Aeglea BioTherapeutics, Inc. Form DEF 14A September 06, 2018

#### UNITED STATES

#### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the

Securities Exchange Act of 1934

(Amendment No. )

Filed by the Registrant

Filed by a party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) Definitive Proxy Statement Definitive Additional Materials Soliciting Material under § 240.14a-12 Aeglea BioTherapeutics, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than The Registrant)

Payment of Filing Fee (Check the appropriate box):

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(3)Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

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(1) Amount Previously Paid:

(2)Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

### AEGLEA BIOTHERAPEUTICS, INC.

901 S. MoPac Expressway

Barton Oaks Plaza One, Suite 250

Austin, TX 78746

### NOTICE OF SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON OCTOBER 8, 2018

Dear Stockholders:

You are cordially invited to attend the 2018 Special Meeting of Stockholders of Aeglea BioTherapeutics, Inc. The meeting will be held on Monday, October 8, 2018, at 9:00 a.m. local time at 901 S. MoPac Expressway, Barton Oaks Plaza One, Suite 250, Austin, TX 78746.

We are holding the meeting for the following purposes, which are more fully described in the accompanying proxy statement:

- 1. To approve an amendment to our 2016 Equity Incentive Plan.
- 2. To transact such other business as may properly come before the Special Meeting or any adjournment or postponement thereof.

Only stockholders of record at the close of business on August 23, 2018 are entitled to notice of, and to vote at, the meeting and any adjournments thereof. This Notice and the accompanying proxy statement are being mailed out to stockholders as of the record date beginning on or about September 6, 2018. For ten days prior to the meeting, a complete list of the stockholders entitled to vote at the meeting will be available for examination by any stockholder for any purpose germane to the meeting during ordinary business hours at our headquarters.

Your vote as an Aeglea BioTherapeutics, Inc. stockholder is very important. Each share of stock that you own represents one vote. For questions regarding your stock ownership, you may contact us through our website at http://ir.aegleabio.com or, if you are a registered holder, our transfer agent, American Stock Transfer & Trust Company, by email through the American Stock Transfer & Trust Company website at www.amstock.com/main/nav\_contactUs.asp or by phone at (800) 937-5449.

By Order of the Board of Directors,

Anthony G. Quinn, M.B Ch.B, Ph.D.

President and Chief Executive Officer

Austin, Texas September 6, 2018

#### YOUR VOTE IS IMPORTANT

WHETHER OR NOT YOU PLAN TO ATTEND THE SPECIAL MEETING, WE ENCOURAGE YOU TO VOTE AND SUBMIT YOUR PROXY BY INTERNET, TELEPHONE OR BY MAIL. FOR ADDITIONAL INSTRUCTIONS ON VOTING BY TELEPHONE OR THE INTERNET, PLEASE REFER TO YOUR PROXY CARD. TO VOTE AND SUBMIT YOUR PROXY BY MAIL, PLEASE COMPLETE, SIGN AND DATE THE ENCLOSED PROXY CARD AND RETURN IT IN THE ENCLOSED ENVELOPE. IF YOU ATTEND THE SPECIAL MEETING, YOU MAY REVOKE YOUR PROXY AND VOTE IN PERSON. IF YOU HOLD YOUR SHARES THROUGH AN ACCOUNT WITH A BROKERAGE FIRM, BANK OR OTHER NOMINEE, PLEASE FOLLOW THE INSTRUCTIONS YOU RECEIVE FROM YOUR ACCOUNT MANAGER TO VOTE YOUR SHARES. AEGLEA BIOTHERAPEUTICS, INC.

### PROXY STATEMENT FOR 2018 SPECIAL MEETING OF STOCKHOLDERS

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## AEGLEA BIOTHERAPEUTICS, INC.

901 S. MoPac Expressway

Barton Oaks Plaza One, Suite 250

Austin, TX 78746

### PROXY STATEMENT FOR THE 2018 SPECIAL MEETING OF STOCKHOLDERS

September 6, 2018

Information About Solicitation and Voting

The accompanying proxy is solicited on behalf of the board of directors of Aeglea BioTherapeutics, Inc. ("Aeglea") for use at Aeglea's 2018 Special Meeting of Stockholders ("Special Meeting") to be held on October 8, 2018, at 9:00 a.m. local time, and any adjournment or postponement thereof. This Proxy Statement and the accompanying form of proxy were first mailed to stockholders on or about September 6, 2018. An electronic copy of this Proxy Statement is available at www.proxyvote.com.

General Information About the SPECIAL Meeting

Purpose of the Special Meeting

At the Special Meeting, stockholders will act upon the proposals described in this Proxy Statement for the 2018 Special Meeting ("Proxy Statement").

Record Date; Quorum

Only holders of record of common stock at the close of business on August 23, 2018 ("Record Date") will be entitled to vote at the Special Meeting. At the close of business on the Record Date, we had 22,081,554 shares of common stock outstanding and entitled to vote. For ten days prior to the meeting, a complete list of the stockholders entitled to vote at the meeting will be available for examination by any stockholder for any purpose relating to the meeting during ordinary business hours at our headquarters.

The holders of a majority of the voting power of the shares of stock entitled to vote at the Special Meeting as of the Record Date must be present at the Special Meeting in order to hold the Special Meeting and conduct business. This presence is called a quorum. Your shares are counted as present at the Special Meeting if you are present and vote in person at the Special Meeting or if you have properly submitted a proxy.

### Voting Rights; Required Vote

In deciding all matters at the Special Meeting, each holder of shares of common stock is entitled to one vote for each share of common stock held as of the close of business on the Record Date. You may vote all shares owned by you as of the Record Date, including (i) shares held directly in your name as the stockholder of record, and (ii) shares held for

you as the beneficial owner in street name through a broker, bank, trustee, or other nominee.

Stockholder of Record: Shares Registered in Your Name. If, on the Record Date, your shares were registered directly in your name with our transfer agent, American Stock Trust & Transfer Company, then you are considered the stockholder of record with respect to those shares. As a stockholder of record, you may vote at the Special Meeting or vote by telephone, by Internet, or by filling out and returning the proxy card.

Beneficial Owner: Shares Registered in the Name of a Broker or Nominee. If, on the Record Date, your shares were held in an account with a brokerage firm, bank or other nominee, then you are the beneficial owner of the shares held in street name. As a beneficial owner, you have the right to direct your nominee on how to vote the shares held in your account, and your nominee has enclosed or provided voting instructions for you to use in directing it on how to vote your shares. However, the organization that holds your shares is considered the stockholder of record for purposes of voting at the Special Meeting. Because you are not the stockholder of record, you may not vote your shares at the Special Meeting unless you request and obtain a valid proxy from the organization that holds your shares giving you the right to vote the shares at the Special Meeting.

Approval of the amendment to the 2016 Equity Incentive Plan to (i) provide for an increase in the number of shares of common stock reserved for issuance thereunder by 1,759,602 shares, (ii) extend the term of the Plan through August 7, 2028 and (iii) provide for an automatic increase in the number of shares reserved for issuance thereunder on January 1 of each year for the remaining term of the plan equal to (a) 4.0% of the number of issued and outstanding shares of common stock on December 31 of the immediately preceding year, or (b) a lesser amount as approved by the board each year, will be obtained if the number of votes cast "FOR" the proposal at the Special Meeting exceeds the number of votes cast "AGAINST" the proposal.

Broker non-votes occur when a broker, bank or other nominee holding shares for a beneficial owner does not vote on a particular matter because such broker, bank or other nominee does not have discretionary authority to vote on that matter and has not received voting instructions from the beneficial owner. Brokers, banks and other nominees typically do not have discretionary authority to vote on non-routine matters. Broker non-votes are counted for purposes of determining whether a quorum is present, and have no effect on the outcome of the matters voted upon. Under the rules and interpretations of The Nasdaq Stock Market Listing Rules, "non-routine" matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors, executive compensation and certain corporate governance proposals, even if management-supported. At our Special Meeting, none of the proposals are considered a "routine" matter. Note that if you are a beneficial holder and do not provide specific voting instructions to your broker, the broker that holds your shares will not have discretionary authority to vote on the approval of the amendment to the 2016 Equity Incentive Plan. Accordingly, we encourage you to provide voting instructions to your broker, whether or not you plan to attend the meeting.

Recommendations of the Board of Directors on Each of the Proposals Scheduled to be Voted on at the Special Meeting

The board of directors recommends that you vote "FOR" the approval of the amendment to the 2016 Equity Incentive Plan ("Proposal No. 1"). None of the directors or executive officers has any substantial interest in any matter to be acted upon, other than as referenced in "Proposal No. 1—Approval of Amendment to 2016 Equity Incentive Plan—Certain Interests of Directors."

Voting Instructions; Voting of Proxies

If you are a stockholder of record, you may:

vote in person—we will provide a ballot to stockholders who attend the Special Meeting and wish to vote in person;
vote via telephone or Internet—in order to do so, please follow the instructions shown on your proxy card; or
vote by mail—complete, sign and date the proxy card enclosed herewith and return it before the Special Meeting in the envelope provided.

Votes submitted by telephone or Internet must be received by 11:59 pm Eastern Time on October 7, 2018. Submitting your proxy, whether via the Internet, by telephone, or by mail, will not affect your right to vote in person should you decide to attend the Special Meeting. If you are not the stockholder of record, please refer to the voting instructions provided by your nominee to direct it how to vote your shares. You may either vote "FOR" or "AGAINST" or "ABSTAIN" from voting. Your vote is important. Whether or not you plan to attend the Special Meeting, we urge you to vote by proxy to ensure that your vote is counted.

All proxies will be voted in accordance with the instructions specified on the proxy card. If you sign a physical proxy card and return it without instructions as to how your shares should be voted on a particular proposal at the Special Meeting, your shares will be voted in accordance with the recommendations of our board of directors stated above.

If you do not vote and you hold your shares in street name, and your broker does not have discretionary power to vote your shares, your shares may constitute "broker non-votes" (as described above) and will not be counted in determining the number of shares necessary for approval of the proposals. However, shares that constitute broker non-votes will be

counted for the purpose of establishing a quorum for the Special Meeting.

If you receive more than one proxy card, your shares are registered in more than one name or are registered in different accounts. To make certain all of your shares are voted, please follow the instructions included on each proxy card and vote each proxy card by telephone, through the Internet or by mail. If you are voting by mail, please complete, sign and return each proxy card to ensure that all of your shares are voted.

Expenses of Soliciting Proxies

Aeglea will pay the expenses of soliciting proxies. Following the original mailing of the soliciting materials, Aeglea and its agents, including directors, officers and other employees, without additional compensation, may solicit proxies by mail, electronic mail, telephone, facsimile, by other similar means, or in person. Following the original mailing of the soliciting materials, Aeglea will request brokers, custodians, nominees and other record holders to forward copies of the soliciting materials to persons for whom they hold shares and to request authority for the exercise of proxies. In such cases, Aeglea, upon the request of the record holders, will

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reimburse such holders for their reasonable expenses. If you choose to access the proxy materials and/or vote through the Internet, you are responsible for any Internet access charges you may incur.

**Revocability of Proxies** 

A stockholder who has given a proxy may revoke it at any time before it is exercised at the Special Meeting by:

delivering to the Corporate Secretary of Aeglea (by any means, including facsimile) a written notice stating that the proxy is revoked;

- signing and delivering a proxy bearing a later
  - date;
- voting again by telephone or Internet; or

attending and voting at the Special Meeting (although attendance at the Special Meeting will not, by itself, revoke a proxy).

Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to revoke a proxy, you must contact that broker, bank, or other nominee to revoke any prior voting instructions.

#### Voting Results

Voting results will be tabulated and certified by the inspector of elections appointed for the Special Meeting. The preliminary voting results will be announced at the Special Meeting. The final results will be tallied by the inspector of elections and filed with the Securities and Exchange Commission ("SEC") in a current report on Form 8-K within four business days of the Special Meeting.

### PROPOSAL NO. 1

#### APPROVAL OF AMENDMENT TO THE 2016 EQUITY INCENTIVE PLAN

General

Our 2016 Equity Incentive Plan ("2016 Plan") was initially adopted by our board of directors in December 2015 and subsequently approved by our stockholders in December 2015. The 2016 Plan became effective in April 2016 in connection with our initial public offering and the material terms of the 2016 Plan were reapproved by our stockholders on June 7, 2017. The 2016 Plan provides for the grant of awards to eligible employees, directors, consultants, independent contractors and advisors in the form of stock options, restricted stock awards ("RSAs"), stock bonus awards ("Stock Bonus Awards"), stock appreciation rights ("SARs"), restricted stock units ("RSUs") and performance awards ("Performance Awards").

Our board of directors has determined that it is in the best interests of the Company and its stockholders to seek stockholder approval of the amendment to our 2016 Plan, which will (i) provide for an increase in the number of shares of common stock reserved for issuance thereunder by 1,759,602 shares, (ii) extend the term of the Plan through August 7, 2028 and (iii) provide for an automatic increase in the number of shares reserved for issuance thereunder on January 1 of each year for the remaining term of the plan equal to (a) 4.0% of the number of issued and outstanding shares of common stock on December 31 of the immediately preceding year, or (b) a lesser amount as approved by the board each year.

Reasons for the Amendment of the 2016 Plan

We are asking our stockholders to approve the amendment to the 2016 Plan because, among other things, we believe that the amendment to the 2016 Plan is in the best interests of the Company because of the continuing need to provide stock options, restricted stock units and other equity-based incentives to attract and retain qualified personnel and to respond to relevant market changes in equity compensation practices. If our stockholders do not approve the amendment to the 2016 Plan, we will be limited in our ability to continue to issue awards under the 2016 Plan in numbers sufficient to attract and motivate the highly skilled employees we need to recruit and retain. The requested pool of shares was approved by our board of directors in part to permit us to grant certain options, described below, to Dr. Anthony G. Quinn, upon appointing him as permanent President and Chief Executive Officer in July 2018.

Equity compensation is a critical element of our compensation program. Offering a broad-based equity compensation program is vital to attracting and retaining highly skilled people in the highly competitive life sciences industry. We use equity awards to increase incentives on the part of eligible employees, non-employee directors and consultants who provide significant services to the company and its affiliates. We believe that providing an equity stake in the future success of our business encourages our employees to be highly motivated to achieve our long-term business goals and to increase stockholder value. Their innovation and productivity are critical to our success. Accordingly, approving the amendment to our 2016 Plan is in the best interest of our stockholders because equity awards help us to:

attract, motivate and retain talented employees, directors and consultants;

align employee and stockholder interests; and

ink employee compensation with company performance.

We strongly believe that approval by you of the amendment to our 2016 Plan will enable us to achieve our goals in attracting and retaining our most valuable asset: our employees.

Without stock options, restricted stock units or other forms of equity incentives, we would be forced to consider cash replacement alternatives to provide a market-competitive total compensation package necessary to attract, retain and

motivate the employee talent critical to our future successes. These cash replacement alternatives could, among other things, reduce the cash available for investment in growth and development and cause a loss of motivation by employees to achieve superior performance over a longer period of time. Equity-based awards also directly align a portion of the compensation of our employees with the economic interests of our stockholders. If this Proposal 1 is not approved by our stockholders, we believe our ability to attract and retain the talent we need to compete in our industry would be adversely impacted, and this could affect our long-term success.

Summary of the 2016 Plan as Proposed to be Amended

The following is a summary of the principal provisions of the 2016 Plan as would be amended by these proposed amendments. This summary is qualified in its entirety by reference to the full text of the 2016 Plan which is attached as Appendix A.

We adopted the 2016 Plan, which became effective in April 2016 as the successor to our 2015 Equity Incentive Plan (the "2015 Plan"). We initially reserved 1,694,286 shares of our common stock to be issued under our 2016 Plan, which includes 594,286

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shares of common stock not issued or subject to outstanding grants under our 2015 Plan at the time the 2016 Plan became effective. Currently, the 2016 Plan provides for an annual increase in the number of shares available for issuance thereunder on January 1 of each of 2017 through 2023, 4% of the number of issued and outstanding shares of the Company's common stock on the December 31 immediately prior to the date of increase, or a lesser number as approved by our board of directors. The increase is only effective if our board of directors either confirmed the increase or approved the increase of a lesser number of shares prior to January 1 of each relevant year. Pursuant to this provision, the number of shares reserved for grant and issuance increased by 537,233 shares on January 1, 2017 and 666,807 shares on January 1, 2018. As proposed, we plan to reserve an additional 1,759,602 shares under the 2016 Plan and provide for an automatic increase in the number of shares reserved for issuance thereunder on January 1 of each year for the remaining term of the plan (2028) equal to (a) 4.0% of the number of issued and outstanding shares of common stock on December 31 of the immediately preceding year, or (b) a lesser amount as approved by the board each year. In addition, the following shares are available for grant and issuance under our 2016 Plan:

shares subject to options or stock appreciation rights granted under our 2016 Plan that cease to be subject to the option or stock appreciation right for any reason other than exercise of the option or stock appreciation right; shares subject to awards granted under our 2016 Plan that are subsequently forfeited or repurchased by us at the original issue price;

shares subject to awards granted under our 2016 Plan that otherwise terminate without shares being issued; shares surrendered pursuant to an exchange program as defined in the Plan;

shares subject to awards under our 2016 Plan that are used to pay the exercise price of an option or withheld to satisfy the tax withholding obligations related to any award;

shares issuable upon the exercise of options or subject to other awards under our 2015 Plan that cease to be subject to such options or other awards by forfeiture or otherwise as of the date of our initial public offering;

shares issued under our 2015 Plan pursuant to the exercise of options that are forfeited;

shares issued under our 2015 Plan repurchased by us at the original issue price; and

shares subject to awards under our 2015 Plan that are used to pay the exercise price of an option or withheld to satisfy the tax withholding obligations related to any award.

Awards under the 2016 Plan settled in cash or other property rather than shares do not reduce the amount of shares available under the 2016 Plan.

Our 2016 Plan authorizes the award of stock options, RSAs, Stock Bonus Awards, SARs, RSUs and Performance Awards (each as more fully described below). No person is eligible to receive more than 400,000 shares in any calendar year under our 2016 Plan other than a new employee of ours, who is eligible to receive no more than 775,000 shares under the plan in the calendar year in which the employee commences employment. Additionally, no person is eligible to receive more than \$10,000,000 in Performance Awards in any calendar year under the 2016 Plan. Further, no more than 8,200,000 shares will be issued pursuant to the exercise of ISO. Finally, no non-employee member of our board will be eligible to receive more than 100,000 shares in any calendar year under our 2016 Plan.

Our 2016 Plan is administered by our compensation committee, all of the members of which are non-employee directors and outside directors as defined under applicable federal tax laws, or by our board of directors acting in place of our compensation committee. The compensation committee has, among others, the authority to construe and interpret our 2016 Plan, grant awards and make all other determinations necessary or advisable for the administration of the 2016 Plan, and has full power to implement and carry out the 2016 Plan, except that our board of directors will establish the terms of the grant of any awards to non-employee directors.

Our 2016 Plan provides for the grant of awards to our employees, directors, consultants, independent contractors and advisors, provided the consultants, independent contractors, directors and advisors render bona fide services not in connection with the offer and sale of securities in a capital-raising transaction. ISOs may be granted only to employees. As of July 31, 2018, we had 4 executive officers, 7 non-employee directors, and 47 employees who were eligible to participate in the 2016 Plan.

A stock option is a right to purchase a share of our common stock, subject to certain conditions, if applicable. The exercise price of stock options must be at least equal to the fair market value of our common stock on the date of grant. Stock options may vest based on time or achievement of performance conditions, or a combination of both. Stock options may be vested and exercisable within the times or upon the conditions as set forth in the award agreement and our compensation committee may provide for stock options to become exercisable at one time or from time to time, periodically or otherwise, in such number of shares or percentage of shares as it determines. The maximum term of options granted under our 2016 Plan is ten years.

An RSA is a grant by us of shares of our common stock subject to restrictions, which may vest based on time or achievement of performance conditions. The price, if any, of an RSA will be determined by the compensation committee and may be less than the fair market value of our common stock on the date of grant. Unless otherwise determined by the compensation committee at the time of award, vesting will cease on the date the participant no longer provides services to us and unvested shares will be forfeited to or repurchased by us.

SARs provide for a payment, or payments, in cash or shares of our common stock, to the holder based upon the difference between the fair market value of our common stock on the date of exercise and the stated exercise price multiplied by the number of shares subject to the SAR. SARs may vest based on time or achievement of performance conditions.

RSUs represent the right to receive shares of our common stock at a specified date in the future, subject to forfeiture of that right because of termination of employment or failure to achieve certain performance conditions. If an RSU has not been forfeited, then on the date specified in the RSU agreement, we will deliver to the holder of the RSU whole shares of our common stock (which may be subject to additional restrictions), cash or a combination of our common stock and cash. Unless otherwise determined in the award agreement or by the compensation committee, vesting will cease on the date the holder no longer provides services to us.

A Performance Award is an award of a cash bonus or a number of shares of our common stock that may be settled upon achievement of the pre-established performance goals in cash or by issuance of the underlying shares. Unless otherwise determined in the award agreement or by the compensation committee, vesting will cease on the date the holder no longer provides services to us. These awards are subject to forfeiture prior to settlement because of termination of employment or failure to achieve the performance goals. No participant is eligible to receive more than \$10,000,000 in Performance Awards in any calendar year.

Stock bonuses may be granted as additional compensation for service or performance and, therefore, will not be issued in exchange for cash.

In general, awards granted under our 2016 Plan will vest over a three or four-year period.

Our 2016 Plan permits the grant of performance-based stock and cash awards. Our compensation committee may structure awards so that the stock or cash will be issued or paid only following the achievement of certain pre-established performance goals during a designated performance period.

Our compensation committee may establish performance goals under which performance-based awards may be made by selecting from one or more of the following performance criteria: (a) profit before tax; (b) sales; (c) expenses; (d) billings; (e) revenue; (f) net revenue; (g) earnings (which may include earnings before interest and taxes, earnings before taxes, net earnings, stock-based compensation expenses, depreciation and amortization); (h) operating income; (i) operating margin; (j) operating profit; (k) controllable operating profit, or net operating profit; (l) net profit; (m) gross margin; (n) operating expenses or operating expenses as a percentage of revenue; (o) net income; (p) earnings per share; (q) total stockholder return; (r) market share; (s) return on assets or net assets; (t) our stock price; (u) growth in stockholder value relative to a pre-determined index; (v) return on equity; (w) return on invested capital; (x) cash flow (including free cash flow or operating cash flows); (y) balance of cash, cash equivalents and

marketable securities; (z) cash conversion cycle; (aa) economic value added; (bb) individual confidential business objectives; (cc) contract awards or backlog; (dd) overhead or other expense reduction; (ee) credit rating; (ff) completion of an identified special project; (gg) Completion of a joint venture or other corporate transaction; (hh) strategic plan development and implementation; (ii) succession plan development and implementation; (jj) improvement in workforce diversity; (kk) employee satisfaction; (ll) employee retention; (mm) customer indicators and satisfaction; (nn) new product invention or innovation; (oo) research and development expenses; (pp) attainment of research and development milestones; (qq) improvements in productivity; (rr) bookings; (ss) working-capital targets and changes in working capital; and (tt) attainment of objective operating goals and employee metrics.

Our compensation committee may select the abovementioned performance criteria, either individually, alternatively or in any combination, and may be applied on a company-wide basis or with respect to one or more business units or subsidiaries, either individually, alternatively or in any combination; on a GAAP or non-GAAP basis; and measured in absolute terms or relative to a pre-established target. Our compensation committee may, in recognition of unusual or non-recurring items such as acquisition-related activities or changes in applicable accounting rules, provide for one or more equitable adjustments (based on objective standards) to the performance factors to preserve the compensation committee's original intent regarding the performance factors at the time of the initial award grant. Our compensation committee may also adjust performance factors to account for changes in law and accounting

and make such adjustments as our compensation committee deems necessary or appropriate to reflect the impact of extraordinary or unusual items, events or circumstances to avoid windfalls or hardships.

If the number of outstanding shares of our common stock is changed by a change in our capital structure without consideration, such as a stock split, proportionate adjustments will be made to the number of shares reserved under our 2016 Plan, the exercise prices of and number of shares subject to outstanding stock option and SARs awards, the number of shares subject to other outstanding awards, the maximum number of shares that can be granted in a calendar year to an individual or a new employee, the maximum number of shares that may be issued as ISOs and the number of shares that may be granted as awards to non-employee directors, subject to any required action by board of directors or our stockholders and in compliance with applicable securities laws.

Awards granted under our 2016 Plan may not be transferred in any manner other than by will or by the laws of descent and distribution or as determined by our compensation committee. Unless otherwise permitted by our compensation committee, stock options may be exercised during the lifetime of the optionee only by the optionee or the optionee's guardian or legal representative. Stock options granted under our 2016 Plan generally may be exercised for a period of three months after the termination of the optionee's service to us for any reason other than for cause, death or disability, for a period of 12 months post-termination in the case of termination due to death or disability, or such longer period as our compensation committee may provide. Options generally terminate immediately upon termination of employment for cause. Unless otherwise determined by our compensation committee and as set forth in a participant's award agreement, upon a termination of employment or service with us, the vesting of any shares of RSAs, RSUs, Stock Bonus Awards, stock options, SARs or Performance Awards will cease on the date of termination of employment.

Our 2016 Plan provides that in the event of specified types of acquisitions, mergers or consolidations, a sale or other disposition of all or substantially all of our assets, a corporate transaction or a change in the effective control of our company that occurs on the date that a majority of our board members is replaced during any twelve month period by board members whose appointment or election is not endorsed by a majority of the board members prior to the date of the appointment or election, (a) outstanding awards under our 2016 Plan may be continued if our company is the successor entity, (b) outstanding awards under our 2016 Plan may be assumed by any surviving or acquiring corporation; (c) outstanding awards under our 2016 Plan may be substituted by the surviving or acquiring corporation for similar awards; (d) the exercise or vesting of outstanding awards under our 2016 Plan may fully or partially accelerate, expiration of such awards may accelerate and our right to repurchase or re-acquire shares acquired under an award may lapse and forfeiture rights with respect to such shares may lapse; (e) outstanding awards may be settled for the full value of such outstanding award (whether or not then vested or exercisable) in cash, cash equivalents, or securities of the successor entity with a fair market value equal to the required amount followed by the cancellation of such awards, provided that payment may be deferred until the date or dates the award would have become exercisable or vested; or (f) outstanding awards may be terminated for no consideration. Our board of directors shall have full power to assign our company's right to repurchase or re-acquire or forfeiture rights to such successor or acquiring corporation. Awards need not be treated similarly in a corporate transaction.

Our board of directors or its compensation committee has the discretion to provide that a stock award under our 2016 Plan will immediately vest as to all or any portion of the shares subject to the stock award at the time of a corporate transaction or in the event a participant's service with us or a successor entity is terminated actually or constructively within a designated period following the occurrence of the transaction. Stock awards held by participants under our 2016 Plan will generally not vest automatically on such an accelerated basis unless specifically provided in the participant's applicable award agreement. However, following a corporate transaction, 100% of the shares subject to an award held by an employee shall become vested if the holder is subject to an involuntary termination within 12 months after the corporate transaction, subject to certain release requirements. In addition, in the event of a corporate transaction, the vesting of all awards granted to non-employee directors shall accelerate and such awards shall become exercisable (as applicable) in full prior to the consummation of the corporate transaction at such times and on such conditions as our compensation committee determines.

In the event of a corporate transaction, the arrangement as set out above shall also apply to awards under the 2015 Plan in effect on the date of our initial public offering, provided the vesting acceleration provisions set forth in any employment agreement or letter or similar agreement between our company and an employee in effect on such date, to the extent more favorable to such employee, will continue to apply to the equity awards held by the employee on such date.

As amended, our 2016 Plan will terminate on August 7, 2028, unless it is terminated earlier by our board of directors. Our board of directors may amend or terminate our 2016 Plan at any time. Our board of directors must obtain the approval of our stockholders if our board of directors amends our 2016 Plan in any manner that requires stockholder approval.

The summary of the 2016 Plan provided above is a summary of the principal features of the 2016 Plan. This summary, however, does not purport to be a complete description of all of the provisions of the 2016 Plan. It is qualified in its entirety by reference to the full text of the 2016 Plan. A copy of the 2016 Plan is attached as Appendix A to this Proxy Statement.

Federal Income Tax Consequences

The following is a brief summary of the federal income tax consequences applicable to awards granted under the 2016 Plan based on federal income tax laws in effect on the date of this Proxy Statement.

This summary is not intended to be exhaustive and does not address all matters that may be relevant to a particular participant. The summary does not discuss the tax laws of any state, municipality, or foreign jurisdiction, or the gift, estate, excise, payroll, or other tax laws other than federal income tax law. This summary does not discuss the impact of Section 280G of the Code governing parachute payments or Section 409A of the Code governing nonqualified deferred compensation plans. The following is not intended or written to be used, and cannot be used, for the purposes of avoiding taxpayer penalties. Because circumstances may vary, we advise all participants to consult their own tax advisors under all circumstances.

Stock Options and Stock Appreciation Rights. A recipient of a stock option or SAR will not recognize taxable income upon the grant of those awards. For NSOs and SARs, the participant will recognize ordinary income upon exercise in an amount equal to the difference between the fair market value of the shares and the exercise price on the date of exercise. Any gain or loss recognized upon any later disposition of the shares generally will be a capital gain or loss. The acquisition of shares upon exercise of an ISO will not result in any taxable income to the participant, except, possibly, for purposes of the alternative minimum tax. The gain or loss recognized by the participant on a later sale or other disposition of such shares will either be long-term capital gain or loss or ordinary income, depending upon whether the participant holds the shares for the legally required period (currently more than two years from the date of grant and more than one year from the date of exercise). If the shares are not held for the legally required period, the participant will recognize ordinary income equal to the lesser of (i) the difference between the fair market value of the shares on the date of exercise and the exercise price, or (ii) the difference between the sales price and the exercise price. Any additional gain recognized on the sale generally will be short-term or long-term capital gain. Different and complex rules may apply to incentive stock options that are early exercisable, and we encourage participants holding such any such awards to seek the advice of their own tax counsel.

Restricted Stock Awards. For RSAs, unless vested or the recipient elects under Section 83(b) of the Code to be taxed at the time of grant or purchase, the recipient will not have taxable income upon the grant, but will recognize ordinary income upon vesting equal to the fair market value of the shares at the time of vesting less the amount paid for such shares (if any). Any gain or loss recognized upon any later disposition of the shares generally will be a capital gain or loss.

Restricted Stock Units. A holder of an RSU does not recognize taxable income when the RSU is granted. When vested RSUs (and dividend equivalents, if any) are settled and distributed, the participant will recognize ordinary income equal to the amount of cash and/or the fair market value of shares received less the amount paid for such stock units (if any).

Other Share-Based Awards. The tax effects of other share-based awards will vary depending on the type, terms and conditions of those awards.

Performance Awards. No income generally will be recognized upon the grant of a performance award. Upon payment in respect of a performance award, the recipient generally will be required to include as taxable ordinary income in the year of receipt an amount equal to the amount of cash received and the fair market value of any nonrestricted shares of common stock or other property received.

Impact of Section 162(m)

Section 162(m) of the Tax Code generally disallows public companies a tax deduction for federal income tax purposes of remuneration in excess of \$1 million paid to certain executive officers. While our Compensation Committee may

consider the deductibility of awards as one factor in determining executive compensation, our Compensation Committee also looks at other factors in making its decisions and retains the flexibility to award compensation that it determines to be consistent with the goals of our executive compensation program even if the awards are not deductible by us for tax purposes.

Changes to Section 162(m) in connection with the passage of the Tax Cuts and Jobs Act repealed exceptions to the deductibility limit that were previously available for "qualified performance-based compensation" (including stock option grants and performance-based cash bonuses and equity awards) effective for taxable years after December 31, 2017. As a result, any compensation paid to certain of our executive officers in excess of \$1 million will be non-deductible unless it qualifies for transition relief afforded by the Tax Cuts and Jobs Act to compensation payable pursuant to certain binding arrangements in effect on November 2, 2017. We believe that compensation expense incurred in respect of our stock options granted prior to November 2, 2017 will continue to be deductible pursuant to this transition rule. However, because of uncertainties in the interpretation and implementation of the changes to Section 162(m) in the Tax Cuts and Jobs Act, including the scope of the transition relief, we can offer no assurance of such deductibility.

#### New 2016 Plan Benefits

On July 18, 2018, the Company entered into an offer letter with Dr. Anthony G. Quinn pursuant to which he became the President and Chief Executive Officer of the Company. Pursuant to the terms of his offer letter, and subject to approval by the board, the Company agreed to grant Mr. Quinn (i) an option to purchase 300,000 shares of the Company's common stock, which is eligible to vest in monthly installments based on Mr. Quinn's continued service over a 48-month period (the "Time-Based Option"); and (ii) options to purchase an aggregate of 200,000 shares of the Company's common stock, which are eligible to vest based on the achievement of certain performance objectives set by our board of directors (the "Performance-Based Option"), each with an exercise price of \$9.36 per share. 140,000 shares of the Time-Based Option and all 200,000 shares of the Performance-Based Option are contingent on stockholder approval of the proposed Amendment.

Awards to directors, executive officers, employees and consultants are made at the discretion of our board of directors and compensation committee. As a result, except as described above, the benefits and amounts that will be received or allocated under the 2016 Plan are not determinable at this time.

The table below shows, as to each of our named executive officers named in the Summary Compensation Table and the other identified groups below, the aggregate number of awards under the Plan for the last completed fiscal year.

	Number
	of
	Options
Name and Position	Granted
Anthony G. Quinn, M.B Ch.B, Ph.D., President and Chief Executive Officer	174,000
David G. Lowe, Ph.D., Former Chief Executive Officer	160,000
Charles N. York II, Chief Financial Officer and Vice President	148,500
James Wooldridge, M.D., Chief Medical Officer	175,000
All current executive officers as a group (4 persons)	607,500
All current non-employee directors as a group (5 persons)	202,000
All current employees, including all current officers who are not executive officers, as a group	876,600

#### History of Grants under the 2016 Plan

From the inception of the 2016 Plan through July 31, 2018, options to purchase a total of 3,778,062 shares had been granted under the 2016 Plan, 186,939 of which had been exercised and 2,744,912 of which remained outstanding. The options outstanding as of July 31, 2018 had a weighted-average exercise price of \$6.02 per share. The closing price per share of our common stock as reported by Nasdaq on the Record Date was \$10.22. The following table summarizes the grants made to our named executive officers, all current executive officers as a group, and all current employees, including all current officers who are not executive officers, as a group, from the inception of the 2016 Plan through July 31, 2018:

Number of

Options Granted

Anthony G. Quinn, M.B Ch.B, Ph.D., President and Chief Executive Officer	512,400
David G. Lowe, Ph.D., Former Chief Executive Officer	320,000
Charles N. York II, Chief Financial Officer and Vice President	295,600
Aaron Schuchart, Chief Business Officer	130,000
James Wooldridge, M.D., Chief Medical Officer	220,000
All current executive officers as a group (4 persons)	1,158,000
All current non-employee directors as a group (7 persons)	435,600
All current employees, including all current officers who are not executive officers, as a group	1,195,262

No shares have been granted under our 2016 Plan to any associates of our directors, executive officers or nominees, and no other person has received at least five percent of awards granted under the 2016 Plan. Additional information about outstanding grants under our 2016 Plan can be found in the Section entitled "Equity Compensation Plan Information" below. The prices, expiration dates and other material conditions of the 2016 Plan can be found in the Section entitled "Summary of the 2016 Plan as Proposed to be Amended" above.

#### Certain Interests of Directors

In considering the recommendation of our board of directors with respect to the approval of the amendment to the 2016 Plan, stockholders should be aware that the members of our board of directors have certain interests that may present them with conflicts of interest in connection with such proposal. As discussed above, directors are eligible to receive awards under the 2016 Plan. Our board of directors recognizes that approval of this proposal may benefit our directors and their successors.

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OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE AMENDMENT TO OUR 2016 EQUITY INCENTIVE PLAN

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### EQUITY COMPENSATION PLAN INFORMATION

The following table presents information as of December 31, 2017 with respect to compensation plans under which shares of our common stock may be issued.

			Number of securiti	es
			remaining available	e
	Number of		for future	
	securities		issuance under	
	to be issued upon	Weighted-average	e	
	exercise	exercise price	equity compensation	
	of outstanding	of outstanding	plans (excluding	
	options, warrants	options, warrants	securities reflected in	
Plan category	and rights(#)	and rights(\$)	column (a))(#)	
	(a)	(b)	(c)	
Equity compensation plans approved by security holders	(1 2,361,360	) \$ 5.21	406,172	(2)
Equity compensation plans not approved by security holders				
Total	2,361,360	5.21	406,172	

(1)Includes our 2015 Plan and 2016 Plan.

(2) Includes 106,765 shares that remain available for purchase under the 2016 Employee Stock Purchase Plan and 299,407 shares of common stock that remain available for grant under the 2016 Plan. There are no shares of common stock available for issuance under our 2015 Plan, but the plan continues to govern the terms of stock options granted thereunder. Any shares of common stock that are subject to outstanding awards under the 2015 Plan that are issuable upon the exercise of stock options that expire or become unexercisable for any reason without having been exercised in full will generally be available for future grant and issuance under our 2016 Plan. In addition, the 2016 Plan provides for an automatic annual increase in the number of shares available for issuance thereunder, to be added on the first day of each fiscal year, beginning on January 1, 2017 and continuing through 2023, up to 4% of the outstanding number of shares of the Company's common stock on the December 31 immediately prior to the date of increase, provided that an increase is only effective if our board of directors either confirmed the automatic increase or approved the increase of a lesser number of shares prior to January 1 of each relevant year. Pursuant to this provision, the number of shares reserved for grant and issuance under our 2016 Plan increased by 666,807 shares on January 1, 2018.

#### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of July 31, 2018, by:

each stockholder known by us to be the beneficial owner of more than 5% of our common stock;

each of our directors or director nominees;

each of our named executive officers; and

all of our directors, director nominees and executive officers as a group.

We have determined beneficial ownership in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares of common stock that they beneficially owned, subject to applicable community property laws.

Applicable percentage ownership is based on 21,995,032 shares of our common stock outstanding on July 31, 2018. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to options held by that person or entity that are currently exercisable or that will become exercisable within 60 days of July 31, 2018. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Aeglea BioTherapeutics, Inc. 901 S. MoPac Expressway, Barton Oaks Plaza One, Suite 250, Austin, Texas 78746.

#### Number of Shares

Name of Beneficial Owner	Beneficially Owned	Percentage Owned
5% Stockholders:		
Lilly Ventures Fund I LLC <sup>(1)</sup>	2,568,543	11.7 %
Nantahala Capital Management, LLC <sup>(2)</sup>	2,144,673	9.8
Novartis Bioventures Ltd. <sup>(3)</sup>	2,134,692	9.7
OrbiMed Private Investments V, LP <sup>(4)</sup>	1,865,524	8.5
Jennison Global Healthcare Master Fund <sup>(5)</sup>	1,393,439	6.3
Baker Bros. Advisors LP <sup>(6)</sup>	1,387,872	6.3
Directors and Named Executive Officers:		
Anthony G. Quinn, M.B Ch.B, Ph.D. <sup>(7)</sup>	263,931	1.2
Charles N. York II <sup>(8)</sup>	207,171	*
James Wooldridge, M.D. <sup>(9)</sup>	61,038	*
George Georgiou, Ph.D. <sup>(10)</sup>	461,996	2.1
Armen Shanafelt, Ph.D. <sup>(11)</sup>	2,614,309	11.9