FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL									
OMB Number:	3235-0287								
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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.					er Name and Ticke PHARMAC					ationship of Reportir k all applicable) Director	ng Person(s) to Is		
(Last) C/O ISIS PHAF 2855 GAZELLI			3. Date 08/11	e of Earliest Transa /2014	ction (M	lonth/[Day/Year)	x	Officer (give title below) Othe below SVP, Legal and General Cou		,		
(Street) CARLSBAD (City)	CA (State)		4. If An	nendment, Date of	Original	Filed	(Month/Day/\	6. Indi Line) X	'				
		Table I - No	n-Derivat	ive S	ecurities Acq	uired,	Dis	posed of,	or Ben	eficially	Owned		
1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)				Execution Da		Code (Instr		4. Securities Disposed Of 5)	Acquired (D) (Instr	I (A) or . 3, 4 and	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			08/11/20	014	08/11/2014	M ⁽¹⁾		700(1)	A	\$10.29	4,453	D	
Common Stock 08				014	08/11/2014	S ⁽²⁾		700(2)	D	\$35	3,753	D	
Common Stock 08/12/ Common Stock 08/12/				014	08/12/2014	M ⁽¹⁾		800(1)	A	\$10.29	4,553	D	
				014	08/12/2014	S ⁽²⁾		800(2)	D	\$35	3,753	D	
		Table II -			curities Acqui					-	wned		

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)				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)	\$10.29	08/11/2014	08/11/2014	M			700	01/03/2012 ⁽³⁾	01/02/2018	Common Stock	700	\$0	8,983	D	
Employee Stock Option (right to buy)	\$10.29	08/12/2014	08/12/2014	M			800	01/03/2012 ⁽⁴⁾	01/02/2018	Common Stock	800	\$0	7,483	D	

Explanation of Responses:

- 1. Acquired as a result of exercising a stock option pursuant to a Rule 10b5-1 Trading Plan. The purchase and sale reported on this Form 4 was effective pursuant to a Rule 10b5-1 Trading Plan adopted by the reporting person on 1/2/14.
- 2. The purchase and sale reported on this Form 4 was effective pursuant to a Rule 10b5-1 Trading Plan adopted by the reporting person on 1/2/14.
- 3. Grant of 1/3/11 to reporting person of stock options under the Isis Pharmaceuticals, Inc. 1989 Stock Option Plan. 25% of the shares subject to the option vest and became exercisable on 1/3/12. Thereafter, the remaining shares subject to the option vest and became exercisable in 36 equal monthly installments, at the rate of 5,750 shares per year. The option shall be fully vested and exercisable on 1/3/15. The option, before the reported exercises, was exercisable as to 6,587 shares on 8/11/14.
- 4. Grant of 1/3/11 to reporting person of stock options under the Isis Pharmaceuticals, Inc. 1989 Stock Option Plan. 25% of the shares subject to the option vest and became exercisable on 1/3/12. Thereafter, the remaining shares subject to the option vest and became exercisable in 36 equal monthly installments, at the rate of 5,750 shares per year. The option shall be fully vested and exercisable on 1/3/15. The option, before the reported exercises, was exercisable as to 5,887 shares on 8/12/14.

Remarks:

/s/Patrick R. O'Neil

08/12/2014

** 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).

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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