FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL | | | | | | | | | |
|------------------------|-----------|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | | |
| Estimated average burd | len | | | | | | | | |
| 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

| 1. Name ar O'NEII (Last) C/O ISIS | 3. [| 2. Issuer Name and Ticker or Trading Symbol ISIS PHARMACEUTICALS INC [ISIS] 3. Date of Earliest Transaction (Month/Day/Year) 03/21/2013 | | | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title Other (specify below) below) SVP, Legal and General Counsel | | | | | | | | | | |
|--|---|--|---|------------|--------------------------------------|--------|--|------------------|----------|--------------------------------------|------|---|--|-----------------------------------|--|--|---|---|--|--|--|--|
| 2855 GAZELLE COURT (Street) CARLSBAD CA 92010 (City) (State) (Zip) | | | | | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | | | Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| Table I - Non-Deriva 1. Title of Security (Instr. 3) 2. Transac Date (Month/Da | | | | | action | ar) if | PA. Deemed Execution Date, f any Month/Day/Year) | | ·, | 3. Transact Code (In 8) | ion | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 | | | or 5. Amou 4 and Securiti Benefic Owned | | nt of es ally Following | Form (D) o | n: Direct r Indirect Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| | | | | | | | | | _ | | / | Amount | (A) or (D) | | | Transac (Instr. 3 | Reported Transaction(s) (Instr. 3 and 4) | | | | | |
| Common Common | | | | | 1/2013 1/2013 | _ | | 1/2013 1/2013 | - | M ⁽¹⁾ S ⁽¹⁾ | | 9,000 | _ | _ | 14.18 10,324 D 19.26 1,324 D | | | | | | | |
| | | 7 | able II - | | | | | | | | | | or Ben | | | 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. Transactio Code (Inst 8) | | n of | | | Date Exer opiration I onth/Day | Date | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | D S (I | Price of erivative ecurity nstr. 5) | 9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4) | Own Form Direct or In (I) (In | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| | | | | | Code | v | (A) | (D) | Da Ex | ate cercisable | | xpiration ate | Title | Amou or Numb of Share | er | | | | | | | |
| Employee Stock Option (right to buy) | \$14.18 | 03/21/2013 | 03/21/2 | 03/21/2013 | | | | 9,000 | 01 | 1/01/2013 | 13 | 2/31/2015 | Common Stock | 9,00 | 0 | \$0 | 16,000 |) | 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 3/16/2012.

Remarks:

/s/Patrick R. O'Neil

** Signature of Reporting Person Date

03/22/2013

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.