FORM 4

UNITED STAT

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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

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 defense conditions of Rule 10b5-1(c). See Instruction 10.

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* Birchler Brian					2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [IONS]							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title Other (specify					
(Last) (First) (Middle) 2855 GAZELLE COURT					3. Date of Earliest Transaction (Month/Day/Year) 01/02/2025							below) EVP, Corp and Development Ops					
(Street) CARLSE			92010 (Zip)	4.	4. If Amendment, Date of Original Filed (Month/Day/Year)							Individual or Joint/Group Filing (Check Applicable ine) Form filed by One Reporting Person Form filed by More than One Reporting Person					
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
Date				Transactio ate onth/Day/\	Execution Date,		Code (Inst				5. Amour Securitie Beneficia Owned F	s ally ollowing	Form:	Direct Indirect Introduced Interest Int	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
				Code V			Amount	(A) or (D)	Price		nsaction(s) tr. 3 and 4)		(
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)	ative Conversion Date Execution Date, Tr rity or Exercise (Month/Day/Year) if any C			Code	ansaction of ode (Instr. Derivative			6. Date Exercisable and Expiration Date (Month/Day/Year) 7. Title and Am of Securities Underlying Derivative Sec (Instr. 3 and 4)			es g Security	8. Price of Derivative Security (Instr. 5)	9. Numbe derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	e s illy	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)	
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares						
Non- Qualified Stock Option (right to buy)	\$34.69	01/02/2025		A		22,000		01/02/2026 ⁽¹⁾	01/01/2035	Common Stock	22,000	\$0.0	22,00	0	D		

Explanation of Responses:

1. Grant on 01/02/2025 to reporting person of stock options under the Ionis Pharmaceuticals, Inc. Amended and Restated 2011 Equity Incentive Plan. Following this transaction, the option was exercisable as to 0 shares on 01/02/2025. 25% of the shares subject to the option will vest and become exercisable on 01/02/2026. Thereafter, the remaining shares subject to the option will vest and become exercisable in 36 equal monthly installments over the next 3 years.

> By: Patrick R. O'Neil, attorneyin-fact For: Brian Birchler

01/03/2025

** 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.