FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

OMB APPROVAL

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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	ame and Address of Reporting Person [*] RSHALL B LYNNE		2. Issuer Name and Ticker or Trading Symbol <u>IONIS PHARMACEUTICALS INC</u> [IONS]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner
(Last) C/O IONIS PH 2855 GAZELL		(Middle) TCALS, INC.	3. Date of Earliest Transaction (Month/Day/Year) 12/23/2020	Officer (give title Other (specify below) below)
(Street) CARLSBAD, (City)	CA (State)	92010 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) X 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

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)		3. Transa Code (8)					5. Amount of Securities Beneficially Owned Following Reported	(I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	v	Amount (A) or (D) Price		Price	Transaction(s) (Instr. 3 and 4)		(
Common Stock	12/23/2020	12/23/2020	S		10,000(1)	D	\$ <u>60</u>	57,464	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)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transa Code (8)		of E		6. Date Exerc Expiration Da (Month/Day/Y	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	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. Shares sold pursuant to a Rule 10b5-1 Trading Plan adopted by the reporting person on September 11, 2020.

Remarks:

/s/Patrick R. O'Neil, attorney-12/28/2020

in-fact

** 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.