| SEC For                               | m 4<br>FORM   | 4                   | UNITED                        | ) STA    | TES S   | ECURITIE   |                             |          |  | NG                                    | SE CC                                | )<br>MMI  | SSION                     |   |                                     |   |                       |
|---------------------------------------|---|---------------------|-------------------------------|----------|---|--|-----------------------------|----------|--|---------------------------------------|--------------------------------------|---|---------------------------|---|-------------------------------------|---|-----------------------|
|                                       |   |                     |                               |          |   | Washir   | ngton, D.                   | C. 205   | 49   |                                       |                                      |   |                           |   | OMB                                 | APPRO   | VAL                   |
| Section obligat                       | this box if no l<br>n 16. Form 4 c<br>ions may cont<br>tion 1(b). |                     | STAT                          |          | d pursuan   | t to Section 16(a<br>tion 30(h) of the                         | i) of the S                 | Securit  | es Exchai  | nge A                                 | Act of 193                           |   | HIP                       | Estim                                   |                                     | er:<br>verage burder<br>sponse:                                   | 3235-0287<br>n<br>0.5 |
| 1. Name an<br><u>Kurata</u><br>(Last) | Lance   | f Reporting Person* | (Middle)                      |          |   | r Name <b>and</b> Ticl<br>Irus Therap                          |                             |          |  | <u>nc.</u>                            | [ ARCT                               | [ (Che  | below)                    | cable)<br>or<br>(give title             | 0                                   | 10% Ov<br>Other (s<br>below)                                      | vner                  |
| C/O AR<br>INC.                        | C/O ARCTURUS THERAPEUTICS HOLDINGS INC.                           |                     |                               |          |   | 3. Date of Earliest Transaction (Month/Day/Year)<br>12/18/2020 |                             |          |  |                                       |                                      |   |                           | Chief Le                                | egal O                              | officer   |                       |
| 10628 S                               | CIENCE C  | ENTER DRIVE,        | SUITE 25                      |          | 4. If Am  | endment, Date c  | of Origina                  | al Filed | (Month/D   | ay/Ye                                 | ear)                                 | 6. Ir<br>Line   | idividual or .            | loint/Group                             | o Filing                            | g (Check Ap   | plicable              |
| (Street)<br>SAN DI                    | EGO C   | ĊA                  | 92121                         |          |   |  |                             |          |  |                                       |                                      |   |                           | led by Mo                               |                                     | orting Perso<br>n One Repo  |                       |
| (City)                                | (5  | State)              | (Zip)                         |          |   |  |                             |          |  |                                       |                                      |   |                           |   |                                     |   |                       |
|                                       |   | Tab                 | ole I - Nor                   | -Deriva  | ative Se  | ecurities Ac   | quired                      | , Dis    | posed (  | of, o                                 | or Bene                              | eficiall  | y Owned                   |   |                                     |   |                       |
| Date                                  |   |                     | 2. Transa<br>Date<br>(Month/D |          | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Yea       | Code   | Transaction<br>Code (Instr. |          | 4. Securities Acquired (A)<br>Disposed Of (D) (Instr. 3,<br>5) |                                       |                                      | ) or<br>4 and<br>Beneficially<br>Owned Foll<br>Reported |                           | Form<br>(D) o                           | n: Direct<br>r Indirect<br>Istr. 4) | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |                       |
|                                       |   |                     |                               |          |   |  | Code                        | v        | Amount   |                                       | (A) or<br>(D)                        | Price   | Transact<br>(Instr. 3 a   | ion(s)                                  |                                     |   | (1150. 4)             |
|                                       |   |                     |                               |          |   | curities Acqu<br>Is, warrants                                  |                             |          |  |                                       |                                      |   | Owned                     |   |                                     |   |                       |
| 1. Title of<br>Derivative<br>Security | rivative Conversion Date Execution Date, Ti                       |                     | ransaction<br>ode (Instr.     | Expirati | Date Exercisable and xpiration Date Am of Securities Underlying |  |                             |          |  | 8. Price of<br>Derivative<br>Security | 9. Numbe<br>derivative<br>Securities | e   | 10.<br>Ownership<br>Form: | 11. Nature<br>of Indirect<br>Beneficial |                                     |   |                       |

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Transaction<br>Code (Instr.<br>8) |   | 5. Number<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D) (Instr.<br>3, 4 and 5) |     | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                    | 7. Title and Amount<br>of Securities<br>Underlying<br>Derivative Security<br>(Instr. 3 and 4) |  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |
|---|---|--|---|---|---|--|-----|--|--------------------|---|--|---|--|--|--|--|
|   |   |  |   | Code                                    | v | (A)  | (D) | Date<br>Exercisable  | Expiration<br>Date | Title   | Amount<br>or<br>Number<br>of<br>Shares |   |  |  |  |  |
| Stock<br>Option<br>(right to<br>buy)                | \$99.29   | 12/18/2020                                 |   | A                                       |   | 25,000   |     | (1)  | 12/18/2030         | Common<br>Stock   | 25,000                                 | \$0   | 25,000   | D  |  |  |

Explanation of Responses:

1. 25% of the shares underlying the option vest on the one year anniversary of the date of grant, with the remainder vesting in 36 successive equal monthly increments thereafter.

| /s/ Lance Kurata                 | <u>12/22/2020</u> |
|----------------------------------|-------------------|
| ** Signature of Reporting Person | Date              |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 $^{*}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.