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 APP	ROVAL								
	OMB Number: 3235-0287 Estimated average burden									
	hours per response	: 0.5								

Instruction 1(b).			Filed pursuant to Section 16(a) of the Securities Exchange Act of 193- or Section 30(h) of the Investment Company Act of 1940	4		13 per response. 0.3				
L. Name and Addre Geary Richa		erson*	2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC IONS]		ationship of Report k all applicable) Director Officer (give title	ting Person(s) to Issuer 10% Owner e Other (specify				
(Last) 2855 GAZELLI	ast) (First) (Middle)		3. Date of Earliest Transaction (Month/Day/Year) 08/31/2023	, a	below) Office	below) er Level 14				
			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicat Line)						
Street) CARLSBAD	CA	92010	_	X	•	one Reporting Person lore than One Reporting				
(City)	(State)	(Zip)	Rule 10b5-1(c) Transaction Indication Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.							

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 2. Transaction Date 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) 1. Title of Security (Instr. 3) 2A. Deemed 5. Amount of 6. Ownership 7. Nature Securities Beneficially Form: Direct (D) or Indirect of Indirect Beneficial Execution Date, Transaction (Month/Day/Year) if any Code (Instr. (Month/Day/Year) 8) Owned Following (I) (Instr. 4) Ownership Reported Transaction(s) (A) or (D) Code ν Price Amount (Instr. 3 and 4) Common Stock 08/31/2023 $J^{(1)}$ 72,961 1 Α \$30.5575 D

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. Transa Code (8)				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)	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	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

Explanation of Responses:

1. Reporting shares acquired under the Ionis Pharmaceuticals, Inc. Amended and Restated 2000 Employee Stock Purchase Plan on August 31, 2023. These shares may not be sold until February 29, 2024.

By: Patrick R. O'Neil,

attorney-in-fact For: Richard 09/01/2023

S. Geary

** 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.