

Aeglea BioTherapeutics, Inc.  
Form POS AM  
April 07, 2016

As filed with the Securities and Exchange Commission on April 7, 2016

Registration No. 333-205001

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**Washington, DC 20549**

**POST-EFFECTIVE AMENDMENT NO. 1**

**TO**

**FORM S-1**

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

**AEGLEA BIOTHERAPEUTICS, INC.**

*(Exact name of registrant as specified in its charter)*

**Delaware**  
*(State or other jurisdiction of  
incorporation or organization)*

**2834**  
*(Primary Standard Industrial  
Classification Code Number)*

**46-4312787**  
*(I.R.S. Employer  
Identification Number)*

**Aeglea BioTherapeutics, Inc.**

**901 S. MoPac Expressway**

**Barton Oaks Plaza One**

**Suite 250**

**Austin, TX 78746**

**(512) 942-2935**

*(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)*

**David G. Lowe, Ph.D.**

**Chief Executive Officer**

**Aeglea BioTherapeutics, Inc.**

**901 S. MoPac Expressway**

**Barton Oaks Plaza One**

**Suite 250**

**Austin, TX 78746**

**(512) 942-2935**

*(Name, address, including zip code, and telephone number, including area code, of agent for service)*

**Copies to:**

**Effie Toshav, Esq.**

**Robert A. Freedman, Esq.**

**Matthew S. Rossiter, Esq.**

**Fenwick & West LLP**

**555 California Street**

**San Francisco, CA 94104**

**Bruce K. Dallas, Esq.**

**Davis Polk & Wardwell LLP**

**1600 El Camino Real**

**Menlo Park, CA 94025**

**(650) 752-2000**

(415) 875-2300

**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.    "

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.    "

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.    "

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.    x    333-205001

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-2 of the Exchange Act. (Check one):

Large accelerated filer    "    Accelerated filer    "                      Non-accelerated filer    x                      Smaller reporting company    "

(Do not check if a smaller reporting company)

**PART II**

**INFORMATION NOT REQUIRED IN PROSPECTUS**

This Post-Effective Amendment No. 1 relates to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-205001), declared effective by the Securities and Exchange Commission on April 6, 2016. The Registrant is filing this Post-Effective Amendment No. 1 pursuant to Rule 462(d) for the sole purpose of replacing Exhibit 5.1 to the Registration Statement. This Post-Effective Amendment No. 1 does not modify any provision of Part I or Part II of the Registration Statement, other than supplementing Item 16 of Part II as set forth below.

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**ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

(a) Exhibits.

**Exhibit**

<b>Number</b>	<b>Description of Document</b>
1.1*	Form of Underwriting Agreement.
3.1*	Restated Certificate of Incorporation, as amended to date.
3.2*	Form of Restated Certificate of Incorporation to be effective upon closing of this offering.
3.3*	Bylaws, as currently in effect.
3.4*	Form of Restated Bylaws to be effective upon closing of this offering.
4.1*	Form of Common Stock Certificate.
4.2*	Amended and Restated Investors Rights Agreement, dated March 10, 2015, by and among the Registrant and certain of its stockholders, as amended.
5.1	Opinion of Fenwick & West LLP.
10.1*	Form of Indemnification Agreement.
10.2*	2015 Equity Incentive Plan and forms of award agreements.
10.3*	2016 Equity Incentive Plan, to become effective on the date the registration statement is declared effective, and forms of award agreements.
10.4*	2016 Employee Stock Purchase Plan, to become effective on the date the registration statement is declared effective, and forms of award agreements.
10.5*	Form of Stock Restriction Agreement.
10.6*	Executive Employment Agreement, dated July 7, 2015, by and between the Registrant and Dr. David G. Lowe.
10.7*	Offer Letter, dated December 28, 2013, issued by the Registrant to Dr. Scott W. Rowlinson.
10.8*	Sponsored Research Agreement No. UTA13-001113, dated December 24, 2013, between The University of Texas at Austin ( UT-Austin ) and Aeglea BioTherapeutics, Inc., Aeglea Development Company, Inc., AERase, Inc., AEMase, Inc., AECase, Inc., AE4ase, Inc., AE5ase, Inc. and AE6ase., Inc., as amended.
10.9*	Master Services Agreement, dated December 24, 2013, between KBI Biopharma, Inc. Aeglea Development Company, Inc. and the Registrant and First Amendment to Master Services Agreement, dated June 30, 2015, between KBI Biopharma, Inc., Aeglea Development Company, Inc. and Registrant.
10.10*	Office Lease, dated November 24, 2014, between Barton Oaks Office Center, LLC and the Registrant.
10.11*	Consulting Agreement, dated February 18, 2014, by and between the Registrant and George Georgiou.
10.12*	Patent License Agreement No. PM1401601, dated December 24, 2013, between UT-Austin on behalf of the Board of Regents of the University of Texas system and AEMase, Inc. (pursuant to Instruction 2

to Item 601 of Regulation S-K, a Patent License No. PM1401501 that is substantially identical in all material respects, except as to the parties thereto, between UT-Austin and AECASE, Inc., was not filed).

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**Exhibit**

<b>Number</b>	<b>Description of Document</b>
10.13*	Board Service Agreement, dated June 12, 2015, between the Registrant and Russell Cox (pursuant to Instruction 2 to Item 601 of Regulation S-K, a Board Service Agreement that is substantially identical in all material respects, except as to the parties thereto, between the Registrant and Sandesh Mahatme, was not filed).
10.14*	Cancer Research Grant Contract, dated June 15, 2015, between AERase, Inc. and the Cancer Prevention Research Institute of Texas.
10.15*	CEO Severance Agreement, dated July 7, 2015, by and between the Registrant and Dr. David G. Lowe.
10.16*	Vice President Severance Agreement dated July 10, 2015 by and between Registrant and Dr. Scott W. Rowlinson.
10.17*	Offer Letter, dated May 4, 2015, issued by the Registrant to Mr. Henry Hebel.
10.18*	Vice President Severance Agreement dated January 14, 2016 by and between Registrant and Mr. Henry Hebel.
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of independent registered public accounting firm.
23.2	Consent of Fenwick & West LLP (included in Exhibit 5.1).
24.1*	Power of Attorney. Reference is made to the signature page hereto.

\* Previously filed.

Registrant has omitted portions of the referenced exhibit and filed such exhibit separately with the Securities and Exchange Commission pursuant to a request for confidential treatment under Rule 406 promulgated under the Securities Act.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the consolidated financial statements or notes.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this amendment to registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Austin, Texas, on the 7th day of April, 2016.

AEGLEA BIOTHERAPEUTICS, INC.

By: /s/ David G. Lowe, Ph.D.  
David G. Lowe, Ph.D.  
President, Chief Executive Officer and  
Director

Pursuant to the requirements of the Securities Act of 1933, this amendment to registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ David G. Lowe, Ph.D.	President, Chief Executive Officer and Director	April 7, 2016
David G. Lowe, Ph.D.	(Principal Executive Officer)	
/s/ Charles N. York II	Chief Financial Officer and Vice President	April 7, 2016
Charles N. York II	(Principal Accounting Officer and Principal Financial Officer)	
*	Director	April 7, 2016
Russell J. Cox		
*	Director	April 7, 2016
George Georgiou, Ph.D.		
*	Director	April 7, 2016
Sandesh Mahatme, LLM		
*	Director	April 7, 2016
Anthony G. Quinn, M.B Ch.B, Ph.D.		
*	Director	April 7, 2016



Armen Shanafelt, Ph.D.

\*By /s/ Charles N. York II

Attorney-In-Fact

April 7, 2016

Charles N. York II

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