| SEC Form 4 | |
|------------|--|
|------------|--|

Instruction 1(b).

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

| OMB Number: | 3235-0287 | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| 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 Addr Swayze Eric | 1 0 | Person* | 2. Issuer Name and Ticker or Trading Symbol <u>IONIS PHARMACEUTICALS INC</u> [IONS] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title Other (specify |
|---------------------------------|--------------------|----------|---|---|
| (Last) 2855 GAZELL | (First) E COURT | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 02/29/2024 | A below) below) Officer Level 14 |
| (Street) CARLSBAD | СА | 92010 | 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 Form filed by More than One Reporting Person |
| (City) | (State) | (Zip) | Rule 10b5-1(c) Transaction Indication | |

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) | Code (Instr. | | | | | 5. Amount of Securities Beneficially Owned Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership |
| | | | Code | v | Amount | (A) or (D) | Price | Reported Transaction(s) (Instr. 3 and 4) | | (Instr. 4) |
| Common Stock | 02/29/2024 | | J ⁽¹⁾ | | 605 | A | \$34.425 | 34,929 | D | |
| Common Stock | | | | | | | | 85 | Ι | by Son |

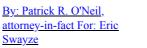
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

(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) | Execution Date, if any | 4. Transa Code (8) | | of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exerc Expiration Da (Month/Day/Y | 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: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|---|--|---------------------------|------------------------------|---|--|--|--|---|-------|---|--|--|--|
| | | | | Code | v | | | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | |

Explanation of Responses:

1. Reporting shares purchased under the Ionis Pharmaceuticals, Inc. Amended and Restated 2000 Employee Stock Purchase Plan on February 29, 2024. These shares may not be sold until August 31, 2024



03/04/2024

** 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.