FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5

obligations may continue. See

Instruction 1(b)

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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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* Swayze Eric						2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC IONS									all applic Directo Officer	able)) Pers	10% Ov Other (s	vner
(Last) (First) (Middle) 2855 GAZELLE COURT						3. Date of Earliest Transaction (Month/Day/Year) 01/17/2023								below) below) EVP Research					
(Street) CARLSBAD CA 92010				4.1	4. If Amendment, Date of Original Filed (Month/Day/Year)								Line)	Individual or Joint/Group Filing (Check Applicable ine) X Form filed by One Reporting Person					
(City)					-									A	Form filed by More than One Reporting Person				- 1
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
Date				Date	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			Benefic Owned		ies For cially (D) Following (I) (n: Direct or Indirect ostr. 4)	7. Nature of Indirect Beneficial Ownership
								Code	v	Amount	(A) or (D)	Price		Reported Transaction(s) (Instr. 3 and 4)				(Instr. 4)	
Common Stock 01/17				01/17/2	2023	23			M ⁽¹⁾		15,780(1)	A	\$0	.0	35,672			D	
Common Stock 01				01/18/2	2023	23			S ⁽²⁾		5,631(2)	D	\$39.7	\$39.7442(3)		30,041		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)	if any	emed ion Date, //Day/Year)		ransaction ode (Instr.		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		te Exer ration D th/Day/		7. Title and Amou of Securities Underlying Derivative Securi (Instr. 3 and 4)		ity De Se	Price of erivative ecurity nstr. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	ly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
					Code	v	(A)	(D)	Date Exerc	cisable	Expiration Date	Title	Amou or Numb of Share	er					
Restricted Stock Unit	\$0.0 ⁽⁴⁾	01/17/2023			M			15,780		(5)	(5)	Common Stock 15,7		80	\$0.0	43,397	,	D	

Explanation of Responses:

- 1. Acquired pursuant to vesting and release of shares in accordance with Restricted Stock Unit awards.
- 2. The sale was made pursuant to an automatic sale to cover the required tax withholding obligations pursuant to the 2011 Equity Incentive Plan Restricted Stock Unit Agreement and Grant Notice.
- 3. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$39.66965 to \$39.79044 inclusive. The reporting person undertakes to provide to Ionis Pharmaceuticals, Inc. any security holder of Ionis Pharmaceuticals, Inc. or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in footnote (3) on this Form 4.
- 4. Each Restricted Stock Unit represents a contingent right to receive one share of Ionis common stock, or its equivalent cash value.
- 5. Restricted Stock Units vest in four equal annual installments. Upon vesting, the restricted stock units will be paid out in whole shares of Ionis common stock or cash as may be determined by the Company.

By: Patrick R. O'Neal,

attorney-in-fact For: Eric

01/19/2023

<u>Swayze</u>

** 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.