

EPIX Pharmaceuticals, Inc.

Form 424B3

March 20, 2008

**Filed Pursuant to Rule 424(b)(3)
Registration No. 333-147800**

**PROSPECTUS SUPPLEMENT NO. 1 DATED MARCH 20, 2008
(TO PROSPECTUS DATED MARCH 17, 2008)**

EPIX PHARMACEUTICALS, INC.

This Prospectus Supplement No. 1 supplements and amends the prospectus dated March 17, 2008, or the Prospectus, relating to the sale from time to time of up to 5,245,468 shares of common stock of EPIX Pharmaceuticals, Inc. by certain selling stockholders. We will not receive any of the proceeds from the sale of shares by the selling stockholders.

On March 20, 2008, we filed with the Securities and Exchange Commission a Current Report on Form 8-K, or the Form 8-K, relating to the discontinuation of our PRX-00023 clinical development program. The information contained in Item 8.01 of the Form 8-K supplements and amends the information contained in the Prospectus.

This Prospectus Supplement No. 1 should be read in conjunction with, and delivered with, the Prospectus and is qualified by reference to the Prospectus except to the extent that the information in this Prospectus Supplement No. 1 supersedes the information contained in the Prospectus.

Our common stock is listed on the NASDAQ Global Market under the symbol EPIX. On March 19, 2008, the last reported sale price of our common stock on the NASDAQ Global Market was \$3.08 per share.

Investing in our common stock involves a high degree of risk. Before buying any shares, you should carefully read the discussion of material risks of investing in our common stock in Risk Factors beginning on page 3 of the Prospectus.

Neither the Securities and Exchange Commission, any state securities commission nor any other regulatory authority, has approved or disapproved these securities nor have any of the foregoing authorities passed upon or endorsed the merits of this offering or the accuracy or adequacy of this Prospectus Supplement No. 1 or the Prospectus or the documents incorporated by reference therein. Any representation to the contrary is a criminal offense.

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): March 20, 2008

EPIX Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-21863

(Commission File Number)

04-3030815

(IRS Employer Identification No.)

4 Maguire Road, Lexington, Massachusetts

(Address of Principal Executive Offices)

02421

(Zip Code)

Registrant's telephone number, including area code: **(781) 761-7600**

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 (*see* General Instruction A.2. below):

- 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))
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Item 7.01 Regulation FD Disclosure.

On March 20, 2008, EPIX Pharmaceuticals, Inc. issued a press release, a copy of which is being furnished as Exhibit 99.1 to this Report on Form 8-K.

The information in this Item 7.01 and Exhibit 99.1 attached hereto is intended to be furnished and shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934 (the Exchange Act) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 8.01 Other Events.

On March 20, 2008, EPIX Pharmaceuticals, Inc., based on the results of its recently completed Phase 2b clinical trial, announced that it is discontinuing clinical development of PRX-00023, its 5-HT1A agonist for the treatment of depression.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits:

99.1 Press Release issued by the registrant on March 20, 2008, furnished herewith.

SIGNATURES

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

EPIX PHARMACEUTICALS, INC.

March 20, 2008

By: /s/ Kim Cobleigh Drapkin

Kim Cobleigh Drapkin
Chief Financial Officer

EXHIBIT INDEX

| Exhibit Number | Description |
|-----------------------|---|
| 99.1 | Press Release issued by the registrant on March 20, 2008, furnished herewith. |