FORM 4

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

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT	OF CHANGE	S IN BENEFICIAL	OWNERSHIP

OMB APPF	ROVAL
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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

O Januar Names and Tieles on Trading Combal

Name and Address of Reporting Person Schneider Eugene				IONIS PHARMACEUTICALS INC IONS Officer (give title Other (specify below) Other (specify below)															
(Last) 2855 GA	FI ZELLE CO	(First) (Middle)				3. Date of Earliest Transaction (Month/Day/Year) 10/17/2022									,	EVP, Chf Clinical Develop Ofcr			
(Street) CARLSE			92010 (Zip)		4. If Amendment, Date of Original Filed (Month/Day/Year)							Line)	Individual or Joint/Group Filing (Check Applicable ne) X Form filed by One Reporting Person Form filed by More than One Reporting Person						
		Tabl	e I - No	n-Deriv	ative	Sec	uriti	es Ac	quired	Dis	posed (of, or Be	enefi	cially	y Owned	d			
1. Title of Security (Instr. 3)			Date (Month/Day/Year)		ır) E	2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction [Code (Instr. 5		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5)			l and Securiti Benefic Owned		es ally Following	Forn (D) o	n: Direct or Indirect nstr. 4)	7. Nature of Indirect Beneficial Ownership	
								Code	v	Amount	(A) o (D)	r _{Pr}	ice	Reported Transaction(s (Instr. 3 and 4				(Instr. 4)	
Common Stock			10/17	10/17/2022				M ⁽¹⁾		416(1) A	\$(\$0.0	14	,176	D			
Common Stock 10/1				10/17	/2022			F ⁽²⁾		144(2	2) D \$4		46.52	14,032			D		
		Т	able II -						,			, or Ber ible sec		•	Owned				
Derivative Conversion Date		3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)		4. Transaction Code (Instr. 8)		n of I		6. Date Exercisa Expiration Date (Month/Day/Year		Amount of		of s ng e Secu nd 4)	rity	ecurity nstr. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	ly OF	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	v	(A)	(D)	Date Exercisal		Expiration Date	Title	Amo or Num of Shar	ber					
Restricted	\$0.0 ⁽³⁾	10/17/2022			M			416	(4)		(4)	Common	41	6	\$0.0	35,909	9	D	

Explanation of Responses:

- 1. Acquired pursuant to vesting and release of shares in accordance with a Restricted Stock Unit award.
- 2. Shares withheld to cover the required tax withholding obligations pursuant to the Ionis Pharmaceuticals, Inc. Amended and Restated 2011 Equity Incentive Plan.
- 3. Each Restricted Stock Unit represents a contingent right to receive one share of Ionis common stock, or its equivalent cash value.
- 4. Restricted Stock Units vest in four equal annual installments. Upon vesting, the restricted stock units will be paid out in whole shares of Ionis common stock or cash as may be determined by the Company.

By: Patrick R. O'Neil, attorneyin-fact For: Eugene Schneider

** 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.