FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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Check this box if no longer subject to Section 16. Form 4 or Form 5	STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP
obligations may continue. See	
Instruction 1(b).	Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

OMB APPROVAL

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

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 (Last) (First) (Middle) C/O IONIS PHARMACEUTICALS, INC.						Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [IONS] Jate of Earliest Transaction (Month/Day/Year) 01/01/2019								Directo Officer below)	tionship of Reporting Person(s) to Issu c all applicable) Director Officer (give title below) SVP Finance & CFO			vner	
2855 GAZELLE COURT					4.	If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable					
(Street) CARLSBAD CA 92010				_								Line							
(City)	(S	tate)	(Zip)																
		Tal	ole I - Noi	n-Der	ivativ	re Se	curitie	s Ac	quired,	Dis	posed o	f, or Ber	neficiall	y Owned					
1. Title of Security (Instr. 3) 2. Transar Date (Month/Date)					ear)	Execution if any	A. Deemed Recution Date, any Ionth/Day/Year)				ies Acquired (A) or Of (D) (Instr. 3, 4 and 5)		Beneficia	es ally Following	Form (D) o	: Direct I r Indirect I str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
								Code	v	Amount	(A) or (D)	Price	Transact (Instr. 3	on(s)					
Common Stock 01/01/2					01/201	2019 01/01/2019		J ⁽¹⁾	V	127(1)	A	\$36.44	8 14	901		D			
			Table II -						,		osed of, convertib		•	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 Date, if any (Month/Day/Year)		4. Transaction Code (Instr. 8)		of E		Expiration	s. Date Exercisable and Expiration Date Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		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 t (Instr. 4)	
					Code	v	(A)	(D)	Date Exercisab		Expiration Date	Title	Amount or Number of Shares						
Employee Stock Option (right to	\$53.77	01/02/2019	01/02/20)19	A		49,800		01/02/202	0(2)	01/01/2026	Common Stock	49,800	\$0	49,80	0	D		

Explanation of Responses:

- 1. Reporting shares acquired under the Ionis Pharmaceuticals, Inc. Amended and Restated 2000 Employee Stock Purchase Plan on January 1, 2019. These shares may not be sold until July 2, 2019.
- 2. Grant of 01/02/2019 to reporting person of stock options under the Ionis Pharmaceuticals, Inc. 2011 Equity Incentive Plan. 25% of the shares subject to the option vest and become exercisable on 01/02/2020. Thereafter, the remaining shares subject to the option vest and become exercisable in 36 equal monthly installments over the next 3 years. Following this transaction, the option was exercisable as to 0 on 01/02/2019.

Remarks:

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

01/03/2019

<u>in-fact</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.