

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL
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[] Check this box if no longer
subject to Section 16. Form 4 or
Form 5 obligations may
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

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 * | | 2. Issuer Name and Ticker or Trading Symbol | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | |
| ROSENWALD LINDSAY A MD | | AVENUE THERAPEUTICS, INC. [ATXI] | | <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner | |
| (Last) (First) (Middle) | | 3. Date of Earliest Transaction (MM/DD/YYYY) | | <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) | |
| C/O AVENUE THERAPEUTICS, INC., 2 GANSEVOORT STREET, 9TH FLOOR | | 10/4/2017 | | | |
| (Street) | | 4. If Amendment, Date Original Filed (MM/DD/YYYY) | | 6. Individual or Joint/Group Filing (Check Applicable Line) | |
| NEW YORK, NY 10014 | | | | <input checked="" type="checkbox"/> Form filed by One Reporting Person | |
| (City) (State) (Zip) | | | | <input type="checkbox"/> Form filed by More than One Reporting Person | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Trans. Date | 2A. Deemed Execution Date, if any | 3. Trans. Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|------------------------------------|----------------|---|------------------------------|---|---|---------------|--------|---|---|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | 10/4/2017 | | P | | 2200 | A | \$5.60 | 12200 (U) | D | |
| Common Stock | 10/5/2017 | | P | | 3550 | A | \$5.60 | 15750 (U) | D | |
| Common Stock | 10/6/2017 | | P | | 2900 | A | \$5.63 | 18650 (U) | D | |
| Common Stock | 10/9/2017 | | P | | 1350 | A | \$5.40 | 20000 (U) | D | |

Table II - Derivative Securities Beneficially Owned (e.g. , puts, calls, warrants, options, convertible securities)

| 1. Title of Derivate Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Trans. Date | 3A. Deemed Execution Date, if any | 4. Trans. Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date | | 7. Title and Amount 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) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|-------------------|---|------------------------------|---|--|-----|--|--------------------|--|-------------------------------|---|--|---|--|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

(1) Includes 10,000 shares of restricted stock.

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| ROSENWALD LINDSAY A MD C/O AVENUE THERAPEUTICS, INC. 2 GANSEVOORT STREET, 9TH FLOOR NEW YORK, NY 10014 | X | | | |

Signatures

/s/ Lucy Lu, M.D., Attorney-in-Fact

10/10/2017

**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.

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