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

2019

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019

A This return/report is for:
- ☐ a multiemployer plan
- ☐ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- ☒ a single-employer plan
- ☐ a DFE (specify) ____

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 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)

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.	10/13/2020	SHASHI JASTHI
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	10/13/2020	SHASHI JASTHI
	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 [X] 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**	536
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	**6a(1)**	481
a(2)	Total number of active participants at the end of the plan year	**6a(2)**	335
b	Retired or separated participants receiving benefits	**6b**	0
c	Other retired or separated participants entitled to future benefits	**6c**	33
d	Subtotal. Add lines **6a(2)**, **6b**, and **6c**	**6d**	368
e	Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	0
f	Total. Add lines **6d** and **6e**.	**6f**	368
g	Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	167
h	Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	**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 2T 3D

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)		**9b** Plan benefit arrangement (check all that apply)	
(1)	[X] Insurance	**(1)**	[X] Insurance
(2)	[ ] Code section 412(e)(3) insurance contracts	**(2)**	[ ] Code section 412(e)(3) insurance contracts
(3)	[X] Trust	**(3)**	[X] Trust
(4)	[ ] General assets of the sponsor	**(4)**	[ ] General assets of the sponsor

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)** [X] **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

b General Schedules

- **(1)** [X] **H** (Financial Information)
- **(2)** [ ] **I** (Financial Information – Small Plan)
- **(3)** [X] 1 **A** (Insurance Information)
- **(4)** [X] **C** (Service Provider Information)
- **(5)** [X] **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 2019 Form M-1 annual report. If the plan was not required to file the 2019 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

2019

This Form is Open to Public Inspection

For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019

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.

1 Coverage Information:

(a) Name of insurance carrier
JOHN HANCOCK LIFE INSURANCE COMAPNY (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	179	01/01/2019	12/31/2019

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
2676	2420

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

PENSION STRATEGIES, INC.
2141 E. HIGHLAND AVE, SUITE 180
PHOENIX, AZ 85016

(b) Amount of sales and base commissions paid	Fees and other commissions paid		**(e)** Organization code
	(c) Amount	**(d)** Purpose	
2676	2420	TPA FEES	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	

(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**	
5	Current value of plan's interest under this contract in separate accounts at year end	**5**	5798831

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)	Service Provider Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	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.**	**2019** **This Form is Open to Public Inspection.**

For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019

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)

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

1 Information on Persons Receiving Only Eligible Indirect Compensation

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

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

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	881	Yes [ ] No [X]	Yes [ ] No [X]	0	Yes [ ] No [X]

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

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

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

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

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)

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

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

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

(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

2019

This Form is Open to Public Inspection.

For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019

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: WISDOMTREE MIDCAP DIVIDEND ETF

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

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)
01-0233346-000	P	189701

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	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
01-0233346-000	P	490534

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

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

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)
01-0233346-000	P	228293

a Name of MTIA, CCT, PSA, or 103-12 IE: TIAA-CREF LARGE-CAP GROWTH IDX

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

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)
01-0233346-000	P	575247

a Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD TOT WLD STK INDEX ETF

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

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)
01-0233346-000	P	8597

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	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
01-0233346-000	P	374595

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

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

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)
01-0233346-000	P	164064

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) 3521

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) 363

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) 157858

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) 47216

a Name of MTIA, CCT, PSA, or 103-12 IE: PIMCO SHORT-TERM 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) 36868

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)

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)

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)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

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 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 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 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 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

2019

This Form is Open to Public Inspection

For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019

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

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	4	895
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		
(2) Participant contributions	1b(2)		
(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)	28468	60851
(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)	4304308	5798831
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

			(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:			
	(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	4332780	5860577
	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 through1j)	1k		
	Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	4332780	5860577

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)	251061	
	(B) Participants	2a(1)(B)	541195	
	(C) Others (including rollovers)	2a(1)(C)	198676	
	(2) Noncash contributions	2a(2)		
	(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		990932
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)	3355	
	(F) Other	2b(1)(F)		
	(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		3355
	(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)		
(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)		1165363
c Other income	2c		
d Total income. Add all **income** amounts in column (b) and enter total	2d		2159650
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	592128	
(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)		592128
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: **(1)** Professional fees	2i(1)	39725	
(2) Contract administrator fees	2i(2)		
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)		
(5) Total administrative expenses. Add lines **2i(1)** through **(4)**	2i(5)		39725
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		631853
Net Income and Reconciliation			
k Net income (loss). Subtract line **2j** from line **2d**	2k		1527797
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 Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? ☒ Yes ☐ No

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

(1) Name: MANSPERGER, PATTERSON AND MCMULLIN, **(2)** EIN: 86-0751928

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, 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.

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.)	4a		X	
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.)	4b		X	

			Yes	No	Amount
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.)	4c		X	
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.)	4d		X	
e	Was this plan covered by a fidelity bond?	4e	X		1000000
f	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
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?	4g		X	
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?	4h		X	
i	Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i	X		
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.)	4j		X	
k	Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l	Has the plan failed to provide any benefit when due under the plan?	4l		X	
m	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m		X	
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.	4n			

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 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.)

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

2019

This Form is Open to Public Inspection.

For calendar plan year 2019 or fiscal plan year beginning 01/01/2019 and ending 12/31/2019

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

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** 0

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 04-6568107

Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.

3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year **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.)

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

If the plan is a defined benefit plan, go to line 8.

5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. **Date:** Month _____ Day _____ Year _____

If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.

6 **a** Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) **6a**

b Enter the amount contributed by the employer to the plan for this plan year **6b**

c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) **6c**

If you completed line 6c, skip lines 8 and 9.

7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

Part III Amendments

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

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

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ..... ☐ **Yes** ☐ **No**

11 **a** Does the ESOP hold any preferred stock? ..... ☐ **Yes** ☐ **No**

b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ..... ☐ **Yes** ☐ **No**

12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ..... ☐ **Yes** ☐ **No**

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (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 participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	**14a**	
b The plan year immediately preceding the current plan year	**14b**	
c The second preceding plan year	**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

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) through (c)

a Enter the percentage of plan assets held as:
Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):

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_____

SOLUGENIX CORPORATION 401(K) PLAN

COMMUNICATION TO THE ADMINISTRATIVE COMMITTEE AND MANAGEMENT

DECEMBER 31, 2019

Mansperger
Patterson
& McMullin, PLC
CERTIFIED PUBLIC ACCOUNTANTS

Jeffrey C. McMullin
James A. Wraith
Bradley W. Enos
Diane R. Hayes
Stephen G. Hale
LaDawn Setser
Wendy M. Whittard
Garrett M. Burnett

To the Administrative Committee and Management of:

SOLUGENIX CORPORATION 401(K) PLAN

We have audited the financial statements of Solugenix Corporation 401(k) Plan for the year ended December 31, 2019, and have issued our report thereon dated September 22, 2020. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated October 10, 2019. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by Solugenix Corporation 401(k) Plan are described in Note 2 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2019 other than new disclosure requirements for fair value measurements in Notes 3 and 4 to the financial statements. We noted no transactions entered into by the Plan during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. There were no significant estimates made to the financial statements for the year ended December 31, 2019.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Audit Adjustments

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. There were no audit adjustments in 2019.

Disagreements with Management

We are pleased to report that no such disagreements arose during the course of our audit. For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report.

Management Representations

We have received certain representations from management that are included in the management representation letter dated September 22, 2020.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Plan's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Plan's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

This information is intended solely for the information and use of the Administrative Committee and management of Solugenix Corporation 401(k) Plan and is not intended to be and should not be used by anyone other than these specified parties.

Sincerely,

Mongperger Patterson & McMullin, PLC

Tempe, Arizona
September 23, 2020

SOLUGENIX CORPORATION 401(K) PLAN

FINANCIAL STATEMENTS

DECEMBER 31, 2019 AND 2018

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INDEPENDENT AUDITORS' REPORT

To the Administrative Committee of:

SOLUGENIX CORPORATION 401(K) PLAN

Report on the Financial Statements

We were engaged to audit the accompanying financial statements of the Solugenix Corporation 401(k) Plan, which comprise the statements of net assets available for benefits as of December 31, 2019 and 2018, and the related statement of changes in net assets available for benefits for the year ended December 31, 2019, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Plan management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on conducting the audit in accordance with auditing standards generally accepted in the United States of America. Because of the matter described in the Basis for Disclaimer of Opinion paragraph, however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for Disclaimer of Opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the plan administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information cited in Note 5, which was certified by John Hancock Life Insurance Company, the custodian of the Plan, except for comparing the information with the related information included in the financial statements and supplemental schedules. We have been informed by the plan administrator that the custodian holds the Plan's investment assets and executes investment transactions. The plan administrator has obtained a certification from the custodian as of and for the year ended December 31, 2019 and 2018, that the information provided to the plan administrator by the custodian is complete and accurate.

Disclaimer of Opinion

Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient, appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Other Matter – Supplemental Schedules

The supplemental Schedule of Assets Held at End of Year is required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 and is presented for the purpose of additional analysis and is not a required part of the financial statements. Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we do not express an opinion on the supplemental schedule referred to above.

Report on Form and Content in Compliance With DOL Rules and Regulations

The form and content of the information included in the financial statements and supplemental schedules, other than that derived from the information certified by the custodian, have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

Monsperger Patterson & McMullin, PLC

Tempe, Arizona
September 22, 2020

SOLUGENIX CORPORATION 401(K) PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2019 AND 2018

	2019	2018
ASSETS:		
Investments at fair value	$ 5,799,726	$ 4,304,312
Investments at contract value	-	-
	5,799,726	4,304,312
Receivables		
Participant loans	60,851	28,468
Employer contributions	-	18,430
Total receivables	60,851	46,898
Total assets	5,860,577	4,351,210
Net assets available for benefits	$ 5,860,577	$ 4,351,210

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, 2019

ADDITIONS:		
Investment income		
Net appreciation in fair value of investments	$	1,165,363
		1,165,363
Interest income on participant loans		3,355
Contributions:		
Participant		541,195
Employer		232,631
Rollovers		198,676
		972,502
Total additions		2,141,220
DEDUCTIONS:		
Benefit payments to participants		592,128
Administrative expenses		39,725
Total deductions		631,853
NET INCREASE		1,509,367
NET ASSETS AVAILABLE FOR BENEFITS		
Beginning of year		4,351,210
End of year	$	5,860,577

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

SOLUGENIX CORPORATION 401(K) PLAN
NOTES TO THE FINANCIAL STATEMENTS
DECEMBER 31, 2019 AND 2018

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 Agreement (Plan Document) for a more complete description of the Plan's provisions.

General

The Plan was established April 1, 2003 and is a prototype defined contribution plan covering employees of Solugenix Corporation (the Company). The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). Eligibility requirements of the Plan are the completion of six consecutive month and be employed on the applicable entry date. Once eligibility requirements have been meet, employees may enroll in the Plan and begin participation on the first day of the following month..

Contributions

Participants may contribute the maximum contribution limit provided by the Internal Revenue Code, currently $18,500. Participants age 50 or older may elect to defer additional amounts. Participants may also contribute amounts representing distributions from other qualified defined benefit or contribution plans.

Under the provisions of the Plan, the Company is required to make safe harbor matching contributions to the Plan equal to 100% of elective deferrals up to 3% of compensation, plus 50% of elective deferrals over 3% but less than 5% of compensation. For the year ended December 31, 2019, safe harbor matching contributions made to the plan totaled $232,631.

Participant Accounts

Each participant's account consists of the participant's contribution (salary deferral), the Company’s discretionary contributions, if any, any rollover contributions, and earnings on the invested balances. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

Notes Receivable from Participants

The minimum loan amount is $1,000. Participants may borrow from their account an amount limited to the lesser of $50,000 or one-half of the participant's vested account balance, reduced by the highest loan balance in the preceding year. Loans must bear a reasonable rate of interest and must be repaid within five years.

NOTE 1 - DESCRIPTION OF THE PLAN, (CONTINUED)

Vesting

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

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. Finally, benefits are recorded when paid.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Subsequent Events

Management has evaluated subsequent events through September 22, 2020, the date the financial statements were available to be issued.

As a result of the spread of COVID-19, economic uncertainties have arisen which have resulted in significant volatility in the investment markets, resulting in a substantial decline in the value of investments. The duration of these uncertainties and the ultimate financial effects cannot be reasonably estimated at this time.

Estimates

The preparation of financial statements in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 requires the Plan Administrator to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

Method of Accounting

The accounting records of the Plan are maintained on the accrual basis. Revenues are recognized when earned, and expenditures are recognized when incurred.

Administrative Costs

The Plan has entered into service contracts with outside consultants and agencies to perform certain administrative services for the Plan. The fees for these services are paid by the Plan Administrator. Fees related to administration of participant loans and distributions are deducted from the participants' applicable accounts.

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

Investment Valuation and Income Recognition

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 3 for discussion of fair value measurements.

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

Market Risk

The Plan invests in various investments, which, in general, are exposed to various risks, such as interest rate, credit and overall market volatility risks. Furthermore, due to the level of risk associated with certain investments securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of net assets available for benefits and participants' individual account balances.

NOTE 3 – FAIR VALUE MEASUREMENTS

FASB ASC 820, Fair Value Measurements and Disclosures, establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobserved inputs (Level 3 measurements). The three levels of the fair value hierarchy under FASB ASC 820 are described below:

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

Level 2: Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

NOTE 3 – FAIR VALUE MEASUREMENTS, (CONTINUED)

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

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Mutal Funds	$ 5,799,726	$ -	$ -	$ 5,799,726
Total Investments at Fair Value	$ 5,799,726	$ -	$ -	$ 5,799,726

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Mutual funds	$ 4,304,312	$ -	$ -	$ 4,304,312
Total Investments at Fair Value	$ 4,304,312	$ -	$ -	$ 4,304,312

NOTE 4 - 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.

During 2019, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated in value by $1,165,363.

NOTE 5 – INFORMATION CERTIFIED BY THE PLAN'S CUSTODIAN (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, 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, 2019 and 2018, the statement of changes in net assets available for benefits for the year ended December 31, 2019, and the supplemental schedule of assets (held at the end of the year) as of December 31, 2019.

NOTE 6 – TAX STATUS

The Plan has received an opinion letter from the Internal Revenue Service dated March 31, 2014, stating that the written form of the underlying plan document is qualified under Section 401(a) of the Internal Revenue Code (the Code), and that any employer adopting this form of the Plan will be considered to have a plan qualified under section 401(a) of the Code. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan has been amended since receiving the opinion letter. However, the Plan Administrator and the Plan's trustee believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

The Plan Administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2019, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to audit by taxing jurisdictions, however, there are currently no audits for any tax periods in progress.

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. Under the provisions of the Plan, participants are always 100% vested in their accounts.

NOTE 8 – PARTY-IN-INTEREST TRANSACTIONS

Parties-in-interest are defined under DOL regulations as any fiduciary of the Plan, any party rendering services to the Plan, the employer, and certain others

Certain Plan investments are shares of mutual funds managed by John Hancock Life Insurance Company. John Hancock Life Insurance Company is the custodian as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions.

During 2019, administrative fees of $39,725 were paid by the Plan to service providers who qualify as parties in interest under ERISA. The Plan's sponsor paid fees for accounting services.

NOTE 8 – 5500 RECONCILIATION

	2019	2018
Net assets available for benefits per the financial statements	$ 5,860,577	$ 4,351,210
Employer and employee contributions receivable	-	18,430
Net assets available for benefits per Form 5500	$ 5,860,577	4,369,640
Net increase in net assets per the financial statements	$ 1,509,367	
Increase in employer and employee contributions receivable	18,430	
Net increase in net assets per Form 5500	$ 1,527,797	

SCHEDULE I

SOLUGENIX CORPORATION 401(K) PLAN
SCHEDULE H, LINE 4I - SCHEDULE OF ASSETS HELD AT END OF YEAR, (CONTINUED)
DECEMBER 31, 2019
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.	BlackRock LifePath Index 2035	**	$	663,912
2	John Hancock Life Ins Co.	BlackRock LifePath Index 2030	**		371,916
3	John Hancock Life Ins Co.	500 Index Fund	**		490,534
4	John Hancock Life Ins Co.	TIAA-CREF Large-Cap Growth Idx	**		575,247
5	John Hancock Life Ins Co.	Mid Cap Index Fund	**		355,239
6	John Hancock Life Ins Co.	Vanguard Value Index Fund	**		374,595
7	John Hancock Life Ins Co.	American Balanced Fund	**		164,064
8	John Hancock Life Ins Co.	New Perspective Fund	**		228,292
9	John Hancock Life Ins Co.	WisdomTree MC Dividend ETF	**		189,701
10	John Hancock Life Ins Co.	Vanguard Mid-Cap Growth ETF	**		333,827
11	John Hancock Life Ins Co.	Science & Technology Fund	**		277,254
12	John Hancock Life Ins Co.	Vanguard Small Cap Value Index	**		130,894
13	John Hancock Life Ins Co.	DFA U.S. Small Cap Fund	**		119,163
14	John Hancock Life Ins Co.	BlackRock LifePath Index 2040	**		328,824
15	John Hancock Life Ins Co.	BlackRock LifePath Index 2045	**		249,342
16	John Hancock Life Ins Co.	Financial Industries Fund	**		95,284
17	John Hancock Life Ins Co.	BlackRock LifePath Index 2050	**		225,719
18	John Hancock Life Ins Co.	Total Bond Market Fund	**		157,858
19	John Hancock Life Ins Co.	BlackRock LifePath Index 2055	**		110,345
20	John Hancock Life Ins Co.	BlackRock LifePath Index Ret	**		25,792
21	John Hancock Life Ins Co.	BlackRock LifePath Index 2025	**		99,538
22	John Hancock Life Ins Co.	Vanguard Small Cap Grow Index	**		46,344
23	John Hancock Life Ins Co.	BlackRock LifePath Index 2060	**		82,137
24	John Hancock Life Ins Co.	PIMCO Short-Term Fund	**		36,868
25	John Hancock Life Ins Co.	DFA International ValueDFA U.S	**		6,444
26	John Hancock Life Ins Co.	Vanguard Tot Wld Stk Index ETF	**		8,597
27	John Hancock Life Ins Co.	Money Market Fund	**		47,216
28	John Hancock Life Ins Co.	Utilities Fund	**		3521
29	John Hancock Life Ins Co.	DFA Inflation-Protected Sec	**		363
30	John Hancock Life Ins Co.	Noninterest-bearing Cash	**		895
					5,799,726
	*Participant Loans	Interest Rates Ranging from 5.25%			60,851
	Total			$	5,860,577

* Indicates a party-in-interest.

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

Schedule H, line 4i
Schedule of Assets (Held At End of Year)

For the plan year beginning 01/01/2019 and ending 12/31/2019

Name of plan

Solugenix Corporation 401(k) Plan

Employer Identification Number

20-1631341

Three-digit plan number ► 001

(a)	(b) Identity of issue, borrower, lessor, or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par, or maturity value	(d) Cost	(e) Current value
	John Hancock Life Ins Co.	BlackRock LifePath Index 2060	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2055	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2050	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2045	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2040	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2035	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2030	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2025	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index 2020	0	
	John Hancock Life Ins Co.	BlackRock LifePath Index Ret	0	
	John Hancock Life Ins Co.	DFA International ValueDFA U.S	0	
	John Hancock Life Ins Co.	DFA U.S. Small Cap Fund	0	
	John Hancock Life Ins Co.	Financial Industries Fund	0	
	John Hancock Life Ins Co.	Mid Cap Index Fund	0	
	John Hancock Life Ins Co.	Science & Technology Fund	0	
	John Hancock Life Ins Co.	Vanguard Mid-Cap Growth ETF	0	
	John Hancock Life Ins Co.	Vanguard Small Cap Grow Index	0	
	John Hancock Life Ins Co.	Vanguard Small Cap Value Index	0	
	John Hancock Life Ins Co.	WisdomTree MC Dividend ETF	0	
	John Hancock Life Ins Co.	500 Index Fund	0	
	John Hancock Life Ins Co.	New Perspective Fund	0	
	John Hancock Life Ins Co.	TIAA-CREF Large-Cap Growth Idx	0	
	John Hancock Life Ins Co.	Utilities Fund	0	
	John Hancock Life Ins Co.	Vanguard Tot Wld Stk Index ETF	0	
	John Hancock Life Ins Co.	Vanguard Value Index Fund	0	
	John Hancock Life Ins Co.	American Balanced Fund	0	
	John Hancock Life Ins Co.	DFA Inflation-Protected Sec	0	
	John Hancock Life Ins Co.	Total Bond Market Fund	0	
	John Hancock Life Ins Co.	Money Market Fund	0	
	John Hancock Life Ins Co.	PIMCO Short-Term Fund	0	
	John Hancock Life Ins Co.	Participant Loans	0	