Instruction 1(b).

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

**OMB APPROVAL** OMB Number: 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

Name and Address of Reporting Person*     MUTO FREDERICK T						2. Issuer Name <b>and</b> Ticker or Trading Symbol  ISIS PHARMACEUTICALS INC [ ISIS ]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
(Last)						3. Date of Earliest Transaction (Month/Day/Year)								X Director Officer (give title below)			10% Owner Other (specify below)		
C/O ISIS PHARMACEUTICALS, INC. 2855 GAZELLE COURT						4. If Amendment, Date of Original Filed (Month/Day/Year)								Individual or Joint/Group Filing (Check Applicable					
(Street) CARLSBAD CA 92010					_								Lir	X Form f	iled by I	-	orting Pers	I	
(City)	(S	tate)	(Zip)											1 01301					
			ole I - N			_			_	d, D	isposed o	-		1					
1. Title of Security (Instr. 3)  2. Transact Date (Month/Day					2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported		6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)			
									Code	v	Amount	(A) or (D)	Price	Transaction (Instr. 3 and	n(s) i 4)		("	str. 4)	
Common Stock				05/30/2013		05/30/2013		M <sup>(1)</sup>		10,000(1)	A	\$5.17	10,00	10,000 D					
Common Stock			05/30/	05/30/2013		05/30/2013		<b>S</b> <sup>(1)</sup>		10,000(1)	D	\$21.96	0		D				
Common Stock													1,500		I		owned through the Cooley Godward Kronish LLP Sal Def & PSP U/A dtd 2/01/74 Pension Plan		
		•	Table II								posed of, , convertil			y Owned					
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	Execution if any	3A. Deemed Execution Date,		action (Instr.	5. Number of			Exer	cisable and	7. Title and of Securion Underlying	nd Amount ities ng e Security	8. Price of Derivative Security (Instr. 5)	deriva Securi Benefi Owned Follow Report	ities icially d ving ted action(s)	10. Ownershi Form: Direct (D) or Indirec (I) (Instr. 4	Beneficial Ownership t (Instr. 4)	
					Code	v	(A)	(D)	Date Exerci	Expiration Date Title Amount or Number of Shares									
Director Stock Option (right to buy)	\$5.17	05/30/2013	05/30	0/2013	M			10,000	07/01/2007		06/30/2013	Common Stock	10,000	\$0		0	D		

## **Explanation of Responses:**

1. Acquired as a result of exercising a stock option that was scheduled to expire on 6/30/13. 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 5/15/13

## Remarks:

/s/Frederick T. Muto

05/31/2013

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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.

 $<sup>^{\</sup>star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

<sup>\*\*</sup> Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).