

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 23, 2002**

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.)

**2292 Faraday Avenue
Carlsbad, CA 92008**

(Address of Principal Executive Offices and Zip Code)

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

Item 5. Other Events.

On April 23, 2002, Isis Pharmaceuticals, Inc. (the "Company") announced that it intends to offer \$125 million of convertible subordinated notes due 2009 in a private placement. A copy of the Company's press release dated April 23, 2002, relating to the proposed offering is attached hereto as Exhibit 99.1.

Item 7. Exhibits.

99.1 Press Release dated April 23, 2002.

2

SIGNATURE

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 23, 2002

By: /s/ B. LYNNE PARSHALL

B. LYNNE PARSHALL
*Executive Vice President,
Chief Financial Officer and Director*

3

INDEX TO EXHIBITS

99.1 Press Release dated April 23, 2002.

QuickLinks

[Item 5. Other Events.](#)

[Item 7. Exhibits.](#)

[SIGNATURE](#)

[INDEX TO EXHIBITS](#)

Contact: Karen Lundstedt
760-603-3880

**ISIS PHARMACEUTICALS ANNOUNCES
CONVERTIBLE DEBT OFFERING**

Carlsbad, CA, April 23, 2002—Isis Pharmaceuticals, Inc. (NASDAQ: ISIS) announced today that subject to market and other conditions, it intends to offer approximately \$125 million of seven-year convertible subordinated notes. The notes will be convertible into shares of Isis common stock. The offering will be made pursuant to an exemption from registration under the Securities Act of 1933. Isis intends to use the net proceeds of this offering for research, drug discovery and development programs, and for other general corporate purposes. Isis may also use the net proceeds of this offering to repay a portion of its existing indebtedness. Expenses to be funded with the offering proceeds include costs of preclinical and clinical studies, the production of compounds for these studies and capital expenditures.

This press release does not constitute an offer to sell nor an offer to buy securities. The offering is being made only to qualified institutional buyers and persons outside the U.S. The convertible notes being offered and the shares of common stock issuable upon conversion of the convertible notes have not been registered under the United States or state securities laws and may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements.

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. In particular, due to market conditions or other circumstances, Isis may not complete the proposed offering of convertible notes.

###

QuickLinks

[ISIS PHARMACEUTICALS ANNOUNCES CONVERTIBLE DEBT OFFERING](#)