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						

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

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

Name and Address of Reporting Person* O'NEIL PATRICK R.					2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [IONS]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title Other (specify					
(Last) 2855 GA	(F ZELLE CO	,	(Middle)		3. Date of Earliest Transaction (Month/Day/Year) 01/03/2022						X	below) EVP	,				
(Street) CARLSE			92010 (Zip)		4. If Amendment, Date of Original Filed (Month/Day/Year)					Line)	dividual or Joint/Group Filing (Check Applicable) X Form filed by One Reporting Person Form filed by More than One Reporting Person						
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)			. Transac	2A. Deemed Execution Date,		3. Transactio Code (Inst	3. 4. Securities Acquired (A) Transaction Disposed Of (D) (Instr. 3, 4 Code (Instr. 5)		d (A) or	5. Amour Securitie Beneficia Owned F	s ally ollowing	Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership			
							Code V	Amount	(A) or (D)	Price	Reported Transact (Instr. 3 a	ion(s)			(Instr. 4)		
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)	itle of 2. 3. Transaction Jak. Deemed 4 Execution Date Execution Date, Urity or Exercise (Month/Day/Year) if any		Cod	ransaction of E ode (Instr. Derivative (I		6. Date Exercisable and Expiration Date (Month/Day/Year) (Month/Day/Year) 7. Title and of Securitie Underlying Derivative S (Instr. 3 and		es g Security	8. Price of Derivative Security (Instr. 5)	9. Numbe derivative Securities Beneficia Owned Following Reported Transactic (Instr. 4)	e C s F lly D o (I	.0. Ownership Form: Direct (D) or Indirect I) (Instr. 4)	Beneficial Ownership (Instr. 4)				
				Cod	e V	(A)		Date Exercisable	Expiration Date	Title	Amount or Number of Shares						
Non- Qualified Stock Option (right to buy)	\$32.6	01/03/2022	01/03/2022	A		30,567	(01/03/2023 ⁽¹⁾	01/02/2032	Common Stock	30,567	\$0.0	30,56	7	D		

Explanation of Responses:

1. Grant on 01/03/2022 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 01/03/2022. 25% of the shares subject to the option will vest and become exercisable on 01/03/2023. Thereafter, the remaining shares subject to the option will vest and become exercisable in 36 equal monthly installments over the next 3 years.

Patrick R. O'Neil

01/05/2022

** 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.