FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| Check this box if no longer subject to | |
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| Section 16. Form 4 or Form 5 | |
| obligations may continue. See | |
| Instruction 1(b). | |

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person* SASSINE ANDY | | | | | 2. Issuer Name and Ticker or Trading Symbol Arcturus Therapeutics Holdings Inc. [ARCT | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | |
|--|--|------------|---------------|-------------|--|------------------|---|--|--|--------------------|--|---|---|--|---|---|--|
| (Last) | (F | irst) | (Middle) | _ _ | | | | | | | | | X Officer below) | (give title | Other below) | (specify | |
| C/O ARCTURUS THERAPEUTICS HOLDINGS INC. | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 02/18/2020 | | | | | | | | C | hief Financ | cial Officer | | |
| 10628 SCIENCE CENTER DRIVE, SUITE 250 | | | | | If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable | | | | |
| (Street) SAN DIEGO CA 92121 | | | | _ " | 4. II Altiendinent, Date of Original Filed (World)/Day/Tear) | | | | | | | | Line) X Form filed by One Reporting Person | | | | |
| | | | | | | | | | | | | | Form filed by More than One Reporting Person | | | | |
| (City) | (S | tate) | (Zip) | | | | | | | | | | 1 01001 | • | | | |
| | | Tab | le I - Non-De | rivativ | e Se | curities | s Ac | quired, | Dis | posed c | f, or Be | neficial | y Owned | | | | |
| 1. Title of Security (Instr. 3) 2. Transa Date (Month/D | | | | | ear) i | Execution if any | a. Deemed recution Date, any lonth/Day/Year) | | Transaction Disposed Of (I Code (Instr. 5) | | | es Acquired (A) or Of (D) (Instr. 3, 4 and | | s Fally (I | i. Ownership Form: Direct D) or Indirect I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | | | Code | v | Amount | (A) or (D) | Price | Reported Transact (Instr. 3 a | ion(s) | | (iiisti. 4) | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. 3. Transaction Date (Month/Day/Year) Frice of Derivative Security 3. Transaction Date Execution D if any (Month/Day/ | | | Code (Instr | | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amoun of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | Ownershi Form: Direct (D) or Indirec (I) (Instr. 4 | Beneficial Ownership (Instr. 4) | |
| | | | | Code | v | (A) | (D) | Date Exercisab | | Expiration Date | Title | Amount or Number of Shares | | | | | |
| Stock Option (right to buy) | \$14.12 | 02/18/2020 | | A | | 80,000 | | (1) | (| 02/18/2030 | Common Stock | 80,000 | \$0.00 | 80,000 | 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.

Remarks:

/s/ Ilan Katz, attorney-in-fact 02/20/2020

** 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.