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

OMB APPROVAL 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*  CROOKE STANLEY T						2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC IONS ]									k all app Direc	onship of Reporting Pe ill applicable) Director Officer (give title		10% Owner Other (specify	
(Last) 2855 GA	(Last) (First) (Middle) 2855 GAZELLE CT.					3. Date of Earliest Transaction (Month/Day/Year) 03/17/2020									belov Exe	,	below) nan of the Board		i
(Street) CARLSBAD CA 92010 (City) (State) (Zip)						4. If Amendment, Date of Original Filed (Month/Day/Year) 03/19/2020								6. Indi Line) X	Form Form	dual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person			
		Table	l - No	n-Deriva	tive S	Secu	rities	Acq	uired,	Dis	posed of	, or B	enefi	icially	/ Own	ed			
1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)						Exec if an	2A. Deemed Execution Date, f any Month/Day/Year)		3. Transaction Code (Instr. 8)		4. Securities Acquired (A Disposed Of (D) (Instr. 3, 5)			4 and Secur Benef Owne		cially Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership
								Code	v	Amount	(A) (D)	or Pri	ice	Reported Transaction(s) (Instr. 3 and 4)				(Instr. 4)	
Common Stock 03/17/						2020			S		4,579(1)	4,579 <sup>(1)</sup> D		44.5	87,356 <sup>(1)</sup>			D	
Common Stock 03/17/2									S		5,421	D	\$	44.5 81		1,935 <sup>(1)</sup>		D	
Common Stock 03/17/2									S		5,651	D	) ;	\$45	76	76,284(1)		D	
Common Stock 03/17/2						2020					4,349	D \$45		\$45	71,935(1)			D	
Common Stock															70	0,391		I	By Trust
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)	if any	ition Date, Tra		oction of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exerci Expiration Dat (Month/Day/Ye		te	7. Title and Amount of Securities Underlying Derivative Security (Inst 3 and 4)		De Se (In	Price of rivative curity str. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	у	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	

## **Explanation of Responses:**

1. The original Form 4 filed on March 19, 2020 reported 4,969 restricted stock units sold by the reporting person which has been revised by this amendment to reflect the actual amount of shares sold and beneficially owned by Mr. Crooke.

## Remarks:

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

03/27/2020

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.