
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-A

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(b) OR 12(g) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Syndax Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State of Incorporation or Organization)

32-0162505
(I.R.S. Employer Identification No.)

400 Totten Pond Road, Suite 110
Waltham, Massachusetts
(Address of principal executive offices)

02451
(Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

**Title of each class
to be so registered**
Common Stock, \$0.0001 par value per share

**Name of each exchange on which
each class is to be registered**
The NASDAQ Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), please check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), please check the following box.

Securities Act registration statement file number to which this form relates: **333-208861**

Securities to be registered pursuant to Section 12(g) of the Act: **None.**

Item 1. Description of Registrant's Securities to be Registered.

The description of the common stock, par value \$0.0001 per share (the "Common Stock"), of Syndax Pharmaceuticals, Inc. (the "Company"), to be registered hereunder is contained in the section entitled "Description of Capital Stock" in the prospectus forming a part of the Company's Registration Statement on Form S-1 (Registration No. 333-208861), initially filed with the Securities and Exchange Commission (the "Commission") on January 4, 2016, as subsequently amended from time to time (the "Registration Statement"), and is incorporated herein by reference. The prospectus to be filed with the Commission pursuant to Rule 424(b) under the Securities Act of 1933, as amended, which will constitute part of the Registration Statement, shall be deemed to be incorporated herein by reference.

Item 2. Exhibits.

Pursuant to the instructions as to exhibits with respect to Form 8-A, no exhibits are required to be filed because no other securities of the Company are registered on The NASDAQ Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

Date: March 2, 2016

Syndax Pharmaceuticals, Inc.

By: /s/ Allan L. Shaw

Allan L. Shaw

Chief Financial Officer, Treasurer and Secretary