FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

	Check this box if no longer subject to
١	Section 16. Form 4 or Form 5 obligations may continue. See
J	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

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned  1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day/Year) (Month/Day/Year) (Month/Day/Year)  2. Transaction Date (Month/Day/Year) (Month/Day/Year) (Month/Day/Year)  2. Transaction Date (Month/Day/Year) (Month/Day/Year) (Month/Day/Year) (Month/Day/Year)  2. Transaction Date (Month/Day/Year) (Month/Day/Y	1. Name and Address of Reporting Person*  HOUGEN ELIZABETH L  (Last) (First) (Middle)  2855 GAZELLE CT.						2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC  ]  3. Date of Earliest Transaction (Month/Day/Year) 02/29/2020									heck all a Di Y Of	chip of Reportir ipplicable) rector ficer (give title low) SVP, Fina		10% C Other below)	wner (specify
1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day/Year)  3. Transaction Date (Instr. 3 and 4)  3. Transaction Date (Instr. 3 and 4)  5. Amount of Securities Beneficially Owned (Instr. 3 and 4)  5. Amount of Disposed Of (D) (Instr. 3, 4 and 5)  6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)  7. Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)  7. Title of Derivative Securities (Month/Day/Year)  8. Price of Derivative Securities Date (Month/Day/Year)  8. Price of Derivative Securities Deneficially Owned (Month/Day/Year)  9. Number of derivative Securities Deneficially Owned (Month/Day/Year)  1. Title of Derivative Securities Deneficially Owned (Instr. 3)  1. Title of Derivative Securities Deneficially Owned (Instr. 3)  1. Title of Derivative Securities Deneficially Owned (Instr. 3)  1. Title of Derivative Securities Deneficially Owned (Instr. 3)  2. Denemed Execution Date (Instr. 3)  3. Transaction (Instr. 3)  4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 4)  5. Amount of Disposed Of (D) (Instr. 4)  6. Owner Ship Securities Deneficially Owned (Instr. 4)  8. Price of Derivative Securities Deneficially Owned (Instr. 4)  9. Number of Derivative Securities Deneficially Owned (Instr. 4)  1. Title of Derivative Securities Deneficially Owned (Instr. 4)  1. Title of Derivative Securities Deneficially Owned (Instr. 4)  1. Title of Derivative Securities Deneficially Owned (Instr. 4)  1. Title of Derivative Securities Deneficially Owned (Instr. 4)  2. Derivative Securities Deneficially Owned (Instr. 5)  3. Transaction (Instr. 4)  4. Securities Acquired (A) or Disposed Of (D) (Instr. 4)  5. Amoun	CARLSBAD CA 92010					4. If	4. If Amendment, Date of Original Filed (Month/Day/Year)									ne) <mark>X</mark> Fo	Form filed by One Reporting Person Form filed by More than One Reporting			
Date (Month/Day/Year)   Execution Date, if any (Month/Day/Year)   Code (Instr. 3, 4 and 5)   Code (Instr. 3, 4 and 4)   Code (Instr. 3, 4 and 4)   Common Stock   Common Stock   Code (Instr. 3)   Code (Instr. 3, 4 and 4)   Code (Instr.		Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
Common Stock    Code   V   Amount   (A) or (D)   Price   Transaction(s) (Instr. 3 and 4)   D	Date						Execution Date, y/Year) if any			Transaction Disposed Of (D) (Instr. 3, 4 Code (Instr.					d 5) Sed Ber Ow	urities eficially ned Following	Form: D (D) or In	irect direct	7. Nature of Indirect Beneficial Ownership (Instr. 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)  Price of Derivative Security Secu									Code	v	Amount (A)		or	Price	Trai	saction(s)			(111301. 4)	
(e.g., puts, calls, warrants, options, convertible securities)  1. Title of Derivative Security (Instr. 3)  Price of Derivative Security Securities Underlying Derivative Security Securi	Common Stock 02/29/2						.020		J <sup>(1)</sup>		147		A	\$43.163		32,374	D			
Derivative Security (Instr. 3) Price of Derivative Security Security (Instr. 3) Price of Derivative Security (Instr. 4) Price of Derivative Security (Instr. 5) Price																				
Date Expiration of	Derivative Security	Conversion or Exercise Price of Derivative	Date	Execution Date, T if any C (Month/Day/Year) 8			ansaction of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4		rative rities ired r osed ) : 3, 4	Expiration Date (Month/Day/Year)			Amount of Securities Underlying Derivative Security (Instr. and 4)		ount	Derivativ Security	derivative Securities Beneficially Owned Following Reported Transaction	Own Forn Direc or In (I) (Ir	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)

## Explanation of Responses:

1. Reporting 147 shares acquired under the Ionis Pharmeceuticals, Inc. Amended and Restated 2000 Employee Stock Purchase Plan on February 29, 2020. These 147 shares may not be sold until August 30, 2020.

## Remarks:

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

in-fact

\*\* Signature of Reporting Person Date

03/03/2020

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\star}$  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.