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| <div>Form 5500</div> <div>Department of the Treasury<br/>Internal Revenue Service</div> <div>Department of Labor<br/>Employee Benefits Security<br/>Administration</div> <div>Pension Benefit Guaranty Corporation</div> | <div>Annual Return/Report of Employee Benefit Plan</div> <div>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).</div> <div>▶ Complete all entries in accordance with the instructions to the Form 5500.</div> | <div>OMB Nos. 1210-0110<br/>1210-0089</div> <div>2022</div> <div>This Form is Open to Public Inspection</div> |
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|                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| Part I                                                                                     | Annual Report Identification Information                                                                                                                                                                                                                                                                                                                                                                          |
| For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022 |                                                                                                                                                                                                                                                                                                                                                                                                                   |
| A                                                                                          | This return/report is for:<br><div><input type="checkbox"/> a multiemployer plan</div> <div><input type="checkbox"/> a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)</div> <div><input checked="" type="checkbox"/> a single-employer plan</div> <div><input type="checkbox"/> a DFE (specify) _____</div> |
| B                                                                                          | This return/report is:<br><div><input type="checkbox"/> the first return/report</div> <div><input type="checkbox"/> the final return/report</div> <div><input type="checkbox"/> an amended return/report</div> <div><input type="checkbox"/> a short plan year return/report (less than 12 months)</div>                                                                                                          |
| C                                                                                          | If the plan is a collectively-bargained plan, check here. .... ▶ <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                         |
| D                                                                                          | Check box if filing under:<br><div><input checked="" type="checkbox"/> Form 5558</div> <div><input type="checkbox"/> automatic extension</div> <div><input type="checkbox"/> the DFVC program</div> <div><input type="checkbox"/> special extension (enter description)</div>                                                                                                                                     |
| E                                                                                          | If this is a retroactively adopted plan permitted by SECURE Act section 201, check here. .... ▶ <input type="checkbox"/>                                                                                                                                                                                                                                                                                          |

|         |                                                                                                                                                                                                                                                                                                                                                   |    |                                                    |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------------|
| Part II | Basic Plan Information—enter all requested information                                                                                                                                                                                                                                                                                            |    |                                                    |
| 1a      | Name of plan<br>SOLUGENIX CORPORATION 401(K) PLAN                                                                                                                                                                                                                                                                                                 | 1b | Three-digit plan number (PN) ▶ 001                 |
|         |                                                                                                                                                                                                                                                                                                                                                   | 1c | Effective date of plan<br>01/01/2005               |
| 2a      | Plan sponsor's name (employer, if for a single-employer plan)<br>Mailing address (include room, apt., suite no. and street, or P.O. Box)<br>City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)<br>SOLUGENIX CORPORATION<br><br>601 VALENCIA AVENUE, SUITE 260<br>SUITE 260<br>BREA, CA 92823 | 2b | Employer Identification Number (EIN)<br>20-1631341 |
|         |                                                                                                                                                                                                                                                                                                                                                   | 2c | Plan Sponsor's telephone number<br>714-223-5721    |
|         |                                                                                                                                                                                                                                                                                                                                                   | 2d | Business code (see instructions)<br>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. | 10/09/2023 | SHASHIDHAR JASTHI                                            |
|           | Signature of plan administrator                   | Date       | Enter name of individual signing as plan administrator       |
| SIGN HERE | Filed with authorized/valid electronic signature. | 10/09/2023 | SHASHIDHAR 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                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
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| <b>3a</b> Plan administrator's name and address <input checked="" type="checkbox"/> Same as Plan Sponsor                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>3b</b> Administrator's EIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>3c</b> Administrator's telephone number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>4</b> 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:<br><b>a</b> Sponsor's name<br><b>c</b> Plan Name                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>4b</b> EIN<br><br><b>4d</b> PN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>5</b> Total number of participants at the beginning of the plan year                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;"><b>5</b></td> <td style="text-align: right;">390</td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>5</b> | 390 |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>5</b>                                                                                                                                                                                                                                                                                                                                                                                                                   | 390                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6</b> Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines <b>6a(1)</b> , <b>6a(2)</b> , <b>6b</b> , <b>6c</b> , and <b>6d</b> ).                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="background-color: #f2f2f2; height: 20px;"></td> </tr> <tr> <td style="width: 10%; text-align: center;"><b>6a(1)</b></td> <td style="text-align: right;">309</td> </tr> <tr> <td style="text-align: center;"><b>6a(2)</b></td> <td style="text-align: right;">346</td> </tr> <tr> <td style="text-align: center;"><b>6b</b></td> <td style="text-align: right;">0</td> </tr> <tr> <td style="text-align: center;"><b>6c</b></td> <td style="text-align: right;">96</td> </tr> <tr> <td style="text-align: center;"><b>6d</b></td> <td style="text-align: right;">442</td> </tr> <tr> <td style="text-align: center;"><b>6e</b></td> <td style="text-align: right;">0</td> </tr> <tr> <td style="text-align: center;"><b>6f</b></td> <td style="text-align: right;">442</td> </tr> <tr> <td style="text-align: center;"><b>6g</b></td> <td style="text-align: right;">261</td> </tr> <tr> <td style="text-align: center;"><b>6h</b></td> <td style="text-align: right;">0</td> </tr> </table> |          |     | <b>6a(1)</b> | 309 | <b>6a(2)</b> | 346 | <b>6b</b> | 0 | <b>6c</b> | 96 | <b>6d</b> | 442 | <b>6e</b> | 0 | <b>6f</b> | 442 | <b>6g</b> | 261 | <b>6h</b> | 0 |
|                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6a(1)</b>                                                                                                                                                                                                                                                                                                                                                                                                               | 309                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6a(2)</b>                                                                                                                                                                                                                                                                                                                                                                                                               | 346                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6b</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6c</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | 96                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6d</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | 442                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6e</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6f</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | 442                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6g</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | 261                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>6h</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>a(1)</b> Total number of active participants at the beginning of the plan year .....                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>a(2)</b> Total number of active participants at the end of the plan year .....                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>b</b> Retired or separated participants receiving benefits .....                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>c</b> Other retired or separated participants entitled to future benefits.....                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>d</b> Subtotal. Add lines <b>6a(2)</b> , <b>6b</b> , and <b>6c</b> .....                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>e</b> Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. ....                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>f</b> Total. Add lines <b>6d</b> and <b>6e</b> .....                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>g</b> Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item).....                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>h</b> Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>7</b> Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item) .....                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;"><b>7</b></td> <td></td> </tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>7</b> |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>7</b>                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>8a</b> If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:<br>2E 2F 2G 2J 2K 2T 3D 3H                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>b</b> If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>9a</b> Plan funding arrangement (check all that apply)<br>(1) <input checked="" type="checkbox"/> Insurance<br>(2) <input type="checkbox"/> Code section 412(e)(3) insurance contracts<br>(3) <input checked="" type="checkbox"/> Trust<br>(4) <input type="checkbox"/> General assets of the sponsor                                                                                                                   | <b>9b</b> Plan benefit arrangement (check all that apply)<br>(1) <input checked="" type="checkbox"/> Insurance<br>(2) <input type="checkbox"/> Code section 412(e)(3) insurance contracts<br>(3) <input checked="" type="checkbox"/> Trust<br>(4) <input type="checkbox"/> General assets of the sponsor                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>10</b> Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |     |              |     |              |     |           |   |           |    |           |     |           |   |           |     |           |     |           |   |
| <b>a Pension Schedules</b><br>(1) <input checked="" type="checkbox"/> <b>R</b> (Retirement Plan Information)<br><br>(2) <input type="checkbox"/> <b>MB</b> (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary<br><br>(3) <input type="checkbox"/> <b>SB</b> (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary | <b>b General Schedules</b><br>(1) <input checked="" type="checkbox"/> <b>H</b> (Financial Information)<br>(2) <input type="checkbox"/> <b>I</b> (Financial Information – Small Plan)<br>(3) <input checked="" type="checkbox"/> <b>1</b> <b>A</b> (Insurance Information)<br>(4) <input checked="" type="checkbox"/> <b>C</b> (Service Provider Information)<br>(5) <input checked="" type="checkbox"/> <b>D</b> (DFE/Participating Plan Information)<br>(6) <input type="checkbox"/> <b>G</b> (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 2022 Form M-1 annual report. If the plan was not required to file the 2022 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 \_\_\_\_\_

|                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                    |                                                                                                |
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| <div>SCHEDULE A<br/>(Form 5500)<br/><div>Department of the Treasury<br/>Internal Revenue Service</div><div>Department of Labor<br/>Employee Benefits Security Administration</div><div>Pension Benefit Guaranty Corporation</div></div> | <div>Insurance Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</div> <div>▶ File as an attachment to Form 5500.</div> <div>▶ Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2).</div> | <div>OMB No. 1210-0110</div> <div>2022</div> <div>This Form is Open to Public Inspection</div> |
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| For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022 |                                                      |
| A Name of plan<br>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<br>SOLUGENIX CORPORATION            | D Employer Identification Number (EIN)<br>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                                | 261                                                                         | 01/01/2022              | 12/31/2022 |

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                                    | 11119                         |

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 |                       |
|                                               | 5470                            | TPA FEES    | 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      |                       |
|                                               | 4148                            | TPA COMPENSATION | 5                     |

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

ASCENSUS HOLDINGS, INC.

200 DRYDEN ROAD  
DRESHER, PA 19025

| (b) Amount of sales and base commissions paid | Fees and other commissions paid |                  | (e) Organization code |
|-----------------------------------------------|---------------------------------|------------------|-----------------------|
|                                               | (c) Amount                      | (d) Purpose      |                       |
|                                               | 881                             | TPA COMPENSATION | 5                     |

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

FUTUREPLAN BY ASCENSUS - PENST

P.O. BOX 734602  
CHICAGO, IL 60673

| (b) Amount of sales and base commissions paid | Fees and other commissions paid |             | (e) Organization code |
|-----------------------------------------------|---------------------------------|-------------|-----------------------|
|                                               | (c) Amount                      | (d) Purpose |                       |
|                                               | 620                             | 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 |                       |
|                                               |                                 |             |                       |

**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.

|          |                                                                                              |          |          |
|----------|----------------------------------------------------------------------------------------------|----------|----------|
| <b>4</b> | Current value of plan's interest under this contract in the general account at year end..... | <b>4</b> | 112      |
| <b>5</b> | Current value of plan's interest under this contract in separate accounts at year end.....   | <b>5</b> | 10099555 |

**6 Contracts With Allocated Funds:****a** State the basis of premium rates ▶

|          |                                                                                                                                                                                                      |           |  |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--|
| <b>b</b> | Premiums paid to carrier .....                                                                                                                                                                       | <b>6b</b> |  |
| <b>c</b> | Premiums due but unpaid at the end of the year .....                                                                                                                                                 | <b>6c</b> |  |
| <b>d</b> | 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.....<br>Specify nature of costs ▶ | <b>6d</b> |  |

**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>b</b> | Balance at the end of the previous year .....                                                  | <b>7b</b>    |   |
| <b>c</b> | Additions: (1) Contributions deposited during the year .....                                   | <b>7c(1)</b> |   |
|          | (2) Dividends and credits.....                                                                 | <b>7c(2)</b> |   |
|          | (3) Interest credited during the year.....                                                     | <b>7c(3)</b> |   |
|          | (4) Transferred from separate account.....                                                     | <b>7c(4)</b> |   |
|          | (5) Other (specify below) .....                                                                | <b>7c(5)</b> |   |
|          | ▶                                                                                              |              |   |
|          | (6) Total additions.....                                                                       | <b>7c(6)</b> |   |
| <b>d</b> | Total of balance and additions (add lines <b>7b</b> and <b>7c(6)</b> ) .....                   | <b>7d</b>    | 0 |
| <b>e</b> | Deductions:                                                                                    |              |   |
|          | (1) Disbursed from fund to pay benefits or purchase annuities during year .....                | <b>7e(1)</b> |   |
|          | (2) Administration charge made by carrier.....                                                 | <b>7e(2)</b> |   |
|          | (3) Transferred to separate account.....                                                       | <b>7e(3)</b> |   |
|          | (4) Other (specify below) .....                                                                | <b>7e(4)</b> |   |
|          | ▶                                                                                              |              |   |
|          | (5) Total deductions.....                                                                      | <b>7e(5)</b> |   |
| <b>f</b> | Balance at the end of the current year (subtract line <b>7e(5)</b> from line <b>7d</b> ) ..... | <b>7f</b>    | 0 |

**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:

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

**10** Nonexperience-rated contracts:

|                                                                                                                                                                                                                                                             |            |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--|
| <b>a</b> Total premiums or subscription charges paid to carrier .....                                                                                                                                                                                       | <b>10a</b> |  |
| <b>b</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. ....<br>Specify nature of costs. | <b>10b</b> |  |

**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. ▶

|                                                                                                                                                                                                                                              |                                                                                                                                                                                                                             |                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <div>SCHEDULE C</div> <div>(Form 5500)</div> <div>Department of the Treasury<br/>Internal Revenue Service</div> <div>Department of Labor<br/>Employee Benefits Security Administration</div> <div>Pension Benefit Guaranty Corporation</div> | <div>Service Provider Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</div> <div>▶ File as an attachment to Form 5500.</div> | OMB No. 1210-0110                       |
|                                                                                                                                                                                                                                              |                                                                                                                                                                                                                             | 2022                                    |
|                                                                                                                                                                                                                                              |                                                                                                                                                                                                                             | This Form is Open to Public Inspection. |

|                                                                                            |                                                      |     |
|--------------------------------------------------------------------------------------------|------------------------------------------------------|-----|
| For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022 |                                                      |     |
| A Name of plan<br>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<br>SOLUGENIX CORPORATION            | D Employer Identification Number (EIN)<br>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)..... ☒ 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<br>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 |
|------------------------------------------------------------------------------------------------------------|

|                                                                                                            |
|------------------------------------------------------------------------------------------------------------|
| (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

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**(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

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**(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

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**(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

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**(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)<br>Service Code(s)     | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>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)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|----------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 15 28 60<br>62 63 67<br>68 | RECORDKEEPER                                                                                      | 1907                                                                   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                                            | 0                                                                                                                                                                               | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                          |

(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)<br>Service Code(s) | (c)<br>Relationship to employer, employee organization, or person known to be a party-in-interest | (d)<br>Enter direct compensation paid by the plan. If none, enter -0-. | (e)<br>Did service provider receive indirect compensation? (sources other than plan or plan sponsor) | (f)<br>Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures? | (g)<br>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)<br>Did the service provider give you a formula instead of an amount or estimated amount? |
|------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 26                     | RIA                                                                                               | 26659                                                                  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                            | 0                                                                                                                                                                               | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                          |

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

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

**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<br>(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<br>(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<br>(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)

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                    |                     |
|--------------------|---------------------|
| <b>a</b> Name:     | <b>b</b> EIN:       |
| <b>c</b> Position: |                     |
| <b>d</b> Address:  | <b>e</b> Telephone: |
|                    |                     |

Explanation:

|                                                                                                                                                                                                               |                                                                                                                                                                                                                              |                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SCHEDULE D</b><br><b>(Form 5500)</b><br><br><small>Department of the Treasury<br/>Internal Revenue Service</small><br><br><small>Department of Labor<br/>Employee Benefits Security Administration</small> | <b>DFE/Participating Plan Information</b><br><br>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).<br><br><b>► File as an attachment to Form 5500.</b> | OMB No. 1210-0110<br><br><div style="text-align: center; font-size: 1.2em; font-weight: bold;">2022</div><br><br><b>This Form is Open to Public Inspection.</b> |
| For calendar plan year 2022 or fiscal plan year beginning <span style="margin-left: 20px;">01/01/2022</span> and ending <span style="margin-left: 20px;">12/31/2022</span>                                    |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>A</b> Name of plan<br>SOLUGENIX CORPORATION 401(K) PLAN                                                                                                                                                    | <b>B</b> Three-digit plan number (PN) <span style="float: right;">►</span>                                                                                                                                                   | 001                                                                                                                                                             |
| <b>C</b> Plan or DFE sponsor's name as shown on line 2a of Form 5500<br>SOLUGENIX CORPORATION                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>D</b> Employer Identification Number (EIN)<br>20-1631341                                                                                                                                                   |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>Part I</b> <b>Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)</b><br>(Complete as many entries as needed to report all interests in DFEs)                |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: TIAA-CREF LARGE-CAP GROWTH IDX                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY                                                                                                                         |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>c</b> EIN-PN 01-0233346-000                                                                                                                                                                                | <b>d</b> Entity code P                                                                                                                                                                                                       | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 886084                                                      |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: 500 INDEX FUND                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY                                                                                                                         |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>c</b> EIN-PN 01-0233346-000                                                                                                                                                                                | <b>d</b> Entity code P                                                                                                                                                                                                       | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 868920                                                      |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2040                                                                                                                                  |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY                                                                                                                         |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>c</b> EIN-PN 01-0233346-000                                                                                                                                                                                | <b>d</b> Entity code P                                                                                                                                                                                                       | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 821570                                                      |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2050                                                                                                                                  |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY                                                                                                                         |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>c</b> EIN-PN 01-0233346-000                                                                                                                                                                                | <b>d</b> Entity code P                                                                                                                                                                                                       | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 691763                                                      |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2035                                                                                                                                  |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY                                                                                                                         |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>c</b> EIN-PN 01-0233346-000                                                                                                                                                                                | <b>d</b> Entity code P                                                                                                                                                                                                       | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 683718                                                      |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD VALUE INDEX FUND                                                                                                                                      |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY                                                                                                                         |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>c</b> EIN-PN 01-0233346-000                                                                                                                                                                                | <b>d</b> Entity code P                                                                                                                                                                                                       | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 676966                                                      |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2045                                                                                                                                  |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY                                                                                                                         |                                                                                                                                                                                                                              |                                                                                                                                                                 |
| <b>c</b> EIN-PN 01-0233346-000                                                                                                                                                                                | <b>d</b> Entity code P                                                                                                                                                                                                       | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 669136                                                      |

|                                                                                       |                        |                                                                                                            |
|---------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------|
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2030          |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 562144 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: SCIENCE & TECHNOLOGY FUND              |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 493305 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: MID CAP INDEX FUND                     |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 446935 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD MID-CAP GROWTH ETF            |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 394884 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: AMERICAN FUNDS NEW PERSPECTIVE         |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 392616 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2055          |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 275867 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD SMALL CAP VALUE INDEX         |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 244847 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: WISDOMTREE MIDCAP DIVIDEND ETF         |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 243809 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: DFA U.S. SMALL CAP FUND                |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 242570 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2025          |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 242093 |

|                                                                                       |                        |                                                                                                            |
|---------------------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------|
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: AF AMERICAN BALANCED FUND              |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 236251 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2060          |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 195064 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: MONEY MARKET FUND                      |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 137908 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: FINANCIAL INDUSTRIES FUND              |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 132241 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: MFS UTILITIES FUND                     |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 108375 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: TOTAL BOND MARKET FUND                 |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 100874 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX RET           |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 85385  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD SMALL CAP GROW INDEX          |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 73735  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: BLACKROCK LIFEPATH INDEX 2065          |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 69252  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: VANGUARD ST INVESTMENT-GRADE           |                        |                                                                                                            |
| <b>b</b> Name of sponsor of entity listed in (a): JOHN HANCOCK LIFE INSURANCE COMPANY |                        |                                                                                                            |
| <b>c</b> EIN-PN 01-0233346-000                                                        | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 45343  |

**a** Name of MTIA, CCT, PSA, or 103-12 IE: **FIDELITY INTERNATIONAL INDEX****b** Name of sponsor of entity listed in (a): **JOHN HANCOCK LIFE INSURANCE COMPANY**

|                                       |                               |                                                                                                                  |
|---------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN <b>01-0233346-000</b> | <b>d</b> Entity code <b>P</b> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <b>36208</b> |
|---------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|

**a** Name of MTIA, CCT, PSA, or 103-12 IE: **DFA INTERNATIONAL VALUE****b** Name of sponsor of entity listed in (a): **JOHN HANCOCK LIFE INSURANCE COMPANY**

|                                       |                               |                                                                                                                  |
|---------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN <b>01-0233346-000</b> | <b>d</b> Entity code <b>P</b> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <b>22065</b> |
|---------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|

**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 LIFE INSURANCE COMPANY**

|                                       |                               |                                                                                                                  |
|---------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN <b>01-0233346-000</b> | <b>d</b> Entity code <b>P</b> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <b>19627</b> |
|---------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|

**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> 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):

|                 |                      |                                                                                                     |
|-----------------|----------------------|-----------------------------------------------------------------------------------------------------|
| <b>c</b> EIN-PN | <b>d</b> Entity code | <b>e</b> 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

|                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                              |                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>SCHEDULE H</b><br><b>(Form 5500)</b><br><br><small>Department of the Treasury<br/>Internal Revenue Service</small><br><br><small>Department of Labor<br/>Employee Benefits Security Administration</small><br><br><small>Pension Benefit Guaranty Corporation</small> | <b>Financial Information</b><br><br>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).<br><br><b>► File as an attachment to Form 5500.</b> | OMB No. 1210-0110<br><br><b>2022</b><br><br><b>This Form is Open to Public Inspection</b> |
| For calendar plan year 2022 or fiscal plan year beginning <u>01/01/2022</u> and ending <u>12/31/2022</u>                                                                                                                                                                 |                                                                                                                                                                                                                                                                              |                                                                                           |
| <b>A</b> Name of plan<br><u>SOLUGENIX CORPORATION 401(K) PLAN</u>                                                                                                                                                                                                        | <b>B</b> Three-digit plan number (PN) <span style="float: right;">►</span>                                                                                                                                                                                                   | <u>001</u>                                                                                |
| <b>C</b> Plan sponsor's name as shown on line 2a of Form 5500<br><u>SOLUGENIX CORPORATION</u>                                                                                                                                                                            | <b>D</b> Employer Identification Number (EIN)<br><u>20-1631341</u>                                                                                                                                                                                                           |                                                                                           |

| Part I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Asset and Liability Statement |                       |                 |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------|-----------------|----------|
| <b>1</b> 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. <b>Round off amounts to the nearest dollar.</b> 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 |          |
| <b>a</b> Total noninterest-bearing cash.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                               | <b>1a</b>             | 112             | 112      |
| <b>b</b> Receivables (less allowance for doubtful accounts):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                               |                       |                 |          |
| <b>(1)</b> Employer contributions.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                               | <b>1b(1)</b>          | 0               | 43610    |
| <b>(2)</b> Participant contributions.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               | <b>1b(2)</b>          | 0               | 262      |
| <b>(3)</b> Other.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                               | <b>1b(3)</b>          |                 |          |
| <b>c</b> General investments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                               |                       |                 |          |
| <b>(1)</b> Interest-bearing cash (include money market accounts & certificates of deposit).....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                               | <b>1c(1)</b>          |                 |          |
| <b>(2)</b> U.S. Government securities .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                               | <b>1c(2)</b>          |                 |          |
| <b>(3)</b> Corporate debt instruments (other than employer securities):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                               |                       |                 |          |
| <b>(A)</b> Preferred .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                               | <b>1c(3)(A)</b>       |                 |          |
| <b>(B)</b> All other .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                               | <b>1c(3)(B)</b>       |                 |          |
| <b>(4)</b> Corporate stocks (other than employer securities):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                               |                       |                 |          |
| <b>(A)</b> Preferred .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                               | <b>1c(4)(A)</b>       |                 |          |
| <b>(B)</b> Common.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                               | <b>1c(4)(B)</b>       |                 |          |
| <b>(5)</b> Partnership/joint venture interests .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                               | <b>1c(5)</b>          |                 |          |
| <b>(6)</b> Real estate (other than employer real property) .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                               | <b>1c(6)</b>          |                 |          |
| <b>(7)</b> Loans (other than to participants).....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                               | <b>1c(7)</b>          |                 |          |
| <b>(8)</b> Participant loans.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               | <b>1c(8)</b>          | 103322          | 110367   |
| <b>(9)</b> Value of interest in common/collective trusts.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                               | <b>1c(9)</b>          |                 |          |
| <b>(10)</b> Value of interest in pooled separate accounts .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                               | <b>1c(10)</b>         |                 |          |
| <b>(11)</b> Value of interest in master trust investment accounts.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                               | <b>1c(11)</b>         |                 |          |
| <b>(12)</b> Value of interest in 103-12 investment entities .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               | <b>1c(12)</b>         |                 |          |
| <b>(13)</b> Value of interest in registered investment companies (e.g., mutual funds).....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                               | <b>1c(13)</b>         | 10733443        | 10099555 |
| <b>(14)</b> Value of funds held in insurance company general account (unallocated contracts).....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                               | <b>1c(14)</b>         |                 |          |
| <b>(15)</b> Other .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                               | <b>1c(15)</b>         |                 |          |

| <b>1d</b> Employer-related investments:                              |              | (a) Beginning of Year | (b) End of Year |
|----------------------------------------------------------------------|--------------|-----------------------|-----------------|
| (1) Employer securities .....                                        | <b>1d(1)</b> |                       |                 |
| (2) Employer real property .....                                     | <b>1d(2)</b> |                       |                 |
| <b>e</b> Buildings and other property used in plan operation .....   | <b>1e</b>    |                       |                 |
| <b>f</b> Total assets (add all amounts in lines 1a through 1e) ..... | <b>1f</b>    | 10836877              | 10253906        |

**Liabilities**

|                                                                           |           |   |   |
|---------------------------------------------------------------------------|-----------|---|---|
| <b>g</b> Benefit claims payable .....                                     | <b>1g</b> |   |   |
| <b>h</b> Operating payables .....                                         | <b>1h</b> |   |   |
| <b>i</b> Acquisition indebtedness .....                                   | <b>1i</b> |   |   |
| <b>j</b> Other liabilities .....                                          | <b>1j</b> |   |   |
| <b>k</b> Total liabilities (add all amounts in lines 1g through 1j) ..... | <b>1k</b> | 0 | 0 |

**Net Assets**

|                                                           |           |          |          |
|-----------------------------------------------------------|-----------|----------|----------|
| <b>l</b> Net assets (subtract line 1k from line 1f) ..... | <b>1l</b> | 10836877 | 10253906 |
|-----------------------------------------------------------|-----------|----------|----------|

**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 |
|------------------------------------------------------------------------------------------------------------|-----------------|------------|-----------|
| <b>a Contributions:</b>                                                                                    |                 |            |           |
| (1) Received or receivable in cash from: <b>(A)</b> Employers .....                                        | <b>2a(1)(A)</b> | 560514     |           |
| <b>(B)</b> Participants .....                                                                              | <b>2a(1)(B)</b> | 1239809    |           |
| <b>(C)</b> Others (including rollovers) .....                                                              | <b>2a(1)(C)</b> | 134261     |           |
| (2) Noncash contributions .....                                                                            | <b>2a(2)</b>    |            |           |
| (3) Total contributions. Add lines <b>2a(1)(A)</b> , <b>(B)</b> , <b>(C)</b> , and line <b>2a(2)</b> ..... | <b>2a(3)</b>    |            | 1934584   |
| <b>b Earnings on investments:</b>                                                                          |                 |            |           |
| (1) Interest:                                                                                              |                 |            |           |
| <b>(A)</b> Interest-bearing cash (including money market accounts and certificates of deposit) .....       | <b>2b(1)(A)</b> |            |           |
| <b>(B)</b> U.S. Government securities .....                                                                | <b>2b(1)(B)</b> |            |           |
| <b>(C)</b> Corporate debt instruments .....                                                                | <b>2b(1)(C)</b> |            |           |
| <b>(D)</b> Loans (other than to participants) .....                                                        | <b>2b(1)(D)</b> |            |           |
| <b>(E)</b> Participant loans .....                                                                         | <b>2b(1)(E)</b> | 5560       |           |
| <b>(F)</b> Other .....                                                                                     | <b>2b(1)(F)</b> |            |           |
| <b>(G)</b> Total interest. Add lines <b>2b(1)(A)</b> through <b>(F)</b> .....                              | <b>2b(1)(G)</b> |            | 5560      |
| (2) Dividends: <b>(A)</b> Preferred stock .....                                                            | <b>2b(2)(A)</b> |            |           |
| <b>(B)</b> Common stock .....                                                                              | <b>2b(2)(B)</b> |            |           |
| <b>(C)</b> Registered investment company shares (e.g. mutual funds) .....                                  | <b>2b(2)(C)</b> |            |           |
| <b>(D)</b> Total dividends. Add lines <b>2b(2)(A)</b> , <b>(B)</b> , and <b>(C)</b> .....                  | <b>2b(2)(D)</b> |            |           |
| (3) Rents .....                                                                                            | <b>2b(3)</b>    |            |           |
| (4) Net gain (loss) on sale of assets: <b>(A)</b> Aggregate proceeds .....                                 | <b>2b(4)(A)</b> |            |           |
| <b>(B)</b> Aggregate carrying amount (see instructions) .....                                              | <b>2b(4)(B)</b> |            |           |
| <b>(C)</b> Subtract line <b>2b(4)(B)</b> from line <b>2b(4)(A)</b> and enter result .....                  | <b>2b(4)(C)</b> |            |           |
| (5) Unrealized appreciation (depreciation) of assets: <b>(A)</b> Real estate .....                         | <b>2b(5)(A)</b> |            |           |
| <b>(B)</b> Other .....                                                                                     | <b>2b(5)(B)</b> |            |           |
| <b>(C)</b> Total unrealized appreciation of assets. Add lines <b>2b(5)(A)</b> and <b>(B)</b> .....         | <b>2b(5)(C)</b> |            |           |

|                                                                                                 |        | (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)  |            | -2068594  |
| (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     |            | 55278     |
| d Total income. Add all <b>income</b> amounts in column (b) and enter total .....               | 2d     |            | -73172    |
| <b>Expenses</b>                                                                                 |        |            |           |
| e Benefit payment and payments to provide benefits:                                             |        |            |           |
| (1) Directly to participants or beneficiaries, including direct rollovers .....                 | 2e(1)  | 448071     |           |
| (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)  |            | 448071    |
| 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)  | 6090       |           |
| (2) Contract administrator fees .....                                                           | 2i(2)  | 28979      |           |
| (3) Investment advisory and management fees .....                                               | 2i(3)  | 26659      |           |
| (4) Other .....                                                                                 | 2i(4)  |            |           |
| (5) Total administrative expenses. Add lines 2i(1) through (4) .....                            | 2i(5)  |            | 61728     |
| j Total expenses. Add all <b>expense</b> amounts in column (b) and enter total .....            | 2j     |            | 509799    |
| <b>Net Income and Reconciliation</b>                                                            |        |            |           |
| k Net income (loss). Subtract line 2j from line 2d .....                                        | 2k     |            | -582971   |
| 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** 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:

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.) .....

|    | Yes | No | Amount |
|----|-----|----|--------|
| 4a |     | X  |        |

|                                                                                                                                                                                                                                                                                                            | Yes | No | Amount  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|---------|
| <b>b</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.) |     |    |         |
| <b>4b</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>c</b> 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.)                                                                                                                             |     |    |         |
| <b>4c</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>d</b> 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.)                                                                                                                  |     |    |         |
| <b>4d</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>e</b> Was this plan covered by a fidelity bond?                                                                                                                                                                                                                                                         | X   |    | 3000000 |
| <b>f</b> Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?                                                                                                                                                                          |     | X  |         |
| <b>4f</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>g</b> 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?                                                                                                                                       |     |    |         |
| <b>4g</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>h</b> 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?                                                                                                                             |     |    |         |
| <b>4h</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>i</b> Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)                                                                                                                                                   | X   |    |         |
| <b>4i</b>                                                                                                                                                                                                                                                                                                  | X   |    |         |
| <b>j</b> 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.)                                                                                     |     |    |         |
| <b>4j</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>k</b> Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?                                                                                                                                              |     |    |         |
| <b>4k</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>l</b> Has the plan failed to provide any benefit when due under the plan?                                                                                                                                                                                                                               |     |    |         |
| <b>4l</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>m</b> If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)                                                                                                                                                                                     |     |    |         |
| <b>4m</b>                                                                                                                                                                                                                                                                                                  |     | X  |         |
| <b>n</b> 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.                                                                                                                        |     |    |         |
| <b>4n</b>                                                                                                                                                                                                                                                                                                  |     |    |         |

**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 \_\_\_\_\_.

|                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <div>SCHEDULE R<br/>(Form 5500)<br/><br/>Department of the Treasury<br/>Internal Revenue Service<br/><br/>Department of Labor<br/>Employee Benefits Security Administration<br/><br/>Pension Benefit Guaranty Corporation</div>                                                                                                                            | <div>Retirement Plan Information</div> <div>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).</div> <div>► File as an attachment to Form 5500.</div> | <div>OMB No. 1210-0110</div> <div>2022</div> <div>This Form is Open to Public Inspection.</div> |
| For calendar plan year 2022 or fiscal plan year beginning 01/01/2022 and ending 12/31/2022                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| A Name of plan<br>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<br>SOLUGENIX CORPORATION                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                  | D Employer Identification Number (EIN)<br>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                                                                                               |
| 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):<br><br>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.)                                                                                                                           |                                                                                                 |
| 4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A<br>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 _____<br>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? ..... <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? ..... <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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..... <input type="checkbox"/> Increase <input type="checkbox"/> Decrease <input type="checkbox"/> Both <input type="checkbox"/> 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?..... <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 11 a Does the ESOP hold any preferred stock?..... <input type="checkbox"/> Yes <input type="checkbox"/> 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.)..... <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                              |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 12 Does the ESOP hold any stock that is not readily tradable on an established securities market?..... <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| For Paperwork Reduction Act Notice, see the Instructions for Form 5500.                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| Schedule R (Form 5500) 2022 v. 220413                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                  |                                                                                                 |

**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): \_\_\_\_\_

|           |                                                                                                                                                                                                                                                                                                                        |            |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>14</b> | 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:                                                                                                             |            |
| <b>a</b>  | The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: <input type="checkbox"/> last contributing employer <input type="checkbox"/> alternative <input type="checkbox"/> reasonable approximation (see instructions for required attachment)..... | <b>14a</b> |
| <b>b</b>  | The plan year immediately preceding the current plan year. <input type="checkbox"/> Check the box if the number reported is a change from what was previously reported (see instructions for required attachment) .....                                                                                                | <b>14b</b> |
| <b>c</b>  | The second preceding plan year. <input type="checkbox"/> Check the box if the number reported is a change from what was previously reported (see instructions for required attachment) .....                                                                                                                           | <b>14c</b> |
| <b>15</b> | 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:                                                                                                                                           |            |
| <b>a</b>  | The corresponding number for the plan year immediately preceding the current plan year.....                                                                                                                                                                                                                            | <b>15a</b> |
| <b>b</b>  | The corresponding number for the second preceding plan year.....                                                                                                                                                                                                                                                       | <b>15b</b> |
| <b>16</b> | Information with respect to any employers who withdrew from the plan during the preceding plan year:                                                                                                                                                                                                                   |            |
| <b>a</b>  | Enter the number of employers who withdrew during the preceding plan year .....                                                                                                                                                                                                                                        | <b>16a</b> |
| <b>b</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.....                                                                                                                                                           | <b>16b</b> |
| <b>17</b> | 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 ..... <input type="checkbox"/>                                                                   |            |

**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**  
**FINANCIAL STATEMENTS**  
**DECEMBER 31, 2022 AND 2021**

## TABLE OF CONTENTS

|                                                                   | Page No. |
|-------------------------------------------------------------------|----------|
| INDEPENDENT AUDITORS' REPORT .....                                | 1        |
| FINANCIAL STATEMENTS                                              |          |
| Statements of Net Assets Available for Benefits.....              | 4        |
| Statement of Changes in Net Assets Available for Benefits .....   | 5        |
| Notes to the Financial Statements .....                           | 6        |
| SUPPLEMENTAL SCHEDULES                                            |          |
| Schedule H, Line 4i – Schedule of Assets Held at End of Year..... | 12       |

## **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, 2022 and 2021, and the related statement of changes in net assets available for benefits for the year ended December 31, 2022, 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, 2022 and 2021, and for the year ended December 31, 2022, 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).

*Monopergel Patterson & McMullin, PLLC*

Tempe, Arizona  
September 22, 2023

**SOLUGENIX CORPORATION 401(K) PLAN**  
**STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS**  
**DECEMBER 31, 2022 AND 2021**

|                                   | <u>2022</u>                 | <u>2021</u>                 |
|-----------------------------------|-----------------------------|-----------------------------|
| <b>ASSETS:</b>                    |                             |                             |
| Cash and equivalents              | \$ <u>112</u>               | \$ <u>112</u>               |
| Investments at fair value         | <u>10,100,027</u>           | <u>10,733,443</u>           |
|                                   | <u>10,100,027</u>           | <u>10,733,443</u>           |
| Receivables                       |                             |                             |
| Participant loans                 | 110,367                     | 103,322                     |
| Employer contributions            | <u>43,400</u>               | <u>54,963</u>               |
| Total receivables                 | <u>153,767</u>              | <u>158,285</u>              |
| Total assets                      | <u>10,253,906</u>           | <u>10,891,840</u>           |
| Net assets available for benefits | \$ <u><u>10,253,906</u></u> | \$ <u><u>10,891,840</u></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, 2022**

**ADDITIONS:**

|                                      |    |       |
|--------------------------------------|----|-------|
| Interest income on participant loans | \$ | 5,560 |
|--------------------------------------|----|-------|

Contributions:

|             |  |           |
|-------------|--|-----------|
| Participant |  | 1,239,809 |
| Employer    |  | 560,829   |
| Rollovers   |  | 134,261   |
|             |  | 1,934,899 |

|                 |  |           |
|-----------------|--|-----------|
| Total additions |  | 1,940,459 |
|-----------------|--|-----------|

**DEDUCTIONS:**

|                                               |  |           |
|-----------------------------------------------|--|-----------|
| Net depreciation in fair value of investments |  | 2,068,594 |
| Benefit payments to participants              |  | 448,071   |
| Administrative expenses                       |  | 61,728    |
|                                               |  | 2,578,393 |

|                  |  |           |
|------------------|--|-----------|
| Total deductions |  | 2,578,393 |
|------------------|--|-----------|

|                     |  |           |
|---------------------|--|-----------|
| <b>NET DECREASE</b> |  | (637,934) |
|---------------------|--|-----------|

**NET ASSETS AVAILABLE FOR BENEFITS**

|                                |  |            |
|--------------------------------|--|------------|
| Beginning of year, as restated |  | 10,891,840 |
|--------------------------------|--|------------|

|             |    |            |
|-------------|----|------------|
| End of year | \$ | 10,253,906 |
|-------------|----|------------|

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

**SOLUGENIX CORPORATION 401(K) PLAN  
NOTES TO THE FINANCIAL STATEMENTS  
DECEMBER 31, 2022 AND 2021**

**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, 2022, 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 6.50%, 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, 2022 AND 2021**

**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, 2022 and 2021, 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, 2022 AND 2021**

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

Excess Contributions Payable

There were no excess contributions payable for the years ended December 31, 2022 and 2021.

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 22, 2023, 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, 2022, the statement of changes in net assets available for benefits for the year ended December 31, 2022, and the supplemental schedule of assets (held at the end of the year) as of December 31, 2022.

**SOLUGENIX CORPORATION 401(K) PLAN**  
**NOTES TO THE FINANCIAL STATEMENTS, (CONTINUED)**  
**DECEMBER 31, 2022 AND 2021**

**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, 2022 and 2021:

| <b>December 31, 2022</b>        |                      |                |                |                      |
|---------------------------------|----------------------|----------------|----------------|----------------------|
|                                 | <b>Level 1</b>       | <b>Level 2</b> | <b>Level 3</b> | <b>Total</b>         |
| 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> |
| <b>December 31, 2021</b>        |                      |                |                |                      |
|                                 | <b>Level 1</b>       | <b>Level 2</b> | <b>Level 3</b> | <b>Total</b>         |
| Mutual Funds                    | \$ 10,733,443        | \$ -           | \$ -           | \$ 10,733,443        |
| Total Investments at Fair Value | <u>\$ 10,733,443</u> | <u>\$ -</u>    | <u>\$ -</u>    | <u>\$ 10,733,443</u> |

Gains and losses included in changes in net assets available for benefits for the years ended December 31, 2022 and 2021, 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, 2022, 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, 2022 AND 2021**

**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 2022, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) depreciated in value by \$2,068,594.

**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 \$61,728 for the year ended December 31, 2022.

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 March 31, 2014, 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.

**SOLUGENIX CORPORATION 401(K) PLAN**  
**NOTES TO THE FINANCIAL STATEMENTS, (CONTINUED)**  
**DECEMBER 31, 2022 AND 2021**

**NOTE 10 – RECONCILIATION OF FINANCIAL STATEMENTS TO SCHEDULE H OF FORM 5500**

The following is a reconciliation of net assets available for benefits per the financial statements to Schedule H of Form 5500:

|                                                                | <u>2022</u>          | <u>2021</u>       |
|----------------------------------------------------------------|----------------------|-------------------|
| Net assets available for benefits per the financial statements | \$ 10,253,906        | \$ 10,891,840     |
| Employer and employee contributions receivable                 | <u>-</u>             | <u>(54,963)</u>   |
| Net assets available for benefits per Form 5500                | <u>\$ 10,253,906</u> | <u>10,836,877</u> |

The following is a reconciliation of benefits paid to participants per the financial statements for the year ended December 31, 2022 to Schedule H of Form 5500:

|                                                            |                     |
|------------------------------------------------------------|---------------------|
| Net decrease in net assets per the financial statements    | \$ (637,934)        |
| Decrease in employer and employee contributions receivable | <u>54,963</u>       |
| Net decrease in net assets per Form 5500                   | <u>\$ (582,971)</u> |

Amounts are for the difference between 2022 and 2021 contributions made in the subsequent year.

**SCHEDULE I**

**SOLUGENIX CORPORATION 401(K) PLAN  
SCHEDULE H, LINE 4I – SCHEDULE OF ASSETS HELD AT END OF YEAR  
DECEMBER 31, 2022  
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                           | **       | \$ 868,919        |
| 2   | John Hancock Life Ins Co.                                 | American Balanced Fund                   | **       | 236,251           |
| 3   | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2025            | **       | 242,093           |
| 4   | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2030            | **       | 562,144           |
| 5   | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2035            | **       | 683,718           |
| 6   | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2040            | **       | 821,570           |
| 7   | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2045            | **       | 669,136           |
| 8   | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2050            | **       | 691,763           |
| 9   | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2055            | **       | 275,867           |
| 10  | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2060            | **       | 195,064           |
| 11  | John Hancock Life Ins Co.                                 | BlackRock LifePath Index 2065            | **       | 69,252            |
| 12  | John Hancock Life Ins Co.                                 | BlackRock LifePath Index Ret             | **       | 85,385            |
| 13  | John Hancock Life Ins Co.                                 | DFA Inflation-Protected Sec              | **       | 19,627            |
| 14  | John Hancock Life Ins Co.                                 | DFA International ValueDFA U.S           | **       | 22,159            |
| 15  | John Hancock Life Ins Co.                                 | DFA U.S. Small Cap Fund                  | **       | 242,665           |
| 16  | John Hancock Life Ins Co.                                 | Fidelity International Index Fund        | **       | 36,208            |
| 17  | John Hancock Life Ins Co.                                 | Financial Industries Fund                | **       | 132,241           |
| 18  | John Hancock Life Ins Co.                                 | Mid Cap Index Fund                       | **       | 446,935           |
| 19  | John Hancock Life Ins Co.                                 | Money Market Fund                        | **       | 137,908           |
| 20  | John Hancock Life Ins Co.                                 | New Perspective Fund                     | **       | 392,616           |
| 21  | John Hancock Life Ins Co.                                 | Science & Technology Fund                | **       | 493,305           |
| 22  | John Hancock Life Ins Co.                                 | TIAA-CREF Large-Cap Growth Idx           | **       | 886,178           |
| 23  | John Hancock Life Ins Co.                                 | Total Bond Market Fund                   | **       | 100,874           |
| 24  | John Hancock Life Ins Co.                                 | Utilities Fund                           | **       | 108,375           |
| 25  | John Hancock Life Ins Co.                                 | Vanguard Mid-Cap Growth ETF              | **       | 394,884           |
| 26  | John Hancock Life Ins Co.                                 | Vanguard Short-Term Investment Grade     | **       | 45,343            |
| 27  | John Hancock Life Ins Co.                                 | Vanguard Small Cap Grow Index            | **       | 73,735            |
| 28  | John Hancock Life Ins Co.                                 | Vanguard Small Cap Value Index           | **       | 244,941           |
| 29  | John Hancock Life Ins Co.                                 | Vanguard Value Index Fund                | **       | 676,967           |
| 30  | John Hancock Life Ins Co.                                 | WisdomTree MC Dividend ETF               | **       | 243,904           |
|     |                                                           |                                          |          | 10,100,027        |
|     |                                                           |                                          |          |                   |
|     | *Participant Loans                                        | Interest Rates Ranging from 4.25 - 6.50% |          | 110,367           |
|     | Total                                                     |                                          |          | \$ 10,210,394     |

\* Indicates a party-in-interest.

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

|                                                                            |                                      |
|----------------------------------------------------------------------------|--------------------------------------|
| For the plan year beginning <b>01/01/2022</b> and ending <b>12/31/2022</b> |                                      |
| Name of plan<br><b>Solugenix Corporation 401(k) Plan</b>                   |                                      |
| Employer Identification Number<br><b>20-1631341</b>                        | Three-digit plan number ► <b>001</b> |

[illegible]