter the valuation date:	Month <u>12</u> Day <u>31</u> Year <u>2023</u>		
2 Assets:			
a Market value	2a		<u>772961</u>
b Actuarial value	2b		<u>772961</u>
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	<u>0</u>	<u>0</u>	<u>0</u>
b For terminated vested participants	<u>1</u>	<u>8573</u>	<u>8573</u>
c For active participants	<u>6</u>	<u>750910</u>	<u>755655</u>
d Total	<u>7</u>	<u>759483</u>	<u>764228</u>
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)	<input type="checkbox"/>		
a Funding target disregarding prescribed at-risk assumptions	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate	5		<u>5.25 %</u>
6 Target normal cost			
a Present value of current plan year accruals	6a		<u>16166</u>
b Expected plan-related expenses	6b		<u>0</u>
c Target normal cost	6c		<u>16166</u>

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE			
	Signature of actuary	<u>08/14/2025</u>	Date
	<u>JOSEPH C. WHISNANT, JR.</u>	<u>23-04782</u>	Most recent enrollment number
	<u>PENTEGRA RETIREMENT SERVICES</u>	<u>704-714-3887</u>	Telephone number (including area code)
	<u>5350 77 CENTER DR - STE 200 CHARLOTTE, NC 28217</u>		
	Address of the firm		

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions

Part II Beginning of Year Carryover and Prefunding Balances		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	0
10	Interest on line 9 using prior year's actual return of <u>1.67</u> %	0	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		45445
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.47</u> %		2486
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		47931
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages			
14	Funding target attainment percentage	14	101.14 %
15	Adjusted funding target attainment percentage	15	101.14 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	107.26 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls					
18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
03/30/2024	92305	0			
			Totals ▶	18(b)	92305
				18(c)	0

19	Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:	
	a Contributions allocated toward unpaid minimum required contributions from prior years.	19a 0
	b Contributions made to avoid restrictions adjusted to valuation date	19b 0
	c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c 91151
20	Quarterly contributions and liquidity shortfalls:	
	a Did the plan have a "funding shortfall" for the prior year?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	c If line 20a is "Yes," see instructions and complete the following table as applicable:	

Liquidity shortfall as of end of quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %	<input type="checkbox"/> N/A, full yield curve used
b Applicable month (enter code).....				21b 0
22 Weighted average retirement age				22 69
23 Mortality table(s) (see instructions)	<input checked="" type="checkbox"/> Prescribed - combined	<input type="checkbox"/> Prescribed - separate	<input type="checkbox"/> Substitute	

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.....	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
26 Demographic and benefit information		
a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment.....	27	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6c).....	31a	16166	
b Excess assets, if applicable, but not greater than line 31a	31b	8733	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	0	0	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....	34	7433	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0
36 Additional cash requirement (line 34 minus line 35).....	36	7433	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	37	91151	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	83718	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b		
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years	40	0	

Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)

41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021

Schedule SB, Part V Statement of Actuarial Assumptions/Methods

X-Gen Inc Defined Benefit Plan 46-1535164 / 001

For the plan year 12/31/2023 through 12/30/2024

Valuation Date: 12/31/2023

Funding Method: As prescribed in IRC Section 430
 Age - Eligibility age at last birthday and other ages at nearest birthday
 New participants are not included in current year's valuation

Retrospective Compensation - Highest 3 consecutive years of service

Form of Payment - Assumed form of payment for funding is 5% Life Annuity and 5% Joint with 50% Survivor Benefit and 90% lump sum equivalent of normal form. Funding Target for lump sum is the greater of the present value of accrued benefit computed using funding segment rates and 417(e) Applicable Mortality Table or lump sum at the assumed retirement date of accrued benefit using plan actuarial equivalence discounted using appropriate segment rate. Lump sum on plan actuarial equivalence rates will not exceed 415 maximum allowable distribution, which is the lesser amount computed using a) 5.5% interest and the Applicable Mortality Table or b) the greater of plan actuarial equivalence interest and mortality or 417(e) Minimum

Interest Rates -

Segment rates for the Valuation Date as permitted under IRC 430(h)(2)(C)

Segment #	Year	Rate %
Segment 1	0 - 5	4.21
Segment 2	6 - 20	4.86
Segment 3	> 20	4.87

Segment rates as of September 30, 2022 As permitted under IRC 430(h)(2)(C)(iv)(II) - ARP

Segment #	Year	Rate %
Segment 1	0 - 5	4.75
Segment 2	6 - 20	5.00
Segment 3	> 20	5.74

Pre-Retirement - Mortality Table - 23C - 2023 Combined
 Early Retirement Table - None
 Turnover Table - None
 Disability Table - None
 Salary Scale - None
 Expense Load - None
 Ancillary Ben Load - None

Post-Retirement - Mortality Table - 23C - 2023 Combined
 Cost of Living - None
 Lump Sum - G94 - 1994 Group Annuity Reserving Proj 2002, Scale AA (unisex) at 5.5%
 or
 23E - 2023 Applicable Mortality Table for 417(e) (unisex)

Asset Valuation Method: Fair market value of assets adjusted for contributions under IRC 430(g)(4)

Discrimination Test Assumptions:

HCE Determination - Based on all employees
 Otherwise Excludable - Otherwise Excludable HCEs are included with the Not Otherwise Excludable employees

Schedule SB, Part V

Statement of Actuarial Assumptions/Methods

X-Gene Inc Defined Benefit Plan

46-1535164 / 001

For the plan year 12/31/2023 through 12/30/2024

410(b)/401(a)(4) Testing:

Pre-Retirement - Interest - 8.5%

Post-Retirement - Interest - 8.5%

Mortality Table - G71M - 1971 Group Annuity (male)

Permissively Aggregated Plans - Not tested As Single Plan

Compensation - Use current compensation to calculate the benefit accrual rate (annual method)

Testing Age - Normal retirement age or attained age, if older

Testing Service - Separate benefiting service for DC and for DB for Accrued-to-Date Method

Normal Form for MVAR - Joint with 50% Survivor Benefits

401(a)(26) Testing:

Compensation - Use current compensation to calculate the benefit accrual rate for 401(a)(26)

Testing Age - Normal retirement age or attained age, if older

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <hr/> <small>Department of Labor Employee Benefits Security Administration</small> <hr/> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500 or 5500-SF.	<small>OMB No. 1210-0110</small> <hr/> 2023 <hr/> This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 12/31/2023 and ending 12/30/2024

▶ **Round off amounts to nearest dollar.**

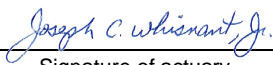
▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan X-Gene Inc Defined Benefit Plan	B Three-digit plan number (PN) ▶	002
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF X-Gene Inc	D Employer Identification Number (EIN) 46-1535164	
E Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	F Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

Part I Basic Information			
1 Enter the valuation date:	Month <u>12</u>	Day <u>31</u>	Year <u>2023</u>
2 Assets:			
a Market value.....	2a	772,961	
b Actuarial value	2b	772,961	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	0	0	0
b For terminated vested participants.....	1	8,573	8,573
c For active participants.....	6	750,910	755,655
d Total	7	759,483	764,228
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>			
a Funding target disregarding prescribed at-risk assumptions.....	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate.....	5	5.25%	
6 Target normal cost			
a Present value of current plan year accruals.....	6a	16,166	
b Expected plan-related expenses	6b	0	
c Target normal cost.....	6c	16,166	

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	 Signature of actuary	<u>08/14/2025</u> Date
	<u>Joseph C. Whisnant, Jr.</u> Type or print name of actuary	<u>2304782</u> Most recent enrollment number
	<u>Pentegra Retirement Services</u> Firm name	<u>704-714-3887</u> Telephone number (including area code)
	<u>5350 77 Center Dr - Ste 200</u> <u>Charlotte NC 28217</u> Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:				
a Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %	<input type="checkbox"/> N/A, full yield curve used
b Applicable month (enter code).....				21b 0
22 Weighted average retirement age				22 69
23 Mortality table(s) (see instructions)	<input checked="" type="checkbox"/> Prescribed - combined	<input type="checkbox"/> Prescribed - separate	<input type="checkbox"/> Substitute	

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
26 Demographic and benefit information		
a Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
b Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years.....	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6c).....	31a	16,166	
b Excess assets, if applicable, but not greater than line 31a	31b	8,733	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment	0	0	
b Waiver amortization installment	0	0	
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33		
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)....	34	7,433	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement.....	0	0	0
36 Additional cash requirement (line 34 minus line 35)	36	7,433	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c).....	37	91,151	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)	38a	83,718	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b		
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0	
40 Unpaid minimum required contributions for all years.....	40	0	

Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)

41 If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies. <input type="checkbox"/> 2019 <input type="checkbox"/> 2020 <input type="checkbox"/> 2021

Schedule SB, line 19 - Discounted Employer Contributions

X-Gen Inc Defined Benefit Plan

46-1535164 / 001

For the plan year 12/31/2023 through 12/30/2024

Valuation Date: 12/31/2023

	Date	Amount	Adjusted Contribution	Adjusted Prior Year Contribution	Adjusted Quarterly	Effective Rate	Penalty Rate
Deposited Contribution	03/30/2024	\$92,305					
Applied to Additional Contribution	12/31/2023	84,778	83,718	0	0	5.25	0.00
Applied to MRC	12/31/2023	7,527	7,433	0	0	5.25	0.00
Totals for Deposited Contribution		\$92,305	\$91,151	\$0	\$0		

**Schedule SB, line 22 -
Description of Weighted Average Retirement Age**

X-Gene Inc Defined Benefit Plan

46-1535164 / 001

For the plan year 12/31/2023 through 12/30/2024

The age reported is the weighted average of the assumed retirement ages for all active participants as of the valuation date based on their funding target or target normal cost should the funding target of the plan be zero rounded to the nearest whole age. For an active late retiree, the assumed retirement age may be later than the Plan's normal retirement age. Each participant's rate of retirement is assumed to be 100% of his/her assumed retirement age.

Schedule SB, Part V Summary of Plan Provisions

X-Gene Inc Defined Benefit Plan 46-1535164 / 001

For the plan year 12/31/2023 through 12/30/2024

<u>Employer:</u>	X-Gene Inc														
Type of Entity -	Limited Liability Company (LLC) taxed as S Corp														
EIN: 46-1535164	TIN: 87-3876474 Plan #: 001 Plan Type: Defined Benefit														
<u>Dates:</u>	Effective - 12/31/2021 Valuation - 12/31/2023														
	Top Heavy Years - 2020, 2021, 2023														
<u>Eligibility:</u>	All employees excluding non-resident aliens, members of an excluded class and union														
	Minimum age - 21 Months of service - 12														
Hours Required for -	Eligibility - 1000 Benefit accrual - 1000 Vesting - 1000														
Plan Entry -	12/31 or 06/30 the plan year on or next following eligibility satisfaction														
<u>Retirement:</u>	Normal - Anniversary date nearest attainment of age 65 and completion of 5 years of participation														
	Early - Not provided														
<u>Average Compensation:</u>	Highest 3 consecutive years of service														
Top Heavy Minimum Benefit -	Highest 5 consecutive top heavy years of participation														
<u>Plan Benefits:</u>	Retirement - Frozen benefit formula														
Accrued Benefit -	Frozen accrued benefit as of 12/30/2023														
	Maximum allowable distribution is lump sum equivalent of normal form not to exceed 415 maximum allowable distribution, which is the lesser amount computed using a) 5.5% interest and the Applicable Mortality Table or b) the greater of plan actuarial equivalence interest and mortality or 417(e) Minimum														
Early Retirement -	None														
Death Benefit -	Face Amount plus Present Value of Accrued Benefit														
Disability Benefit -	None														
<u>Top Heavy Minimum:</u>	2% of average compensation per top heavy year of participation excluding years prior to the adoption date of the plan and 1984 (if earlier), limited to 10 years														
<u>IRS Limitations:</u>	415 Limits - Percent: 100 Dollar: \$265,000														
	Maximum 401(a)(17) compensation - \$330,000														
<u>Normal Form:</u>	Life Annuity														
<u>Optional Forms:</u>	Lump Sum Life Annuity Guaranteed for 10 Years Joint with 50%, 75% or 100% Survivor Benefit														
<u>Vesting Schedule:</u>	<table border="0"> <thead> <tr> <th>Years</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>0-1</td> <td>0%</td> </tr> <tr> <td>2</td> <td>20%</td> </tr> <tr> <td>3</td> <td>40%</td> </tr> <tr> <td>4</td> <td>60%</td> </tr> <tr> <td>5</td> <td>80%</td> </tr> <tr> <td>6</td> <td>100%</td> </tr> </tbody> </table>	Years	Percent	0-1	0%	2	20%	3	40%	4	60%	5	80%	6	100%
Years	Percent														
0-1	0%														
2	20%														
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	Service is calculated using all years of service														

Schedule SB, Part V Summary of Plan Provisions

X-Gen Inc Defined Benefit Plan 46-1535164 / 001

For the plan year 12/31/2023 through 12/30/2024

Present Value of Accrued Benefit: Based on the greater of 417(e) or Actuarial Equivalence

417(e):

Interest Rates -	First Month Prior to Plan Yr Beg		
	Segment #	Years	Rate %
	Segment 1	0 - 5	5.50
	Segment 2	6 - 20	5.76
	Segment 3	> 20	5.83

Mortality Table - 23E - 2023 Applicable Mortality Table for 417(e) (unisex)

Actuarial Equivalence:

Pre-Retirement -	Interest -	5.5%
	Mortality Table -	None
Post-Retirement -	Interest -	5.5%
	Mortality Table -	G94 - 1994 Group Annuity Reserving Proj 2002, Scale AA (unisex)