## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D	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 ]							Relationship of Reporting Person(s) to Issuer (Check all applicable)     Director					
(Last) 2855 GA	(Fi	,	(Middle)		3. Date of Earliest Transaction (Month/Day/Year) 01/02/2024						2	X Officer (give title below) Other (specify below)  EVP CLO & General Counsel					
(Street)	BAD C.	A	92010	4.	If Ame	ndment, I	Date	of Original Fil	led (	(Month/Day	//Year)	Line	Form fi	led by One led by More	Repo	(Check App rting Person One Report	
(City)	(S	tate)	(Zip)	R	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 to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.											o satisfy					
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																
Date				ransaction te onth/Day/Y	Execution Date,		Code (Ins	Transaction Disposed Of (D) (Instr. 3, Code (Instr. 5)			5. Amour Securitie Beneficia Owned F	s For	Form (D) or	m: Direct or Indirect Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
							Code	/	Amount	(A) or (D) Price		Transaction(s) (Instr. 3 and 4)				msu. 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)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year	Code (		on of E		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amou of Securities Underlying Derivative Securi (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficially Owned Following Reported Transactio (Instr. 4)	Owner Form: Direct or Indi (I) (Ins	Ownership	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A)	(D)	Date Exercisable		Expiration Date	Title	Amount or Number of Shares					
Non- Qualified Stock Option (right to buy)	\$52.87	01/02/2024		A		27,200		01/02/2025 <sup>(1</sup>		01/01/2034	Common Stock	27,200	\$0.0	27,200	)	D	

## **Explanation of Responses:**

1. Grant on 01/02/2024 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 01/02/2024. 25% of the shares subject to the option will vest and become exercisable on 01/02/2025. 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

01/04/2024

\*\* 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.