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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 20549

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**SCHEDULE 13G**

(Rule 13d-102)

**Information to be Included in Statements Filed Pursuant  
to § 240.13d-1(b), (c) and (d) and Amendments Thereto Filed  
Pursuant to § 240.13d-2**

**Under the Securities Exchange Act of 1934  
(Amendment No. )**

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**Aeglea BioTherapeutics, Inc.**

(Name of Issuer)

**Common Stock, \$0.0001  
par value per share  
(Title of Class of Securities)**

**00773J103  
(CUSIP Number)**

**April 30, 2020  
(Date of Event Which Requires Filing of This Statement)**

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Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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1	Names of Reporting Persons BCLS II Equity Opportunities, LP	
2	Check the Appropriate Box if a Member of a Group (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC Use Only	
4	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	5	Sole Voting Power 0 shares of Common Stock
	6	Shared Voting Power 2,700,000 shares of Common Stock
	7	Sole Dispositive Power 0 shares of Common Stock
	8	Shared Dispositive Power 2,700,000 shares of Common Stock
9	Aggregate Amount Beneficially Owned by Each Reporting Person 2,700,000 shares of Common Stock	
10	Check if the Aggregate Amount in Row (9) Excludes Certain Shares <input type="checkbox"/>	
11	Percent of Class Represented by Amount in Row 9 6.1%	
12	Type of Reporting Person PN	

**Item 1(a) Name of Issuer**

The name of the issuer to which this filing on Schedule 13G relates is Aeglea BioTherapeutics, Inc. (the “Issuer”).

**Item 1(b) Address of Issuer’s Principal Executive Offices**

The principal executive offices of the Issuer are located at 805 Las Cimas Parkway, Suite 100, Austin, Texas 78746.

**Item 2(a) Name of Person Filing**

This Schedule 13G is being filed by BCLS II Equity Opportunities, LP, a Delaware limited partnership (the “Reporting Person”).

Bain Capital Life Sciences Investors, LLC, a Delaware limited liability company (“BCLSI”), whose managers are Jeffrey Schwartz and Adam Koppel, is the manager of Bain Capital Life Sciences Investors II, LLC, a Cayman limited liability company (“BCLSI II”), which is the general partner of Bain Capital Life Sciences Fund II, L.P., a Cayman exempted limited partnership (“BCLS II”), which is the manager of BCLS II Equity Opportunities GP, LLC, a Delaware limited liability company (“BCLS II Equity GP”), which is the general partner of the Reporting Person.

As a result, each of BCLSI, Mr. Schwartz and Dr. Koppel may be deemed to share voting and dispositive power with respect to the securities held by the Reporting Person.

**Item 2(b) Address of Principal Business Office or, if None, Residence**

The principal business address of the Reporting Person, BCLSI, BCLSI II, BCLS II, BCLS II Equity GP, Mr. Schwartz and Dr. Koppel is 200 Clarendon Street, Boston, MA 02116.

**Item 2(c) Citizenship**

The Reporting Person, BCLSI and BCLS II Equity GP are each organized under the laws of the State of Delaware. BCLSI II and BCLS II are each organized under the laws of the Cayman Islands. Mr. Schwartz and Dr. Koppel are citizens of the United States.

**Item 2(d) Title of Class of Securities**

The class of securities of the Issuer to which this Schedule 13G relates is Common Stock, \$0.0001 par value per share (“Common Stock”).

**Item 2(e) CUSIP Number**

The CUSIP number of the Common Stock is 00773J103.

**Item 3 If this statement is filed pursuant to §§ 240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a**

- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c)  Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);

- (d)  Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e)  An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);
- (g)  A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act (15 U.S.C. 80a-3);
- (j)  A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
- (k)  Group, in accordance with § 240.13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

#### **Item 4            Ownership**

##### **(a) Amount beneficially owned:**

As of the date hereof, the Reporting Person beneficially owns 2,700,000 shares of Common Stock, representing approximately 6.1% of the Issuer's outstanding shares of Common Stock. The percentage of the Issuer's outstanding shares of Common Stock held by the Reporting Person is based on 44,593,764 shares of Common Stock issued and outstanding as of May 1, 2020, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.

##### **(b) Percent of class:**

See Item 4(a) hereof.

##### **(c) Number of shares as to which the person has:**

(i) Sole power to vote or to direct the vote:

0 shares of Common Stock

(ii) Shared power to vote or to direct the vote:

2,700,000 shares of Common Stock

(iii) Sole power to dispose or to direct the disposition of:

0 shares of common Stock

(iv) Shared power to dispose or to direct the disposition of:

2,700,000 shares of Common Stock

#### **Item 5            Ownership of Five Percent or Less of a Class**

Not applicable.

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**Item 6 Ownership of More Than Five Percent on Behalf of Another Person**

Not applicable.

**Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person**

Not applicable.

**Item 8 Identification and Classification of Members of the Group**

Not applicable.

**Item 9 Notice of Dissolution of Group**

Not applicable.

**Item 10 Certifications**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the Issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

**SIGNATURES**

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information in this statement is true, complete and correct.

Dated: June 9, 2020

**BCLS II Equity Opportunities, LP**

By: BCLS II Equity Opportunities GP, LLC  
its general partner

By: Bain Capital Life Sciences Fund II, L.P.  
its manager

By: Bain Capital Life Sciences Investors II, LLC  
its general partner

By: Bain Capital Life Sciences Investors, LLC  
its manager

By: /s/ Jeffrey Schwartz

Name: Jeffrey Schwartz

Title: Managing Director