

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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).

**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* <u>O'NEIL PATRICK R.</u>  (Last) (First) (Middle) C/O IONIS PHARMACEUTICALS, INC. 2855 GAZELLE COURT  (Street) CARLSBAD CA 92010  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>IONIS PHARMACEUTICALS INC [ IONS ]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>SVP Legal &amp; General Counsel</u>
	3. Date of Earliest Transaction (Month/Day/Year) <u>04/03/2019</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

**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)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 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)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	04/03/2019	04/03/2019	M <sup>(1)</sup>		7,654 <sup>(1)</sup>	A	\$61.68	27,327	D	
Common Stock	04/03/2019	04/03/2019	S <sup>(1)</sup>		7,654 <sup>(1)</sup>	D	\$84.83 <sup>(2)</sup>	19,673	D	
Common Stock	04/04/2019	04/04/2019	M <sup>(1)</sup>		15,492 <sup>(1)</sup>	A	\$61.68	35,165	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(1)</sup>		15,492 <sup>(1)</sup>	D	\$84.75	19,673	D	
Common Stock	04/04/2019	04/04/2019	M <sup>(3)</sup>		4,873 <sup>(3)</sup>	A	\$61.68	24,546	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(3)</sup>		4,873 <sup>(3)</sup>	D	\$82.19 <sup>(4)</sup>	19,673	D	
Common Stock	04/04/2019	04/04/2019	M <sup>(5)</sup>		2,657 <sup>(5)</sup>	A	\$61.57	22,330	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(5)</sup>		2,657 <sup>(5)</sup>	D	\$82.03 <sup>(6)</sup>	19,673	D	
Common Stock	04/04/2019	04/04/2019	M <sup>(5)</sup>		2,000 <sup>(5)</sup>	A	\$47.34	21,673	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(5)</sup>		2,000 <sup>(5)</sup>	D	\$84.2	19,673	D	
Common Stock	04/04/2019	04/04/2019	M <sup>(5)</sup>		3,600 <sup>(5)</sup>	A	\$47.34	23,273	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(5)</sup>		3,600 <sup>(5)</sup>	D	\$82.1	19,673	D	
Common Stock	04/04/2019	04/04/2019	M <sup>(5)</sup>		8,000 <sup>(5)</sup>	A	\$49.25	27,673	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(5)</sup>		8,000 <sup>(5)</sup>	D	\$84.29 <sup>(7)</sup>	19,673	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(8)</sup>		1,122 <sup>(8)</sup>	D	\$82.01 <sup>(9)</sup>	18,551	D	
Common Stock	04/04/2019	04/04/2019	S <sup>(8)</sup>		1,878 <sup>(8)</sup>	D	\$84.25	16,673	D	
Common Stock	04/05/2019	04/05/2019	M <sup>(5)</sup>		2,252 <sup>(5)</sup>	A	\$61.68	18,925	D	
Common Stock	04/05/2019	04/05/2019	S <sup>(5)</sup>		2,252 <sup>(5)</sup>	D	\$84.75	16,673	D	

