FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

| OMB Number: | 3235-0287 | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| Estimated average burden | | | | | | | | | |
| hours per response. | 0.5 | | | | | | | | |

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

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

| 10b5-1(c). See Ins | struction 10. | | | |
|-----------------------------------|-------------------------|----------|---|---|
| 1. Name and Address O'Loughlin St | s of Reporting Person * | | 2. Issuer Name and Ticker or Trading Symbol Actinium Pharmaceuticals, Inc. [ATNM] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner |
| (Last) C/O ACTINIUM | (First) I PHARMACEUTIO | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 12/28/2023 | X Officer (give title Other (specify below) Chief Financial Officer |
| 100 PARK AVE | ., 23RD FLOOR | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person |
| (Street) NEW YORK, | NY | 10017 | | Form filed by More than One Reporting Person |
| (City) | (State) | (Zip) | | |

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

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transac Code (Ir 8) | tion | | Securities Acquired (A) or sposed Of (D) (Instr. 3, 4 and 5) | | Securities | Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--|---|---------------------------------|------|--------|--|-------|------------------|---|---|
| | | | Code | v | Amount | (A) or (D) | Price | (Instr. 3 and 4) | | (111501.4) |

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. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transac Code (In 8) | | 5. Number Derivative Securities Acquired Disposed (Instr. 3, 4 | e s (A) or l of (D) | Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | Reported | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) |
|---|---|--|---|---------------------------------|---|---|------------------------------|-------------------------------------|--------------------|--|----------------------------------|---|------------------------------|--|---------------------------------------|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | Transaction(s) (Instr. 4) | | |
| Stock Option (Right to Buy) | \$5 ⁽¹⁾ | 12/28/2023 | | A | | 253,123 | | (2) | 12/28/2033 | Common Stock | 253,123 | \$0 | 253,123 | D | |

Explanation of Responses:

- $1. This \ price \ represents \ the \ closing \ price \ of \ the \ Issuer's \ common \ stock \ on \ December \ 28, 2023, \ the \ date \ of \ the \ grant.$
- $2.\ Pursuant\ to\ the\ terms\ of\ the\ Issuer's\ 2019\ Stock\ Plan,\ 2\%\ of\ the\ options\ will\ vest\ each\ month\ from\ the\ date\ of\ grant\ until\ fully\ vested.$

<u>/s/ Steve O'Loughlin</u> <u>12/29/2023</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.