UNITED STATES 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): July 27, 2015

Bellerophon Therapeutics, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation) **001-36845** (Commission File Number)

47-3116175 (IRS Employer Identification No.)

53 Frontage Road, Suite 301 Hampton, New Jersey(Address of Principal Executive Offices)

08827 (Zip Code)

Registrant's telephone number, including area code: (908) 574-4770

(Former Name or Former Address, if Changed Since Last Report)

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):

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

Item 1.01. Entry into a Material Definitive Agreement.

On July 27, 2015, Bellerophon Pulse Technologies LLC ("Pulse Technologies"), a subsidiary of Bellerophon Therapeutics, Inc. (the "Company"), entered into a second amendment (the "Amendment") to the Exclusive Cross-License, Technology Transfer, and Regulatory Matters Agreement (the "Cross-License"), dated as of February 9, 2014, between Pulse Technologies and INO Therapeutics LLC ("INO Therapeutics"), a subsidiary of Ikaria, Inc. ("Ikaria"). The parties entered into the Cross-License in connection with the Company's spin-out from Ikaria, its former parent company.

The Amendment expands the scope of the Company's license from INO Therapeutics under the Cross-License to allow the Company to develop its INOpulse program for the treatment of three additional cardiopulmonary diseases: chronic thromboembolic pulmonary hypertension (CTEPH), pulmonary hypertension associated with sarcoidosis and pulmonary hypertension associated with pulmonary edema from high altitude sickness. Subject to the terms set forth therein, the Amendment also provides that the Company will pay INO Therapeutics a royalty equal to five percent (5%) of Net Sales (as defined in the Amendment) of any commercialized products for the three additional indications.

In September 2013, October 2013 and February 2014, the Company and each of its subsidiaries entered into an agreement not to compete with Ikaria Acquisition LLC, a subsidiary of Ikaria (the "Non-Competition Agreements"). In connection with entering into the Amendment, the Company and each of its subsidiaries entered into amendments to the Non-Competition Agreements (the "Non-Competition Agreement Amendments"), pursuant to which the term of the non-compete periods under each of the Non-Competition Agreements was extended such that it will expire on the date that is five years after the effective date of the Non-Competition Agreement Amendments.

The foregoing descriptions of the Amendment and the Non-Competition Agreement Amendments do not purport to be complete and are qualified in their entirety by reference to the Amendment and the Non-Competition Agreement Amendments, which the Company intends to file with the Securities and Exchange Commission as exhibits to its Quarterly Report on Form 10-Q for the period ending September 30, 2015.

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.

BELLEROPHON THERAPEUTICS, INC.

Date: July 31, 2015 By: /s/ Jonathan M. Peacock

Name: Jonathan M. Peacock

Title: Chairman and Chief Executive Officer