FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

vvasiiiigtoii,	D.C.	20549	

**OMB APPROVAL** OMB Number: 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

Name and Address of Reporting Person*     O'NEIL PATRICK R.				ssuer Name <b>and</b> Ticker IS PHARMACE					5. Relationship of Reporting Person(s) to Issuer Check all applicable)  Director 10% Owner				
,									_ x	Officer (give title below)		(specify	
(Last) (First) (Middle) C/O ISIS PHARMACEUTICALS, INC.				oate of Earliest Transac 01/2014	ction (Mo	onth/D	ay/Year)		SVP, Legal & 0	,	·		
2855 GAZELLE COURT			4. If	Amendment, Date of 0	Original I	Filed	(Month/Day/Ye		6. Individual or Joint/Group Filing (Check Applicable				
(Street) CARLSBAD CA 92010								Line) X	Form filed by One Reporting Person  Form filed by More than One Reporting  Person				
(City)	(State)	(Zip)											
Table I - Non-Deriv				ative Securities Acquired, Disposed of, or Beneficially Owned									
	7	Table I - Non	-Derivative	Securities Acqu	uired,	Disp	osed of, c	or Ben	eficially	Owned			
1. Title of Security (			-Derivative 2. Transaction Date (Month/Day/Yea	2A. Deemed Execution Date,	3. Transac Code (I 8)	ction	4. Securities Disposed Of	Acquired	(A) or	5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership	
1. Title of Security (			2. Transaction Date	2A. Deemed Execution Date, ar) if any	3. Transac Code (I	ction	4. Securities Disposed Of	Acquired	(A) or	5. Amount of Securities Beneficially	Form: Direct (D) or Indirect	of Indirect Beneficial	
Title of Security (     Common Stock			2. Transaction Date	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transac Code (I 8)	ction Instr.	4. Securities Disposed Of 5)	Acquired (D) (Instr.	(A) or 3, 4 and	5. Amount of Securities Beneficially Owned Following Reported Transaction(s)	Form: Direct (D) or Indirect	of Indirect Beneficial Ownership	
			2. Transaction Date (Month/Day/Yea	ar) 2A. Deemed Execution Date, if any (Month/Day/Year) 4 12/01/2014	3. Transac Code (I 8)	ction Instr.	4. Securities Disposed Of 5)	Acquired (D) (Instr. (A) or (D)	(A) or 3, 4 and Price	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	Form: Direct (D) or Indirect (I) (Instr. 4)	of Indirect Beneficial Ownership	
Common Stock			2. Transaction Date (Month/Day/Yea	2A. Deemed Execution Date, if any (Month/Day/Year)  4 12/01/2014  4 12/01/2014	3. Transac Code (I 8) Code	ction Instr.	4. Securities Disposed Of 5)  Amount  500(1)	Acquired (D) (Instr.	(A) or 3, 4 and Price \$7.25	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	Form: Direct (D) or Indirect (I) (Instr. 4)	of Indirect Beneficial Ownership	

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

 $M^{(1)}$ 

S<sup>(1)</sup>

500(1)

500(1)

Α

D

\$7.25

\$50.37

4,253

3,753

D

D

12/01/2014

12/01/2014

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)	Code (	ransaction of ode (Instr. Derivative		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 Transaction(s) (Instr. 4)	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				
Employee Stock Option (right to buy)	\$7.25	12/01/2014	12/01/2014	M			1,500	01/03/2013 <sup>(2)</sup>	01/02/2019	Common Stock	1,500	\$0	10,033	D	

## **Explanation of Responses:**

Common Stock

Common Stock

- 1. Acquired as a result of exercising a stock option pursuant to Rule 10b5-1 Trading Plan. The purchase and sale reported on this Form 4 was effective pursuant to Rule 10b5-1 Trading Plan adopted by the reporting person on 1/2/2014.
- $2. \ Grant of 1/3/2012 \ to reporting person of stock options under the Isis Pharmacueticals, Inc. 1989 \ Stock Option Plan. 25\% of the shares subject to the option vested and became exercisable on 1/3/2013.$ Thereafter, the remaining shares subject to the option vest and become exercisable in 36 equal monthly installments, at the rate of 4,875 shares per year. Following this transaction, the option was exercisable as to 4,345 on 12/1/2014.

## Remarks:

/s/Patrick R. O'Neil

12/03/2014

\*\* 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).

12/01/2014

12/01/2014

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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