FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

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Washington	DC 2	0549		

OMB APPROVAL								
OMB Number:	3235-0287							

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

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative

Filed pursuant to Sect or Section 30(h) of the Investment Company Act of 1940

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP	OMB Number:	3235-0287		
	Estimated average burd	den		
Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934	hours per response:	0.5		
Continue 20/h) of the Investment Comment Act of 1040	-			

1. Title of Security (Instr. 3) 2. Transaction			2. Transaction	2A. Deemed	3.	4. Securities Acquired (A)	or	5. Amount of	6. Ownership	7. Nature		
		Table I - N	lon-Derivativ	e Securities Ac	cquired, D	isposed of, or Bene	ficially	Owned				
(City)	(State)	(Zip)										
		,2010						Form filed by Mo Person	re than One Re	porting		
(Street) CARLSBAD	CA	92010	"	02/02/2024				Form filed by On	e Reporting Per	son		
					e of Original F	iled (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line)					
C/O IONIS P	HARMACEUT	ICALS, INC	c.									
2855 GAZELLE COURT				Date of Earliest Tra	nsaction (Mor	ntn/Day/Year)		EVP,Chf GL Po	ıı su & Oper	Oic		
(Last)	(First)	(Middle		D		(I /D A/)		below)	below	'		
1. Name and Address of Reporting Person* Cadoret-Manier Onaiza				ONIS PHARM ONS]				all applicable) Director Officer (give title	10% C	Owner (specify		
1 Name and Add	droce of Doporting	Porcon*	12.	. Issuer Name and T	icker or Tradii	na Symbol	5. Relationship of Reporting Person(s) to Issuer					

and an essentify (means s)	Date (Month/Day/Year)	Execution Date, if any (Month/Day/Year)	Transaction Code (Instr. 8)					Securities Beneficially Owned Following Reported	Form: Direct (D) or Indirect (I) (Instr. 4)	of Indirect Beneficial Ownership (Instr. 4)
			Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)		(111301. 4)
Common Stock	02/02/2024		S		2,162(1)	D	\$49.602(2)	35,788(1)	D	

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

Derivative Security	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transa Code (8)		of Deriv Secu Acqu (A) or Dispo of (D) (Instr	of Expiration D		Expiration Date (Month/Day/Year)			n Date Amount of		Expiration Date (Month/Day/Year) Amount of Securities Underlying Derivative Security (Instr. 5) Eneficially Owned Security (Instr. 3) and 4) Expiration Date derivative Security (Instr. 3) and 4) Expiration Date derivative Security (Instr. 4) Expiration Date derivative Security (Instr. 5) Eneficially Owned Following Reported Transaction		Securities Beneficially Owned Following Reported Transaction(s)	Ownership of Form: Be Direct (D) Ov	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares							

Explanation of Responses:

- 1. The original Form 4 filed on February 2, 2024 reported 2,125 restricted stock units sold by the reporting person which has been revised by this amendment to reflect the actual amount of shares sold and beneficially owned by Ms. Cadoret-Manier.
- 2. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$49.60 to \$49.62 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 (2) on this Form 4.

Patrick R. O'Neil, attorney-in-

fact For: Onaiza Cadoret-09/04/2024

Manier

** Signature of Reporting Person

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.