

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM S-8

**REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933**

Bellerophon Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or
organization)

47-3116175
(I.R.S. Employer
Identification No.)

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

08827
(Zip Code)

2015 Equity Incentive Plan
2014 Equity Incentive Plan
Assumed Ikaria Holdings, Inc. 2007 Stock Option Plan
Assumed Amended and Restated Ikaria Holdings, Inc. 2010 Long Term Incentive Plan
(Full title of the plan)

Jonathan M. Peacock
President and Chief Executive Officer
Bellerophon Therapeutics, Inc.
53 Frontage Road, Suite 301
Hampton, New Jersey 08827
(Name and address of agent for service)

(908) 574-4770
(Telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.01 par value per share	1,586,411 shares(2)	\$0.26 - \$17.92(3)	\$ 16,859,865(3)	\$ 1,959.12
(1)	In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.			
(2)	Consists of (i) 402,387 shares issuable under the Assumed Ikaria Holdings, Inc. 2007 Stock Option Plan, (ii) 175,582 shares issuable under the Assumed Amended and Restated Ikaria Holdings, Inc. 2010 Long Term Incentive Plan, (iii) 508,280 shares issuable under the 2014 Equity Incentive Plan and (iv) 500,162 shares issuable under the 2015 Equity Incentive Plan. Upon the expiration, termination, surrender, cancellation, forfeiture or repurchase of outstanding awards under the 2014 Equity Incentive Plan, the number of shares underlying such awards will be available for issuance under the 2015 Equity Incentive Plan.			
(3)	Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended. The price per share and aggregate offering price are calculated on the basis of (a) \$6.50, the weighted average exercise price of the 402,387 shares subject to outstanding stock option grants under the Assumed Ikaria Holdings, Inc. 2007 Ikaria Stock Option Plan, at prices ranging from \$0.26 to \$17.92, (b) \$8.50, the weighted average exercise price of the 175,582 shares subject to outstanding stock option grants under the Assumed Amended and Restated Ikaria Holdings, Inc. 2010 Long Term Incentive Plan, at prices ranging from \$7.77 to \$14.91, (c) \$13.28, the weighted average exercise price of the 508,280 shares subject to outstanding stock option grants under the 2014 Equity Incentive Plan, all at prices equal to \$13.28, and (d) \$12.00, the initial public offering price set forth on the cover page of the Registrant's Prospectus dated February 13, 2015 relating to its initial public offering, in accordance with Rule 457(c) under the Securities Act of 1933, as amended, for the 500,162 shares issuable under the 2015 Equity Incentive Plan.			

PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.

The information required by Item 1 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act").

Item 2. Registrant Information and Employee Plan Annual Information.

The written statement required by Item 2 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The registrant is subject to the informational and reporting requirements of Sections 13(a), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). The following documents, which are on file with the Commission, are incorporated in this registration statement by reference:

- (a) The registrant's latest annual report filed pursuant to Section 13(a) or 15(d) of the Exchange Act or the latest prospectus filed pursuant to Rule 424(b) under the Securities Act that contains audited financial statements for the registrant's latest fiscal year for which such statements have been filed.
- (b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the document referred to in (a) above.
- (c) The description of the securities contained in the registrant's registration statement on Form 8-A filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The registrant's certificate of incorporation provides that no director of the registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is or is threatened to be made a party to any threatened, pending, or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which the Court of Chancery or such other court shall deem proper.

The registrant's certificate of incorporation provides that it will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the registrant) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the registrant's best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful.

The registrant's certificate of incorporation also provides that it will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of the registrant to procure a judgment in the registrant's favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such

capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the registrant's best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by the registrant against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

The registrant has entered into indemnification agreements with each of its directors and executive officers. These indemnification agreements may require the registrant, among other things, to indemnify directors and executive officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of his or her service as one of the registrant's directors or executive officers, or any of the registrant's subsidiaries or any other company or enterprise to which the person provides services at the registrant's request.

The registrant maintains a general liability insurance policy that covers certain liabilities of the directors and officers of the registrant arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The Exhibit Index immediately preceding the exhibits is incorporated herein by reference.

Item 9. Undertakings.

1. The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Borough of Hampton, State of New Jersey, on this 13th day of February, 2015.

BELLEROPHON THERAPEUTICS, INC.

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

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Bellerophon Therapeutics, Inc., hereby severally constitute and appoint Jonathan M. Peacock, Manesh Naidu and David Abrams, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Bellerophon Therapeutics, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Jonathan M. Peacock</u> Jonathan M. Peacock	Chairman, President and Chief Executive Officer (principal executive officer)	February 13, 2015
<u>/s/ David Abrams</u> David Abrams	Treasurer (principal financial and accounting officer)	February 13, 2015
<u>/s/ Matthew Holt</u> Matthew Holt	Director	February 13, 2015
<u>/s/ Jens Leuhring</u> Jens Luehring	Director	February 13, 2015
<u>/s/ Andre V. Moura</u> Andre V. Moura	Director	February 13, 2015
<u>/s/ Robert T. Nelsen</u> Robert T. Nelsen	Director	February 13, 2015

/s/ Daniel Tassé
Daniel Tassé

Director

February 13, 2015

/s/ Adam Weinstein
Adam Weinstein

Director

February 13, 2015

INDEX TO EXHIBITS

Number	Description
4.1(1)	Certificate of Incorporation of the Registrant
4.2(1)	By-laws of the Registrant
4.3(1)	Form of Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of the Registrant's initial public offering)
4.4(1)	Form of Amended and Restated By-laws of the Registrant (to be effective upon the closing of the Registrant's initial public offering)
5.1	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
23.2	Consent of KPMG LLP, independent registered public accounting firm
24.1	Power of Attorney (included on the signature pages of this registration statement)
99.1(2)	Assumed Ikaria Holdings, Inc. 2007 Ikaria Stock Option Plan
99.2(2)	Assumed Amended and Restated Ikaria Holdings, Inc. 2010 Long Term Incentive Plan
99.3(2)	2014 Equity Incentive Plan
99.4(1)	2015 Equity Incentive Plan

(1)	Previously filed with the Securities and Exchange Commission on February 3, 2015 as an exhibit to the Registrant's Registration Statement on Form S-1 (File No. 333-201474) and incorporated herein by reference.
(2)	Previously filed with the Securities and Exchange Commission on January 13, 2015 as an exhibit to the Registrant's Registration Statement on Form S-1 (File No. 333-201474) and incorporated herein by reference.

February 13, 2015

Bellerophon Therapeutics, Inc.
53 Frontage Road, Suite 301
Hampton, New Jersey 08827

+1 617 526 6000 (t)
+1 617 526 5000 (f)
wilmerhale.com

Re: 2015 Equity Incentive Plan
2014 Equity Incentive Plan
Assumed Ikaria Holdings, Inc. 2007 Stock Option Plan
Assumed Amended and Restated Ikaria Holdings, Inc. 2010 Long Term Incentive Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 1,586,411 shares of common stock, \$0.01 par value per share (the "Shares"), of Bellerophon Therapeutics, Inc., a Delaware corporation (the "Company"), issuable under the Company's 2015 Equity Incentive Plan, 2014 Equity Incentive Plan, Assumed Ikaria Holdings, Inc. 2007 Stock Option Plan and Assumed Amended and Restated Ikaria Holdings, Inc. 2010 Long Term Incentive Plan (collectively, the "Plans").

We have examined the Certificate of Incorporation and By-laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plans, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the State of New York, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Oxford Palo Alto Washington

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plans, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ Lia Der Marderosian
Lia Der Marderosian, a Partner

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Bellerophon Therapeutics, Inc.:

We consent to the use of our report dated May 14, 2014, except for note 13(a), which is as of January 8, 2015, with respect to the financial statements of Bellerophon Therapeutics, LLC as of December 31, 2013 and 2012 and for the years then ended and for the period from August 26, 2009 (inception) to December 31, 2013, incorporated herein by reference.

/s/ KPMG LLP

Short Hills, New Jersey
February 13, 2015
