FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

|--|

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* Geary Richard S						2. Issuer Name and Ticker or Trading Symbol IONIS PHARMACEUTICALS INC [IONS]							f Reporting able) give title	Person(s) to Iss	
(Last) (First) (Middle) C/O IONIS PHARMACEUTICALS, INC. 2855 GAZELLE COURT						te of Earliest Transa 5/2016	action (f	Month	/Day/Year)			below)		velopment	
(Street) CARLSI (City)	ARLSBAD CA 92010 City) (State) (Zip)				4. If A	mendment, Date of	f Origina	al Filed	d (Month/Day/	Line	ndividual or Joint/Group Filing (Check Applicable s) X Form filed by One Reporting Person Form filed by More than One Reporting Person				
		Та	ble I - N	on-Der	ivative	Securities Acc	quire	d, Di	sposed of,	or Bei	neficiall	y Owned			
1. Title of Security (Instr. 3) 2. Transac Date (Month/Da						2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transa Code (8)		4. Securities Disposed Of	(A) or 3, 4 and 5)	5. Amount o Securities Beneficially Owned Folld Reported		6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership	
							Code	v	Amount	(A) or (D)	Price	Transact (Instr. 3 a	ion(s)		(Instr. 4)
Common Stock				01/1	5/2016	01/15/2016	M ⁽¹⁾		775 ⁽¹⁾	A	\$0	5,8	364	D	
Common Stock					9/2016	01/19/2016	S ⁽²⁾		309 ⁽²⁾	D	\$41.45	5,5	555	D	
Common Stock					5/2016	01/15/2016	M ⁽³⁾		1,397(3)	A	\$0	6,9	952	D	
Common Stock					9/2016	01/19/2016	S ⁽⁴⁾		556 ⁽⁴⁾	D	\$41.46	74 6,3	396	D	
Common Stock				01/1	5/2016	01/15/2016	M ⁽⁵⁾		1,875(5)	A	\$0	8,2	271	D	
Common Stock					9/2016	01/19/2016	S ⁽⁶⁾		747 ⁽⁶⁾	D	\$41.45	54 7,5	524	D	
Common Stock 01/1					5/2016	01/15/2016	M ⁽⁷⁾		1,380 ⁽⁷⁾	A	\$0	8,9	904	D	
Common	Stock			01/1	9/2016	01/19/2016	S ⁽⁸⁾		550 ⁽⁸⁾	D	\$41.45	73 8,3	354	D	
			Table II			ecurities Acqu alls, warrants						Owned			
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed 4. Execution Date, Transact		Transactio Code (Inst		Expir (Mon	te Exer ation I th/Day		7. Title a Amount Securitie Underlyi Derivativ (Instr. 3 a	of es ng re Security	8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficia Owned Following Reported	Ownersh Form: Direct (D) or Indirect	Beneficial Ownership t (Instr. 4)

		, ,	, ·	,	,	,	• ′			•					
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	Execution Date, ear) if any		4. Transaction Code (Instr. 8)		nber of tive ities red (A) or sed of str. 3, 4	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	(9)	01/15/2016	01/15/2016	A		6,373		(10)	(10)	Common Stock	6,373	\$0	6,373	D	
Restricted Stock Units	(9)	01/15/2016	01/15/2016	М			775 ⁽²⁾	(11)	(11)	Common Stock	775	\$0	0	D	
Restricted Stock Units	(9)	01/15/2016	01/15/2016	М			1,397 ⁽⁴⁾	(12)	(12)	Common Stock	1,397	\$0	1,397	D	
Restricted Stock Units	(9)	01/15/2016	01/15/2016	М			1,875 ⁽⁶⁾	(13)	(13)	Common Stock	1,875	\$0	3,750	D	
Restricted Stock Units	(9)	01/15/2016	01/15/2016	М			1,380 ⁽⁸⁾	(14)	(14)	Common Stock	1,380	\$0	4,138	D	

Explanation of Responses:

- 1. Acquired pursuant to vesting and release of shares pursuant to an RSU award granted on January 15, 2012.
- 2. The sale was made pursuant to an automatic sale to cover the required tax withholding obligations pursuant to the 2011 Equity Incentive Plan Restricted Stock Unit Agreement and Grant Notice, dated January 15, 2012.
- 3. Acquired pursuant to vesting and release of shares pursuant to an RSU award granted on January 30, 2013.
- 4. The sale was made pursuant to an automatic sale to cover the required tax withholding obligations pursuant to the 2011 Equity Incentive Plan Restricted Stock Unit Agreement and Grant Notice, dated January 30, 2013.
- 5. Acquired pursuant to vesting and release of shares pursuant to an RSU award granted on January 15, 2014.
- 6. The sale was made pursuant to an automatic sale to cover the required tax withholding obligations pursuant to the 2011 Equity Incentive Plan Restricted Stock Unit Agreement and Grant Notice, dated January 15, 2014.
- 7. Acquired pursuant to vesting and release of shares pursuant to an RSU award granted on January 15, 2015.
- 8. The sale was made pursuant to an automatic sale to cover the required tax withholding obligations pursuant to the 2011 Equity Incentive Plan Restricted Stock Unit Agreement and Grant Notice, dated January 15, 2015.

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

10. Grant 1/15/2016 to reporting person of Restricted Stock Units under the Ionis Pharmaceuticals, Inc. 2011 Equity Incentive Plan. Restricted Stock Units vest in four equal annual installments, the first installment vesting on January 15, 2017. 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. The RSU shall be fully vested on January 15, 2020. The RSU is vested as to 0 shares on January 15, 2016.

- 11. Restricted Stock Unit Award granted on January 15, 2012. Restricted Stock Units vest in equal annual installments, the first installment vested on January 15, 2013. 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. The RSU was fully vested on January 15, 2016.
- 12. Restricted Stock Unit Award granted on January 30, 2013. Restricted Stock Units vest in equal annual installments, the first installment vested on January 15, 2014. 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. The RSU shall be fully vested on January 15, 2017.
- 13. Restricted Stock Unit Award granted on January 15, 2014. Restricted Stock Units vest in equal annual installments, the first installment vested on January 15, 2015. 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. The RSU shall be fully vested on January 15, 2018.
- 14. Restricted Stock Unit Award granted on January 15, 2015. Restricted Stock Units vest in equal annual installments, the first installment vested on January 15, 2016. 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. The RSU shall be fully vested on January 15, 2019.

Remarks:

/s/B. Lynne Parshall, attorneyin-fact 01/19/2016

** 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.