FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Washington, D.C. 20549

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

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

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* HOUGEN ELIZABETH L						2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [IONS]										eck all appli Direct	cable)	y Pers	erson(s) to Issuer 10% Owner Other (specify	
	Last) (First) (Middle) C/O IONIS PHARMACEUTICALS, INC. 2855 GAZELLE COURT					3. Date of Earliest Transaction (Month/Day/Year) 11/25/2019										helow			peony	
(Street) CARLSBAD CA 92010					4.1	4. If Amendment, Date of Original Filed (Month/Day/Year)										Individual or Joint/Group Filing (Check Applicable ine) X Form filed by One Reporting Person Form filed by More than One Reporting Person				
(City) (State) (Zip)																				
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																				
1. Title of Security (Instr. 3) 2. Tran Date (Month					saction /Day/Ye	ear)	2A. Deemed Execution Date, if any (Month/Day/Year		'	3. Transaction Code (Instr.) 8)		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4				Benefic Owned	ies cially Following	Forn (D) c	n: Direct or Indirect nstr. 4)	7. Nature of Indirect Beneficial Ownership
										Code	v	Amount	((A) or (D)	Price	Reporte Transac (Instr. 3	ction(s)			(Instr. 4)
Common Stock 11/25					5/201	/2019 11.		1/25/2019		M ⁽¹⁾		4,000	(1)	A	\$10.8	32 24	24,055		D	
Common Stock 11/25					5/2019		11/25/2019		9	S ⁽¹⁾		4,000	(1)	D	\$62.	5 20	20,055		D	
		٦	Fable II - I									sed of, onvertil				Owned				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution I if any (Month/Day	Date,		ransaction Code (Instr.		of		ate Exer piration D onth/Day/	ate		Amou Secur Under Deriva	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	,	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	v	(A)		Date Exe	e ercisable		xpiration ate	Title	O N O	lumber	er				
Employee Stock Option (right to	\$10.82	11/25/2019	11/25/20	19	М			4,000	01/0)2/2017 ⁽²) 0:	1/01/2020	Comm		4,000	\$0	7,700		D	

Explanation of Responses:

- 1. Acquired as a result of exercising a stock option pursuant to Rule 10b5-1 Trading Plan. The purchase and sale reported on this Form 4 was effective pursuant to Rule 10b5-1 Trading Plan adopted by the
- 2. Represents the date on which the options are fully exercisable pursuant to the vesting schedule of the grant.

Remarks:

/s/Patrick R. O'Neil, attorney-

11/26/2019

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.