

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): **April 10, 2007**

ISIS PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-19125

(Commission File No.)

33-0336973

(IRS Employer Identification No.)

1896 Rutherford Road

Carlsbad, CA 92008

(Address of Principal Executive Offices and Zip Code)

Registrant's telephone number, including area code: **(760) 931-9200**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.04. Triggering Events That Accelerate or Increase a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement.

On April 10, 2007, Isis Pharmaceuticals, Inc. ("Isis") issued a notice that it will voluntarily redeem all of its outstanding 5 ½% Convertible Subordinated Notes due 2009 (the "Notes") on May 10, 2007, pursuant to Isis' optional redemption under paragraph 6 of the Notes issued under an Indenture, dated as of May 1, 2002 (the "Indenture") between Isis Pharmaceuticals, Inc., as issuer, and Wells Fargo Bank, National Association, (as successor by consolidation with Wells Fargo Bank Minnesota, National Association) as trustee.

Isis estimates the aggregate redemption price for the outstanding Notes will be approximately \$82.1 million plus accrued but unpaid interest of approximately \$111,000. Prior to the redemption, Isis plans to make its semi-annual interest payment on the Notes on May 1, 2007.

The description of the redemption set forth above is qualified in its entirety by reference to the full and complete terms set forth in the Notes and the Indenture.

A copy of the notice of full redemption Isis issued in connection with this redemption is attached hereto as Exhibit 99.1 and incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

99.1 Notice of Full Redemption Dated April 10, 2007.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ISIS PHARMACEUTICALS, INC.

Dated: April 10, 2007

By: /s/ B. Lynne Parshall
B. Lynne Parshall
Executive Vice President,
Chief Financial Officer and Director

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99.1 Notice of Full Redemption Dated April 10, 2007.

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NOTICE OF FULL REDEMPTION

Isis Pharmaceuticals, Inc.
5 ½% Convertible Subordinated Notes due 2009
 CUSIP 464337AC8

NOTICE IS HEREBY GIVEN TO
 THE HOLDERS of the above referenced notes

Isis Pharmaceuticals, Inc. ("**Isis**") is hereby notifying you that it will redeem all of its outstanding 5 ½% Convertible Subordinated Notes due 2009, CUSIP 464337 AC8 (the "**Notes**") on May 10, 2007 (the "**Redemption Date**"), pursuant to Isis' optional redemption under paragraph 6 of the Notes issued under an Indenture, dated as of May 1, 2002 (the "**Indenture**") between Isis Pharmaceuticals, Inc., as Issuer (the "**Issuer**"), and Wells Fargo Bank, National Association, (as successor by consolidation with Wells Fargo Bank Minnesota, National Association) as trustee (the "**Trustee**").

On the Redemption Date, the redemption price will become due and payable on Notes called for redemption and, unless the Issuer defaults in making payment of the Redemption Price, interest on Notes called for redemption shall cease to accrue on and after the Redemption Date. If any Note contains a CUSIP or CINS number, no representation is made as to the correctness of such numbers either as printed on the Notes or as contained in this Notice of Redemption and the holder should rely only on the other identification numbers printed on the Notes.

The redemption price for the Notes will be \$1,015.71 per \$1,000 principal amount outstanding, plus \$1.375 in accrued but unpaid interest per \$1,000 principal amount outstanding. Please note that the Company will make its semi-annual interest payment on the Notes on May 1, 2007.

In order for a holder to receive its applicable redemption price, the holder must surrender its Notes to Wells Fargo Bank, N.A. (the "**Paying Agent**") at the following address:

Registered & Certified Mail:

Wells Fargo Bank, N.A.
 Corporate Trust Operations
 MAC N9303-121

P.O. Box 1517
 Minneapolis, MN 55480

Regular Mail or Courier:

Wells Fargo Bank, N.A.
 Corporate Trust Operations
 MAC N9303-121

6th St & Marquette Avenue
 Minneapolis, MN 55479

In Person by Hand Only:

Wells Fargo Bank, N.A.
 Corporate Trust Services
 Northstar East Building - 12th
 Floor

608 Second Avenue South
 Minneapolis, MN 55402

As of the date of this letter, the Notes are convertible into 60.1504 shares of Isis' common stock per \$1,000 principal amount, resulting in a conversion price of \$16.625 per share. Your right to convert the Notes will expire on the close of business on May 9, 2007 (the "**Conversion Deadline**"). If you wish to convert your Notes prior to the Conversion Deadline, you will need to satisfy the requirements of Article X of the Indenture and surrender your Notes for conversion to Wells Fargo Bank, N.A. (the "**Conversion Agent**") at the address noted above.

IMPORTANT TAX INFORMATION

Under current United States federal income tax law, backup withholding, at a rate of 28%, generally may apply to the payment of gross redemption proceeds, unless (i) in the case of a non-corporate holder that is a beneficial owner of Notes and that is a United States person (as determined for U.S. federal income tax purposes), the paying agent has received a properly completed IRS Form W-9 setting forth the holder's taxpayer identification number, or (ii) the holder otherwise establishes an exemption. A holder that is a beneficial owner of Notes and that is not a United States person (as determined for U.S. federal income tax purposes) generally may establish an exemption from backup withholding by providing to the paying agent an IRS Form W-8BEN, upon which it certifies its foreign status.

Direct inquiries to the Trustee by telephone to 1-800-344-5128 or by Fax at 612-667-6282.

Isis Pharmaceuticals, Inc.

**By: Wells Fargo Bank, National Association, as
 Trustee**

Dated as of April 10, 2007

IRS Circular 230 disclosure: To ensure compliance with requirements imposed by the IRS, we inform you that any U.S. federal tax advice contained in this communication (including any attachment) is not intended or written by us to be used, and cannot be used, (i) by any taxpayer for the purpose of avoiding tax penalties under the Internal Revenue Code or (ii) for promoting, marketing or recommending to another party any transaction or matter addressed herein.
