Instruction 1(b).

FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

	STATEMENT OF CHANGES IN BENEFICIAL	<b>OWNERSHIP</b>
to Section 16. Form 4 or Form 5		
obligations may continue. See		

**OMB APPROVAL** 3235-0287 Estimated average burden hours per response: 0.5

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*     Monia Brett P						2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC IONS ]									ationship call app Direc	,	ng Pe	rson(s) to Is	
(Last) (First) (Middle) 2855 GAZELLE COURT				3. Da	3. Date of Earliest Transaction (Month/Day/Year) 08/31/2021								X	belov	er (give title w) Chief Executive		Other (below)	specify	
(Street) CARLSI (City)			2010 Zip)		4. If A	4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Indi Line) X					
		Table	I - No	n-Deriva	tive S	Secu	rities	Acc	uired	, Dis	posed of	, or E	Benefi	cially	Own	ed			
1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day)					Execution Date,		ate,	3. Transaction Code (Instr. 8) 4. Securities Disposed Of 5)					and Securi Benefi		ties cially I Following	Forr (D)	wnership m: Direct or Indirect nstr. 4)	7. Nature of Indirect Beneficial Ownership	
							Code	v	Amount	(A) c	Price	е	Transa	action(s) 3 and 4)			(Instr. 4)		
Common Stock			08/31/2	./2021 08/		/31/2021		J <sup>(1)</sup>		355	A	\$33	.796 50		0,469		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)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	Execu if any	ecution Date, any onth/Day/Year)		4. Transaction Code (Instr. 8)		vative rrities rrosed ) r. 3, 4	6. Date Exert Expiration D (Month/Day/)		Amount of Securities Underlying Derivative Security (Ins 3 and 4)  Amount of Security (Ins 3 and 4)  Amount of Security (Ins 3 and 4)		unt of rities rlying ative rity (Instr 4) Amoun or Numbe	nt er		9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	у	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)

## **Explanation of Responses:**

1. Reporting shares acquired under the Ionis Pharmaceuticals, Inc. Amended and Restated 2000 Employee Stock Purchase Plan on August 31, 2021. These shares may not be sold until February 28, 2022.

By: Patrick R. O'Neil, 09/02/2021 attorney-in-fact For: Brett P. Monia

\*\* 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.