FORM 4

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	

10% Owner

below)

6. Individual or Joint/Group Filing (Check Applicable

Form filed by One Reporting Person

Form filed by More than One Reporting

Line)

Other (specify

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

2855 GAZELLE COURT

CA

(Street)

CARLSBAD,

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940 2. Issuer Name and Ticker or Trading Symbol 5. Relationship of Reporting Person(s) to Issuer 1. Name and Address of Reporting Person* (Check all applicable) **IONIS PHARMACEUTICALS INC** [IONS] Cadoret-Manier Onaiza Director Officer (give title below) 3. Date of Earliest Transaction (Month/Day/Year) (Last) (First) (Middle) Chief Corp Dev and Cml Officer 01/04/2021 C/O IONIS PHARMACEUTICALS, INC.

(City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 1. Title of Security (Instr. 3) 2. Transaction 2A. Deemed Execution Date, 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5. Amount of 6. Ownership Form: Direct 7. Nature of Transaction Securities Indirect if any (Month/Day/Year) Beneficial (Month/Day/Year) Code (Instr. 5) Beneficially (D) or Indirect 8) Ownership (Instr. 4) (I) (Instr. 4) Reported (A) or (D) Transaction(s) Price Code Amount (Instr. 3 and 4) Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

4. If Amendment, Date of Original Filed (Month/Day/Year)

(e.g., puts, calls, warrants, options, convertible securities) 2. Conversion 3. Transaction 3A. Deemed Execution Date, 6. Date Exercisable and 7. Title and Amount 9. Number of 11. Nature 1. Title of 5. Number 8. Price of of Securities Underlying Derivative Security Derivative Security (Instr. 3) Transaction Derivative Ownership of Indirect Beneficial Expiration Date (Month/Day/Year) derivative (Month/Day/Year Derivative Security (Instr. 5) Securities or Exercise if anv Code (Instr. Form: Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) Price of Derivative (Month/Day/Year) Beneficially Owned 8) Direct (D) (Instr. 3 and 4) (Instr. 4) Security Following (I) (Instr. 4) Reported Transaction(s) (Instr. 4) Amount Number Date Expiration ν (A) (D) Exercisable Title Shares Code Employee Stock Option \$56.78 01/04/2021 01/04/2021 54,513 01/04/2022(1) 01/03/2028 54,513 \$0.0 54,513 D (right to

Explanation of Responses:

1. Grant on 01/04/2021 to reporting person of stock options under the Ionis Pharmaceuticals, Inc. Amended and Restated 2011 Equity Incentive Plan. Following this transaction, the option was exercisable as to 0 shares on 01/04/2021. 25% of the shares subject to the option will vest and become exercisable on 01/04/2022. Thereafter, the remaining shares subject to the option will vest and become exercisable in 36 equal monthly installments over the next 3 years.

Remarks:

/s/ Patrick R. O'Neil, attorney-

01/06/2021

in-fact

** Signature of Reporting Person

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

92010

- * 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.