# FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

# 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

1. Name and Address of Reporting Person*			2. Issuer Name <b>and</b> Ticker or Trading Symbol IONIS PHARMACEUTICALS INC	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)							
Monia Brett P			IONS	X Director 10% Owner							
(Last) 2855 GAZELI	st) (First) (Middle) 55 GAZELLE COURT		3. Date of Earliest Transaction (Month/Day/Year)       05/22/2023	X Officer (give title Other (specify below) below) Chief Executive Officer							
			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line)							
(Street)				X Form filed by One Reporting Person							
CARLSBAD	CA	92010		Form filed by More than One Reporting							
,			-	Person							
(City)	(State)	(Zip)	Rule 10b5-1(c) Transaction Indication								
			X Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.								

#### 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)			4. Securities Disposed Of 5)			5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	v	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)		
Common Stock	05/22/2023		S		2,301 <sup>(1)</sup>	D	\$40.13	143,004	D	
Common Stock	05/22/2023		S		2,630 <sup>(1)</sup>	D	\$40.14	140,374	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)	Derivative Conversion Date Ex Security or Exercise (Month/Day/Year) if		3A. Deemed Execution Date, if any (Month/Day/Year)	Code (II	Transaction Code (Instr. 8)		ber rative rities ired r osed ) . 3, 4 )	6. Date Exercisable and 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. Shares sold pursuant to a Rule 10b5-1 Trading Plan adopted by the reporting person on November 16, 2022.

### By: Patrick R. O'Neil,

attorney-in-fact For: Brett P. 05/24/2023 Monia

\*\* Signature of Reporting Person Date

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

 $^{\ast}$  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.

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