## 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).

### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940 OMB APPROVAL
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1. Name and Address of Reporting Person* CROOKE STANLEY T			2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [ IONS ]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
				X	Director	10% Owner			
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year)	x	Officer (give title below)	Other (specify below)			
C/O IONIS PHARMACEUTICALS, INC.			01/15/2019	Chairman and CEO					
2855 GAZELL	E COURT								
,			4. If Amendment, Date of Original Filed (Month/Day/Year)		/idual or Joint/Group Filin	g (Check Applicable			
(Street)				Line)					
CARLSBAD	CA	92010		X	Form filed by One Rep	oorting Person			
					Form filed by More that Person	n One Reporting			
(City)	(State)	(Zip)							

#### Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction Disposed Of (D Code (Instr.				5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)		(Instr. 4)
Common Stock	01/15/2019	01/15/2019	<b>M</b> <sup>(1)</sup>		30,587(1)	A	\$ <mark>0</mark>	82,320	D	
Common Stock	01/15/2019	01/15/2019	F <sup>(2)</sup>		12,686 <sup>(2)</sup>	D	\$58.26	69,634	D	
Common Stock	01/15/2019	01/15/2019	<b>M</b> <sup>(1)</sup>		2,346 <sup>(1)</sup>	A	\$ <mark>0</mark>	6,474	Ι	By wife
Common Stock	01/15/2019	01/15/2019	<b>F</b> <sup>(2)</sup>		942 <sup>(2)</sup>	D	\$58.26	5,532	Ι	By wife
Common Stock								725,391	I	By trust

# Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

(e.g., puts, cans, 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)		5. Numl Derivati Securiti Acquire Dispose (D) (Inst and 5)	ve es ed (A) or ed of	6. Date Exercisable and Expiration Date (Month/Day/Year)		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	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		Transaction(s) (Instr. 4)		
Restricted Stock Units	(3)(4)	01/15/2019	01/15/2019	A		63,726		(5)	(5)	Common Stock	63,726	\$0	63,726	D	
Restricted Stock Units	(4)(6)	01/15/2019	01/15/2019	A		5,332		(5)	(5)	Common Stock	5,332	\$0	5,332	I	By wife
Restricted Stock Units	(4)	01/15/2019	01/15/2019	м			30,587	(5)	(5)	Common Stock	30,587	\$0	48,077	D	
Restricted Stock Units	(4)	01/15/2019	01/15/2019	м			2,346	(5)	(5)	Common Stock	2,346	\$0	4,612	I	By wife

#### Explanation of Responses:

1. Acquired pursuant to vesting and release of shares pursuant to Restricted Stock Unit awards.

2. Shares withheld to cover the required tax withholding obligations pursuant to the 2011 Equity Incentive Plan Restricted Stock Unit Agreement and Grant Notice.

3. Grant to reporting person of Restricted Stock Units under the Ionis Pharmaceuticals, Inc. 2011 Equity Incentive Plan.

4. Each Restricted Stock Unit represents a contingent right to receive one share of Ionis common stock, or its equivalent cash value.

5. Restricted Stock Units vest in four equal annual installments. Upon vesting, the restricted stock units will be paid out in whole shares of Ionis common stock or cash as may be determined by the Company.

6. Grant to reporting person's wife of Restricted Stock Units under the Ionis Pharmaceuticals, Inc. 2011 Equity Incentive Plan.

**Remarks:** 

<u>/s/Patrick R. O'Neil, attorney-</u> in-fact

01/17/2019

\*\* 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.

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