UNITED STATES SECURITIES AND EXCHANGE COMMISSION n, D.C. 2

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

FORM 4

| C of Point's obligations may contain | ie. See instructi | JII 1(U). | | | File | ed purs or | Section 30(h) of th | e Investme | ecurities ent Comp | any Act of | Act of 1934 1940 | 1 | | | <u> </u> | | | · |
|--|---|--|---|--------------------------|--|--|--|------------|--|---|---|-------------|---|--|---|---|---|---|
| 1. Name and Address of Reporting <u>Monia Brett P</u> | 2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [IONS] | | | | | | | | (Check al | 5. Relationship of Reporting Person(s) to Issuer Check all applicable) Director 10% Owner X Officer (give title below) Other (specify be | | | | | | | | |
| (Last) (First) (Middle) C/O IONIS PHARMACEUTICALS, INC. 2855 GAZELLE COURT | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 01/01/2016 | | | | | | | | | 10 | , | Drug Discovery | , |
| (Street) CARLSBAD CA 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) (S | State) | (Zi | 0) | | | | | | | | | | | | | | | |
| | | | ٦ | Table I - | Non-Deri | vativ | e Securities A | Acquired | l, Disp | osed of, | or Bene | ficially Ov | ned | | | | | |
| 1. Title of Security (Instr. 3) | | | | | | · | 2A. Deemed Execution Date, if any | | | 4. Securiti 3, 4 and 5) | I. Securities Acquired (A) or Disposed Of (D 8, 4 and 5) | | | D) (Instr. 5. Amount of Securiti Beneficially Owned F Reported Transaction | | ollowing | 6. Ownership Form: Direct (D) or Indirect (I (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. |
| | (Month/Day/Year) | | (Month/Day/Year) | Code | ode V Amou | | | (A) or (D) | Price | | (Instr. 3 and 4) | | (instr. 4) | 4) | | | | |
| Common Stock | 01/01/2016 | | 01/01/2016 | J ⁽¹⁾ | v | 1 | 30 | Α | \$47.7105 | | 4,485 | | D | | | | | |
| Common Stock | 01/04/2016 | | 01/04/2016 | S ⁽³⁾ | | 12 | .7 ⁽³⁾ | D | \$ <mark>61</mark> | | 4,358 | | D | | | | | |
| | | | | Table | | | Securities Ac calls, warrant | | | | | | ed | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transac (Instr. 8) | Secur | | ber of Derivative ties Acquired (A) or sed of (D) (Instr. 3, 4 | Expirati | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities I Derivative Security (Instr. 3 and 4) | | | | 8. Price of Derivative Security (Instr. 5) | 9. Number derivative Securities Beneficial | Form: Direct (D) or Indirect | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |

if any (Month/Day/Year) Dispos and 5) ed of (D) (Instr. 3, 4 Price of Derivati Security

| | | | | | Code | v | (A) | (D) | Exercisable | Date | Title | Number of Shares | | (Instr. 4) | | |
|---------|-------------------------------|---------|------------|------------|------|---|--------|-----|---------------------------|------------|--------------|------------------|-----|------------|---|--|
| Employe | e Stock Option (right to buy) | \$61.68 | 01/04/2016 | 01/04/2016 | Α | | 38,240 | | 01/04/2017 ⁽²⁾ | 01/03/2023 | Common Stock | 38,240 | \$0 | 38,240 | D | |

Explanation of Responses:

1. Reporting 130 shares acquired under the Ionis Pharmaceuticals, Inc. Amended and Restated 2000 Employee Stock Purchase Plan on January 1, 2016. These 130 shares may not be sold until July 2, 2016. 2. Grant of 1/4/2016 to reporting person of stock options under the Ionis Pharmaceuticals, Inc. 2011 Equity Incentive Plan. 25% of the shares subject to the option vest and become exercisable on 1/4/2017. Thereafter, the remaining shares subject to the option vest and become exercisable in 36 equal monthly installments, at her are 0.95.06 shares per year. Following this transaction, the option was exercisable as to 0 on 1/4/2016. 3. The sale reported in this Form 4 was effected pursuant to a Rule 1005-1 trading plan adopted by the reporting person on 7/1/2014.

Remarks:

/s/B. Lynne Parshall, attorney-in-fact 01/04/2016 ** 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. 76ff(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.

Know all by these presents, that the undersigned hereby constitutes and appoints each of Stanley T. Crooke and B. Lynne Parshall, signing individually, the undersigned (1) execute for and on behalf of the undersigned, an officer, director or holder of 10% or more of a registered class of securities of Isis Pharmaceuticals, Inc. (Is (2) do and perform any and all acts for and on behalf of the undersigned that may be necessary or desirable to complete and execute such Form 3, 4 or 5, complete and (3) take any other action of any nature whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit, in the best in The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, (This Power of Attorney shall remain in full force and effect until the earliest to occur of (a) the undersigned is no longer required to file Forms 3, 4 and 5 with t

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 1st day of January, 2012.

/S/Brett P. Monia