

**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**

Bellerophon Therapeutics LLC*

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation or organization)

**53 Frontage Road, Suite 301
Hampton, NJ**
(Address of principal executive offices)

36-4771642
(I.R.S. Employer Identification No.)

08827
(Zip Code)

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

Title of each class to be so registered	Name of each exchange on which each class is to be registered
Common Stock, \$0.01 par value per share	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), check the following box. ☒ x

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), check the following box. ☐ o

Securities Act registration statement file number to which this form relates: **333-201474**
(If applicable)

Securities to be registered pursuant to Section 12(g) of the Act: **Not applicable**

*Bellerophon Therapeutics LLC, a limited liability company organized under the laws of Delaware, is the registrant filing this Registration Statement with the Securities and Exchange Commission. Prior to the listing on The NASDAQ Stock Market LLC, Bellerophon Therapeutics LLC will be converted into a corporation organized under the laws of Delaware, pursuant to the Delaware Limited Liability Company Act Section 18-216 and the General Corporation Law of the State of Delaware Section 265 and renamed Bellerophon Therapeutics, Inc. The Common Stock to be listed on The NASDAQ Stock Market LLC and referred to herein are securities of Bellerophon Therapeutics, Inc.

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

The description under the heading "Description of Capital Stock" relating to the Common Stock, \$0.01 par value per share, of Bellerophon Therapeutics, Inc. (the "Registrant") in the prospectus included in the Registrant's Registration Statement on Form S-1 (File No. 333-201474), as amended (the "Registration Statement"), filed under the Securities Act of 1933, as amended (the "Securities Act"), with the Securities and Exchange Commission (the "Commission") is incorporated herein by reference. Any form of prospectus subsequently filed by the Registrant with the Commission pursuant to Rule 424(b) under the Securities Act that constitutes part of the Registration Statement shall be deemed to be incorporated herein by reference.

Item 2. Exhibits.

None.

SIGNATURE

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

BELLEROPHON THERAPEUTICS LLC

By: /s/ Jonathan M. Peacock
Name: Jonathan M. Peacock
Title: Chairman, President and Chief Executive Officer

Dated: February 10, 2015