

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 SOLUGENIX CORPORATION 401(K) PLAN
1b	Three-digit plan number (PN) ▶ 001
1c	Effective date of plan 01/01/2005
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) SOLUGENIX CORPORATION 601 VALENCIA AVENUE, SUITE 260 BREA, CA 92823
2b	Employer Identification Number (EIN) 20-1631341
2c	Plan Sponsor's telephone number 714-223-5721
2d	Business code (see instructions) 541511

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.	10/11/2024	ANDREA BUTZ
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	10/11/2024	ANDREA BUTZ
	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	5 454
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) 356 6a(2) 329 6b 0 6c 110 6d 439 6e 0 6f 439 6g(1) 263 6g(2) 266 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 2F 2G 2J 2K 2T 3D 3H

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 1
- (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 A (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Insurance 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. ► Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2).	OMB No. 1210-0110 2023 This Form is Open to Public Inspection
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For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023		
A Name of plan SOLUGENIX CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ►	001
C Plan sponsor's name as shown on line 2a of Form 5500 SOLUGENIX CORPORATION	D Employer Identification Number (EIN) 20-1631341	

Part I	Information Concerning Insurance Contract Coverage, Fees, and Commissions	Provide information for each contract on a separate Schedule A. Individual contracts grouped as a unit in Parts II and III can be reported on a single Schedule A.
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1 Coverage Information:

(a) Name of insurance carrier
JOHN HANCOCK LIFE INSURANCE COMPANY (U.S.A)

(b) EIN	(c) NAIC code	(d) Contract or identification number	(e) Approximate number of persons covered at end of policy or contract year	Policy or contract year	
				(f) From	(g) To
01-0233346	65838	130159	266	01/01/2023	12/31/2023

2 Insurance fee and commission information. Enter the total fees and total commissions paid. List in line 3 the agents, brokers, and other persons in descending order of the amount paid.

(a) Total amount of commissions paid	(b) Total amount of fees paid
0	11486

3 Persons receiving commissions and fees. (Complete as many entries as needed to report all persons).

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid
HEMBREE TPA, INC. 13660 N. 94TH DRIVE
SUITE F-3
PEORIA, AZ 85381

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	
	5500	TPA FEES PAID	5

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid
HEMBREE TPA, INC. 13660 N. 94TH DRIVE
SUITE F-3
PEORIA, AZ 85381

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	
	5986	TPA COMPENSATION	5

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		(e) Organization code
	(c) Amount	(d) Purpose	

Part II Investment and Annuity Contract Information

Where individual contracts are provided, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

4 Current value of plan's interest under this contract in the general account at year end	4	112
5 Current value of plan's interest under this contract in separate accounts at year end.....	5	14039483

6 Contracts With Allocated Funds:**a** State the basis of premium rates ▶**b** Premiums paid to carrier**6b****c** Premiums due but unpaid at the end of the year.....**6c****d** If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, enter amount.**6d**

Specify nature of costs ▶

e Type of contract: (1) ☐ individual policies (2) ☐ group deferred annuity(3) ☐ other (specify) ▶**f** If contract purchased, in whole or in part, to distribute benefits from a terminating plan, check here ☐**7** Contracts With Unallocated Funds (Do not include portions of these contracts maintained in separate accounts)**a** Type of contract: (1) ☐ deposit administration (2) ☐ immediate participation guarantee(3) ☐ guaranteed investment (4) ☐ other ▶**b** Balance at the end of the previous year**7b****c** Additions: (1) Contributions deposited during the year**7c(1)**

(2) Dividends and credits

7c(2)

(3) Interest credited during the year

7c(3)

(4) Transferred from separate account.....

7c(4)

(5) Other (specify below)

7c(5)

▶

(6) Total additions.....

7c(6)**d** Total of balance and additions (add lines **7b** and **7c(6)**)**7d****e** Deductions:

(1) Disbursed from fund to pay benefits or purchase annuities during year

7e(1)

(2) Administration charge made by carrier

7e(2)

(3) Transferred to separate account.....

7e(3)

(4) Other (specify below)

7e(4)

▶

(5) Total deductions.....

7e(5)**f** Balance at the end of the current year (subtract line **7e(5)** from line **7d**)**7f**

Part III Welfare Benefit Contract Information

If more than one contract covers the same group of employees of the same employer(s) or members of the same employee organizations(s), the information may be combined for reporting purposes if such contracts are experience-rated as a unit. Where contracts cover individual employees, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

8 Benefit and contract type (check all applicable boxes)

- a** ☐ Health (other than dental or vision)
b ☐ Dental
c ☐ Vision
d ☐ Life insurance
e ☐ Temporary disability (accident and sickness)
f ☐ Long-term disability
g ☐ Supplemental unemployment
h ☐ Prescription drug
i ☐ Stop loss (large deductible)
j ☐ HMO contract
k ☐ PPO contract
l ☐ Indemnity contract
m ☐ Other (specify) ▶

9 Experience-rated contracts:

a Premiums: (1) Amount received	9a(1)		
(2) Increase (decrease) in amount due but unpaid.....	9a(2)		
(3) Increase (decrease) in unearned premium reserve	9a(3)		
(4) Earned ((1) + (2) - (3)).....		9a(4)	
b Benefit charges (1) Claims paid.....	9b(1)		
(2) Increase (decrease) in claim reserves	9b(2)		
(3) Incurred claims (add (1) and (2)).....		9b(3)	
(4) Claims charged		9b(4)	
c Remainder of premium: (1) Retention charges (on an accrual basis) --			
(A) Commissions	9c(1)(A)		
(B) Administrative service or other fees	9c(1)(B)		
(C) Other specific acquisition costs	9c(1)(C)		
(D) Other expenses	9c(1)(D)		
(E) Taxes	9c(1)(E)		
(F) Charges for risks or other contingencies.....	9c(1)(F)		
(G) Other retention charges	9c(1)(G)		
(H) Total retention		9c(1)(H)	
(2) Dividends or retroactive rate refunds. (These amounts were ☐ paid in cash, or ☐ credited.).....		9c(2)	
d Status of policyholder reserves at end of year: (1) Amount held to provide benefits after retirement		9d(1)	
(2) Claim reserves		9d(2)	
(3) Other reserves.....		9d(3)	
e Dividends or retroactive rate refunds due. (Do not include amount entered in line 9c(2).)		9e	

10 Nonexperience-rated contracts:

a Total premiums or subscription charges paid to carrier	10a	
b If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, other than reported in Part I, line 2 above, report amount	10b	

Specify nature of costs.

Part IV Provision of Information

11 Did the insurance company fail to provide any information necessary to complete Schedule A?..... ☐ Yes ☒ No

12 If the answer to line 11 is "Yes," specify the information not provided. ▶

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 SOLUGENIX CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 SOLUGENIX CORPORATION	D Employer Identification Number (EIN) 20-1631341	

Part I	Service Provider Information (see instructions)
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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).. ☒ Yes ☐ No
- 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
JOHN HANCOCK LIFE INSURANCE COMPANY P.O. BOX 600 BUFFALO, NY 14201-0600
01-0233346

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

(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)

JOHN HANCOCK LIFE INSURANCE COMPANY

01-0233346

(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?
15 28 60 62 63 67 68	RECORDKEEPER	2969	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☒ No ☐

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

BAYNTREE WEALTH ADVISORS, LLC

6720 N. SCOTTSDALE RD.
SUITE 340
SCOTTSDALE, AZ 85253

47-3722740

(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?
26	RIA	30068	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 ☐

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
(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
(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 D (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration	DFE/Participating Plan 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.
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For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan SOLUGENIX CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ▶ 001
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 SOLUGENIX CORPORATION	D Employer Identification Number (EIN) 20-1631341

Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)		
a Name of MTIA, CCT, PSA, or 103-12 IE: NUVEEN LARGE-CAP GROWTH INDEX			
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA			
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 1475609	
a Name of MTIA, CCT, PSA, or 103-12 IE: 500 INDEX FUND			
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA			
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 1278428	
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2040			
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA			
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 1258934	
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2045			
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA			
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 1027079	
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2050			
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA			
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 1008724	
a Name of MTIA, CCT, PSA, or 103-12 IE: SCIENCE & TECHNOLOGY FUND			
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA			
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 869971	
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2035			
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA			
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 859665	

a Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD VALUE INDEX FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 845189
a Name of MTIA, CCT, PSA, or 103-12 IE: MONEY MARKET FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 677325
a Name of MTIA, CCT, PSA, or 103-12 IE: MID CAP INDEX FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 555098
a Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD MID-CAP GROWTH ETF		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 533216
a Name of MTIA, CCT, PSA, or 103-12 IE: AMERICAN FUNDS NEW PERSPECTIVE		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 411924
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2055		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 383734
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2060		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 350466
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2030		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 350431
a Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD SMALL CAP VALUE INDEX		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 315431
a Name of MTIA, CCT, PSA, or 103-12 IE: DFA U.S. SMALL CAP FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 290169

a Name of MTIA, CCT, PSA, or 103-12 IE: WISDOMTREE MIDCAP DIVIDEND ETF		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 284828
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2025		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 270918
a Name of MTIA, CCT, PSA, or 103-12 IE: AF AMERICAN BALANCED FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 248813
a Name of MTIA, CCT, PSA, or 103-12 IE: FINANCIAL INDUSTRIES FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 148050
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2065		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 122092
a Name of MTIA, CCT, PSA, or 103-12 IE: TOTAL BOND MARKET FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 118002
a Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD SMALL CAP GROW INDEX		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 110643
a Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX RET		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 64121
a Name of MTIA, CCT, PSA, or 103-12 IE: FIDELITY INTERNATIONAL INDEX		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 48935
a Name of MTIA, CCT, PSA, or 103-12 IE: MFS UTILITIES FUND		
b Name of sponsor of entity listed in (a): JOHN HANCOCK USA		
c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 48262

a Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD ST INVESTMENT-GRADE

b Name of sponsor of entity listed in (a): JOHN HANCOCK USA

c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 30479
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a Name of MTIA, CCT, PSA, or 103-12 IE: DFA INTERNATIONAL VALUE

b Name of sponsor of entity listed in (a): JOHN HANCOCK USA

c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 28174
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a Name of MTIA, CCT, PSA, or 103-12 IE: DFA INFLATION-PROTECTED SEC

b Name of sponsor of entity listed in (a): JOHN HANCOCK USA

c EIN-PN 01-0233346-000	d Entity code P	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 24773
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
-----------------	----------------------	---

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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Part II Information on Participating Plans (to be completed by DFEs, other than DCGs)

(Complete as many entries as needed to report all participating plans. DCGs must report each participating plan using Schedule DCG.)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
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plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN

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 SOLUGENIX CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ▶	001
C Plan sponsor's name as shown on line 2a of Form 5500 SOLUGENIX CORPORATION		
D Employer Identification Number (EIN) 20-1631341		

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	112	112
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)	43610	45086
(2) Participant contributions	1b(2)	262	0
(3) Other	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)	110367	175451
(9) Value of interest in common/collective trusts	1c(9)		
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)		
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	10099555	14039483
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

1d Employer-related investments:		(a) Beginning of Year	(b) End of Year
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	10253906	14260132
Liabilities			
g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through 1j)	1k	0	
Net Assets			
l Net assets (subtract line 1k from line 1f)	1l	10253906	14260132

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)	602801	
(B) Participants	2a(1)(B)	1350442	
(C) Others (including rollovers)	2a(1)(C)	239978	
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)		2193221
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)	10825	
(F) Other	2b(1)(F)		
(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)		10825
(2) Dividends: (A) Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)		
(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)		
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(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)		
(B) Other	2b(5)(B)		
(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)		
(7) Net investment gain (loss) from pooled separate accounts.....	2b(7)		2352738
(8) Net investment gain (loss) from master trust investment accounts.....	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities.....	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		
c Other income	2c		
d Total income. Add all income amounts in column (b) and enter total	2d		4556784

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	471587	
(2) To insurance carriers for the provision of benefits.....	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines 2e(1) through (3)	2e(4)		471587
f Corrective distributions (see instructions)	2f		9862
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses:			
(1) Salaries and allowances	2i(1)		
(2) Contract administrator fees.....	2i(2)	5500	
(3) Recordkeeping fees.....	2i(3)	33541	
(4) IQPA audit fees.....	2i(4)		
(5) Investment advisory and investment management fees	2i(5)	30068	
(6) Bank or trust company trustee/custodial fees	2i(6)		
(7) Actuarial fees	2i(7)		
(8) Legal fees	2i(8)		
(9) Valuation/appraisal fees	2i(9)		
(10) Other trustee fees and expenses	2i(10)		
(11) Other expenses	2i(11)		
(12) Total administrative expenses. Add lines 2i(1) through (11)	2i(12)		69109
j Total expenses. Add all expense amounts in column (b) and enter total	2j		550558

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		4006226
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

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: **MANSPERGER PATTERSON & MCMULLIN PLC**

(2) EIN: **86-0751928**

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.)		☒	
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?	☒		3000000
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.
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For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan SOLUGENIX CORPORATION 401(K) PLAN	B Three-digit plan number (PN) ▶ 001
C Plan sponsor's name as shown on line 2a of Form 5500 SOLUGENIX CORPORATION	D Employer Identification Number (EIN) 20-1631341

Part I	Distributions
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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.....	1
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): 01-0233346 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	3

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.)
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4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? If the plan is a defined benefit plan, go to line 8.	☐ Yes ☐ No ☐ N/A
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
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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
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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) 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) 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)	14a 14b 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
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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 <u>06 / 30 / 2020</u> (MM/DD/YYYY) and the Opinion Letter serial number <u>Q702814A</u> .	
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SOLUGENIX CORPORATION 401(K) PLAN
FINANCIAL STATEMENTS
DECEMBER 31, 2023 AND 2022

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INDEPENDENT AUDITORS' REPORT

To the Administrative Committee of:

SOLUGENIX CORPORATION 401(K) PLAN

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

We have performed audits of the financial statements of Solugenix Corporation 401(k) 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 Solugenix Corporation 401(k) Plan's 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 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 Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA (qualified institution).

Management has obtained certifications from a qualified institution 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 3 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—

- 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.
- the information in the accompanying financial statements related to assets held by and certified to by a qualified institution 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).

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 Solugenix Corporation 401(k) 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 accounting principles generally accepted in the United States of America, 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 Solugenix Corporation 401(k) Plan's ability to continue as a going concern for one year after the date the financial statements are 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, including omissions, 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 Solugenix Corporation 401(k) 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 Solugenix Corporation 401(k) 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 certification, 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 accounting principles generally accepted in the United States of America.

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 accounting principles generally accepted in the United States of America.

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 of assets held at end of year is presented for purposes of additional analysis and is not a required part of the financial statements, but is supplementary information required by the Department of Labor'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 schedule, 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 schedule 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 schedule, we evaluated whether the supplemental schedule, other than the information agreed to or derived from the certified investment information, including their form and content, are presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

In our opinion—

- the form and content of the supplemental schedule, other than the information in the supplemental schedule that agreed to or is derived from the certified investment information, are presented, in all material respects, in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.
- the information in the supplemental schedule related to assets held by and certified to by a qualified institution 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).

Monaperger Patterson & McMullin, PLLC

Tempe, Arizona
September 26, 2024

SOLUGENIX CORPORATION 401(K) PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2023 AND 2022

	<u>2023</u>	<u>2022</u>
ASSETS:		
Cash and equivalents	\$ <u>112</u>	\$ <u>112</u>
Investments at fair value	<u>14,039,483</u>	<u>10,100,027</u>
	<u>14,039,483</u>	<u>10,100,027</u>
Receivables		
Participant loans	175,451	110,367
Employer contributions	<u>45,086</u>	<u>43,400</u>
Total receivables	<u>220,537</u>	<u>153,767</u>
 Total assets	 <u>14,260,132</u>	 <u>10,253,906</u>
 Net assets available for benefits	 <u>\$ 14,260,132</u>	 <u>\$ 10,253,906</u>

The Accompanying Notes are an Integral Part
of These Financial Statements.

**SOLUGENIX CORPORATION 401(K) PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2023**

ADDITIONS:

Investment income	
Net appreciation in fair value of investments	\$ <u>2,352,738</u>
	2,352,738
 Interest income on participant loans	 10,825
 Contributions:	
Participant	1,350,657
Employer	602,973
Rollovers	<u>239,978</u>
	<u>2,193,608</u>
 Total additions	 <u>4,557,171</u>

DEDUCTIONS:

Benefit payments to participants	471,974
Corrective distributions	9,862
Administrative expenses	<u>69,109</u>
 Total deductions	 <u>550,945</u>

NET INCREASE	4,006,226
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NET ASSETS AVAILABLE FOR BENEFITS

Beginning of year, as restated	<u>10,253,906</u>
 End of year	 \$ <u><u>14,260,132</u></u>

The Accompanying Notes are an Integral Part
of These Financial Statements.

**SOLUGENIX CORPORATION 401(K) PLAN
NOTES TO THE FINANCIAL STATEMENTS
DECEMBER 31, 2023 AND 2022**

NOTE 1 - DESCRIPTION OF THE PLAN

The following description of the Solugenix Corporation 401(k) Plan (the Plan) provides only general information. Participants should refer to the Plan and Trust Agreement (Plan Document) for a more complete description of the Plan's provisions.

General

The Plan is a defined contribution plan covering all employees of Solugenix Corporation (the Company) who have six months of service. The Plan is subject to the provisions of ERISA. The Board of Trustees is responsible for oversight of the Plan. The Investment Committee determines the appropriateness of the Plan's investment offerings, monitors investment performance and reports to the Plan's Board of Trustees.

Contributions

Each year, participants may contribute up to 100 percent of pretax annual compensation, as defined in the Plan. Participants who have attained age 50 before the end of the Plan year are eligible to make catch-up contributions. Participants may also contribute amounts representing distributions from other qualified defined benefit or defined contribution plans (rollover). Participants direct the investment of their contributions into various investment options offered by the Plan. For the year ended December 31, 2023, the Company contributed 100 percent of the first 4 percent of compensation that a participant contributed to the Plan. Contributions are subject to certain IRS limitations.

Participant Accounts

Each participant's account is credited with the participant's contributions and Company matching contributions, and Plan earnings. Participant accounts are charged with an allocation of administrative expenses that are paid by the Plan. Allocations are based on participant earnings, account balances, or specific participant transactions, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting

Participants are 100 percent vested in their salary deferral contributions, rollovers, the Company's discretionary contributions, and earnings thereon.

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% of their vested account balance. The notes are secured by the balance in the participant's account and bear interest at rates ranging from 4.25% to 9.50%, which are commensurate with local prevailing rates as determined quarterly by the Plan administrator. Principal and interest is paid ratably through monthly payroll deductions.

SOLUGENIX CORPORATION 401(K) PLAN
NOTES TO THE FINANCIAL STATEMENTS, (CONTINUED)
DECEMBER 31, 2023 AND 2022

NOTE 1 - DESCRIPTION OF THE PLAN, (CONTINUED)

Payment of Benefits

The Plan is designed to provide benefits at the time of retirement. However, if employment is terminated because of death, disability, or for any other reason, participants may request a distribution of their vested account balance from the Plan Administrator. Also, if employment is terminated and the participant has a vested interest of \$5,000 or less, it will be distributed in a lump sum. Furthermore, upon approval of the Plan Administrator, participants may be entitled to take distributions of salary deferral contributions and rollover contributions to satisfy certain immediate and heavy financial needs. Participants can elect to withdraw all, or a portion of their account while still employed, upon attainment of age 59 ½.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the plan are prepared on the accrual basis of accounting.

Investments held by a defined contribution plan are required to be reported at fair value, except for fully benefit-responsive investment contracts. Contract value is the relevant measure for that portion of the net assets available for benefits of a defined contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants normally would receive if they were to initiate permitted transactions under the terms of the plan.

Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP") requires the plan administrator to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosures of contingent assets and liabilities. Accordingly, actual results may differ from those estimates.

Investment Valuation and Income Recognition

Investments are reported at fair value, except for fully benefit-responsive investment contracts, which are reported at contract 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 at the measurement date. The Investment Committee determines the Plan's valuation policies. See Note 4 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 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. Related fees are charged directly to the borrowing participant's account and are included in administrative expenses when incurred. As of December 31, 2023 and 2022, no allowance for credit losses has been recorded. If a participant does not make loan repayments and the plan administrator considers the participant loan to be in default, the loan balance is reduced, and the delinquent participant note receivable is recorded as a benefit payment based on the terms of the Plan document.

**SOLUGENIX CORPORATION 401(K) PLAN
NOTES TO THE FINANCIAL STATEMENTS, (CONTINUED)
DECEMBER 31, 2023 AND 2022**

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, (CONTINUED)

Excess Contributions Payable

There were no excess contributions payable for the years ended December 31, 2023 and 2022.

Payment of Benefits

Benefits are recorded when paid.

Expenses

Certain expenses of maintaining the Plan are paid by the Plan, unless otherwise paid by the Company. Expenses that are paid by the Company are excluded from these financial statements. Fees related to the administration of notes receivable from participants are charged directly to the participant's account and are included in administrative expenses. Investment related expenses are included in net appreciation of fair value of investments.

Subsequent Event

Management has evaluated subsequent events through September 26, 2024, the date the financial statements were available to be issued.

NOTE 3 – CERTIFICATION FROM THE TRUSTEE (UNAUDITED)

The Plan administrator has elected the method of annual reporting compliance permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. John Hancock Life Insurance Company (John Hancock), the custodian of the Plan, has supplied the Plan administrator with a certification as to the completeness and accuracy of all investment information reflected on the accompanying statements of net assets available for benefits as of December 31, 2023, the statement of changes in net assets available for benefits for the year ended December 31, 2023, and the supplemental schedule of assets (held at the end of the year) as of December 31, 2023.

SOLUGENIX CORPORATION 401(K) PLAN
NOTES TO THE FINANCIAL STATEMENTS, (CONTINUED)
DECEMBER 31, 2023 AND 2022

NOTE 4 – FAIR VALUE MEASUREMENTS

The fair value measurement accounting literature establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. This hierarchy consists of three broad levels: Level 1 inputs consist of unadjusted quoted prices in active markets for identical assets and have the highest priority. Level 2 inputs consist of observable inputs other than quoted prices for identical assets (Level 1). Level 3 inputs are unobservable and have the lowest priority. The Plan uses appropriate valuation techniques based on the available inputs to measure the fair value of its investments. When available, the Plan measures fair value using Level 1 inputs because they generally provide the most reliable evidence of fair value. Level 2 inputs are used for investments for which Level 1 inputs were not available. Level 3 inputs would only be used if Level 1 or Level 2 inputs were not available. There are no plan assets requiring the use of Level 3 inputs for the periods presented.

Level 1 Fair Value Measurements

The fair value of mutual funds is based on quoted net asset values of the shares as reported by the fund. The mutual funds held by the Plan are open-end mutual funds registered with the U.S. Securities and Exchange Commission. The funds must publish their daily net asset value and transact at that price. The mutual funds held by the Plan are considered to be actively traded.

The following tables set forth, by level within the fair value hierarchy, the Plan's investments at fair value as of December 31, 2023 and 2022:

December 31, 2023				
	Level 1	Level 2	Level 3	Total
Mutual Funds	\$ 14,039,483	\$ -	\$ -	\$ 14,039,483
Total Investments at Fair Value	<u>\$ 14,039,483</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 14,039,483</u>

December 31, 2022				
	Level 1	Level 2	Level 3	Total
Mutual Funds	\$ 10,100,027	\$ -	\$ -	\$ 10,100,027
Total Investments at Fair Value	<u>\$ 10,100,027</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 10,100,027</u>

Gains and losses included in changes in net assets available for benefits for the years ended December 31, 2023 and 2022, are reported in net appreciation in fair value of investments.

The Plan's policy is to recognize transfers between Levels 1 and 2 and into and out of Level 3 as of the date of the event or change in circumstances that caused the transfer. For the year ended December 31, 2023, there were no significant transfers between Levels 1 and 2 and no transfers into or out of Level 3.

SOLUGENIX CORPORATION 401(K) PLAN
NOTES TO THE FINANCIAL STATEMENTS, (CONTINUED)
DECEMBER 31, 2023 AND 2022

NOTE 5 - INVESTMENTS

Upon enrollment in the Plan, a participant may direct contributions into any of the thirty investment fund options maintained by John Hancock. Participants can individually direct both employee and employer contributions made on their behalf.

Investment earnings, including net appreciation or depreciation of the assets in the Plan, are allocated to participants daily, in proportion to the value of each participant's account as of that date, to the total of all participant accounts.

During 2023, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated in value by \$2,352,738.

NOTE 6 – RELATED PARTY TRANSACTIONS AND PARTY IN INTEREST TRANSACTIONS

Certain Plan investments are shares of mutual funds managed by John Hancock. John Hancock is the trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions. Fees paid by the Plan for the investment management services amounted to \$69,109 for the year ended December 31, 2023.

These party-in-interest transactions are exempt from the prohibited transaction rules of ERISA.

NOTE 7 – PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants would become 100% vested in their employer contributions.

NOTE 8 – TAX STATUS

The Internal Revenue Service (IRS) has determined and informed the Company by a letter dated June 30, 2020, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code (IRC). Although the Plan has been amended since receiving the determination letter, the Plan administrator and the Plan's tax counsel believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC and therefore believe that the Plan is qualified and the related trust is tax-exempt.

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

NOTE 9 – 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. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values 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 statement of net assets available for benefits.

SCHEDULE I

**SOLUGENIX CORPORATION 401(K) PLAN
SCHEDULE H, LINE 4I – SCHEDULE OF ASSETS HELD AT END OF YEAR
DECEMBER 31, 2023
EIN: 75-3091289
PN: 001**

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment	(d) Cost	(e) Current value
1	John Hancock Life Ins Co.	500 Index Fund	**	\$ 1,278,428
2	John Hancock Life Ins Co.	AF American Balanced Fund	**	248,813
3	John Hancock Life Ins Co.	American Funds New Perspective	**	411,924
4	John Hancock Life Ins Co.	BlackRock LifePath Index 2025	**	270,917
5	John Hancock Life Ins Co.	BlackRock LifePath Index 2030	**	350,431
6	John Hancock Life Ins Co.	BlackRock LifePath Index 2035	**	859,665
7	John Hancock Life Ins Co.	BlackRock LifePath Index 2040	**	1,258,934
8	John Hancock Life Ins Co.	BlackRock LifePath Index 2045	**	1,027,079
9	John Hancock Life Ins Co.	BlackRock LifePath Index 2050	**	1,008,724
10	John Hancock Life Ins Co.	BlackRock LifePath Index 2055	**	383,734
11	John Hancock Life Ins Co.	BlackRock LifePath Index 2060	**	350,466
12	John Hancock Life Ins Co.	BlackRock LifePath Index 2065	**	122,092
13	John Hancock Life Ins Co.	BlackRock LifePath Index Ret	**	64,121
14	John Hancock Life Ins Co.	DFA Inflation-Protected Sec	**	24,773
15	John Hancock Life Ins Co.	DFA International Value	**	28,174
16	John Hancock Life Ins Co.	DFA U.S. Small Cap Fund	**	290,169
17	John Hancock Life Ins Co.	Fidelity International Index	**	48,935
18	John Hancock Life Ins Co.	Financial Industries Fund	**	148,050
19	John Hancock Life Ins Co.	MFS Utilities Fund	**	48,262
20	John Hancock Life Ins Co.	Mid Cap Index Fund	**	555,098
21	John Hancock Life Ins Co.	Money Market Fund	**	677,325
22	John Hancock Life Ins Co.	Science & Technology Fund	**	869,971
23	John Hancock Life Ins Co.	TIAA-CREF Large-Cap Growth Idx	**	1,475,610
24	John Hancock Life Ins Co.	Total Bond Market Fund	**	118,002
25	John Hancock Life Ins Co.	Vanguard Mid-Cap Growth ETF	**	533,216
26	John Hancock Life Ins Co.	Vanguard Small Cap Grow Index	**	110,643
27	John Hancock Life Ins Co.	Vanguard Small Cap Value Index	**	315,431
28	John Hancock Life Ins Co.	Vanguard ST Investment-Grade	**	30,479
29	John Hancock Life Ins Co.	Vanguard Value Index Fund	**	845,189
30	John Hancock Life Ins Co.	WisdomTree MidCap Dividend ETF	**	284,828
				14,039,483
	*Participant Loans	Interest Rates Ranging from 4.25 - 9.50%		175,451
	Total			\$ 14,214,934

* Indicates a party-in-interest.

** Assets are participant directed investments and, therefore, cost information is not required.

[illegible]