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 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

1. Name and Address of Reporting Person* CROOKE STANLEY T							2. Issuer Name and Ticker or Trading Symbol ISIS PHARMACEUTICALS INC [ISIS]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable)						
CROOKE STRIVELT T														X	Directo	r		10% Ov	ner		
(Loot) (First) (Middle)							2. Data of Faulicat Transaction (Month/Day/Man)								Officer below)			Other (s below)	pecify		
(Last) (First) (Middle)						3. Date of Earliest Transaction (Month/Day/Year) 12/22/2009									,			resident, CEO			
C/O ISIS PHARMACEUTICALS, INC.							12,22,200								Cité		reside	Int, CLO			
1896 RUTHERFORD ROAD																					
							4. If Amendment, Date of Original Filed (Month/Day/Year)									. Individual or Joint/Group Filing (Check Applicable ine)					
(Street)														X							
CARLSBAD CA 92008													Λ	Form filed by More than One Reporting							
														Person							
(City) (State) (Zip)																					
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																					
1. Title of Security (Instr. 3) 2. Transact Date (Month/Day						Execution Date,			3. Transa Code (I 8)		4. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a				5. Amount of Securities Beneficially Owned Followin		Form (D) o	: Direct	7. Nature of Indirect Beneficial Ownership		
						(MOI		Dayricary	0)			40.55			Reported	i i	(., ((Instr. 4)		
									Code	٧	Amount	(A) or (D)	Price	е	Transact (Instr. 3 a						
Common Stock 12/22/2						009 12/22/2009			M ⁽¹⁾		20,000	1) A	\$6.	8125	20,	000		D			
Common Stock 12/22/2						009 12/22/2009		2/2009	S ⁽²⁾		20,000	2) D	\$1	0.13		0		D			
Common Stock															875	,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 2. 3. Transaction 3A. Deemed 4.										-			d Amo		. Price of	9. Number of		10.	11. Nature		
Derivative Security (Instr. 3)	Conversion or Exercise Price of Derivative Security	Date (Month/Day/Year)	Execution Date, if any (Month/Day/Year)		Transa Code (8)		n of		Expiration Date (Month/Day/Year)			of Securities Underlying Derivative Security (Instr. 3 and 4)		5	perivative security nstr. 5)	derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	of Indirect Beneficial Ownership (Instr. 4)		
					Code	v	(A)	(D)	Date Exercisa		Expiration Date	Title	Amou or Numb of Share	oer							
Employee Stock Option (right to	\$6.8125	12/22/2009	12/22/2	12/22/2009				20,000	01/02/20	002	01/05/2010	Common Stock	20,0	00	\$0	0		D			

Explanation of Responses:

- 1. Acquired as a result of exercising a stock option that was scheduled to expire on 1/5/10. The purchase reported on this Form 4 was effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting
- 2. The sale reported in this Form 4 was effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on 2/15/08.

Remarks:

/s/ Stanley T. Crooke

12/23/2009

** 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.