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(h)

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* PARSHALL B LYNNE						2. Issuer Name and Ticker or Trading Symbol ISIS PHARMACEUTICALS INC [ISIS]								Relationship leck all appli X Directo	,			
(Last) (First) (Middle) C/O ISIS PHARMACEUTICALS, INC. 1896 RUTHERFORD ROAD						3. Date of Earliest Transaction (Month/Day/Year) 12/15/2009								X Officer (give title Other (spec below) Director, COO				pecify
(Street) CARLSBAD CA 92008					- 4. I	4. If Amendment, Date of Original Filed (Month/Day/Year)								e) X Form f Form f	ual or Joint/Group Filing (Check Applicable Form filed by One Reporting Person Form filed by More than One Reporting Person			
(City)	(S		(Zip)		<u> </u>							, -	<u> </u>		•			
Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transact Date (Month/Day					action	2/ Ex	ecurities Acq 2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transaction Code (Instr. 8)		4. Securities Acquired (A) of Disposed Of (D) (Instr. 3, 4		l (A) or	5. Amou Securiti Benefici	nt of es ally Following	Form	: Direct Control of the control of t	7. Nature of Indirect Beneficial Ownership (Instr. 4)
									Code	v	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)				msu. 4)
Common Stock 12/15/2						009 12/1		5/2009	M ⁽¹⁾		10,000(1) A	\$6.812	25 11	,985		D	
Common Stock 12/15/2					/2009	2009 1		12/15/2009			10,000	2) D	\$10.0	3 1,	1,985		D	
		-	Table II -								osed of, converti			Owned				
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deem Execution if any (Month/Da	Date,	Code		of Deri Sec Acq (A) (Disp of (I	umber vative urities uired or oosed O) (Instr. and 5)	Expiration	6. Date Exercisal Expiration Date (Month/Day/Year		of Securit Underlyin Derivative	Title and Amount f Securities nderlying erivative Security nstr. 3 and 4)		9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
					Code	v	(A)	(D)	Date Exercisa		Expiration Date	Title	Amount or Number of Shares					
Employee Stock Option (right to	\$6.8125	12/15/2009	12/15/2009		М			10,000	01/06/20	000	01/05/2010	Common Stock	10,000	\$0	11,910		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 person on 11/6/09.
- $2. \ The sale reported in this Form 4 was effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on 11/6/09.$

Remarks:

12/17/2009 /s/B. Lynne Parshall

** 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.