FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB APPRO	VAL							
	OMB Number:	3235-0287							
l	Estimated average burden								
l	hours per response:	0.5							

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

Filed assessment to Continue 10(a) of the Constitute Fundament Act of 1004

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* O'NEIL PATRICK R. (Last) (First) (Middle) C/O IONIS PHARMACEUTICALS, INC. 2855 GAZELLE COURT (Street) CARLSBAD CA 92010							2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC IONS 3. Date of Earliest Transaction (Month/Day/Year) 07/01/2019 4. If Amendment, Date of Original Filed (Month/Day/Year)									5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title Other (specify below) SVP Legal & General Counsel 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person			
(City)	(S		Zip)	an Davis	·otivo					4 D:		·) on of	مالمند	0				
Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transactive Date (Month/Day)						2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transa Code (8) Code	ection	4. Securitie	es Acquired (A) or Of (D) (Instr. 3, 4 an (D) (D) Price		nd 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)		6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
Common	Common Stock 07/01/2019 07/01/2019 J(1) 161(1) A \$45.7045 16,834 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)	tive Conversion Date Execution or Exercise (Month/Day/Year) if any		on Date, Day/Year)	4. Transaction Code (Instr. 8)		of Deriva Secur Acqui (A) or Dispo of (D) (Instr.	of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year) Date Expiration Exercisable Date		7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4) Amoun or Numbe of Title Shares		t r		9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)		

Explanation of Responses:

1. Reporting 161shares acquired under the Ionis Pharmaceuticals, Inc. Amended and Restated 2000 Employee Stock Purchase Plan on July 1, 2019. These 161 shares may not be sold until January 2, 2020.

Remarks:

/s/Patrick R. O'Neil, attorneyin-fact 07/03/2019

** 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.