

**AEGLEA BIOTHERAPEUTICS, INC.**  
**CHARTER OF THE AUDIT COMMITTEE**  
**OF THE BOARD OF DIRECTORS**

**As adopted June 15, 2015**  
**(Effective as of April 6, 2016)**

**I. PURPOSE**

The purpose of the Audit Committee (the “*Committee*”) of the Board of Directors (the “*Board*”) of Aeglea BioTherapeutics, Inc. (the “*Company*”) is to assist the Board in fulfilling its oversight responsibilities relating to the Company’s financial accounting, reporting, and controls. The Committee’s principal functions are to:

- assist the Board in its oversight of the Company’s accounting and financial reporting processes, including its audits and the integrity of the Company’s financial statements;
- assist the Board in its oversight of compliance by the Company with legal and regulatory requirements;
- assist the Board in its determination of the qualifications, independence and performance of the Company’s independent registered public accounting firm (the “*Independent Auditors*”); and
- prepare and execute the committee report as required by the rules of the Securities and Exchange Commission (the “*Commission*”) to be included in the Company’s annual proxy statement.

This charter (the “*Charter*”) sets forth the authority and responsibility of the Committee in fulfilling its purpose. While the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company’s financial statements are complete and accurate and are in accordance with generally accepted accounting principles. This is the responsibility of the Company’s management and the Independent Auditors.

**II. MEMBERSHIP**

The Committee will consist of three or more members of the Board, with the exact number determined by the Board. Each member of the Committee will:

- be an “independent director” as defined under the applicable rules, regulations and listing requirements of The NASDAQ Stock Market, as amended from time to time (the “*Exchange Rules*”), except as may otherwise be permitted by the Exchange Rules;
- be “independent” as defined in Section 10A(m) of the Securities Exchange Act of 1934, as amended (the “*Exchange Act*”) and Rule 10A-3 and any other rules and regulations promulgated by the Commission under the Exchange Act (the “*Commission Rules*”), except as may otherwise be permitted by the Commission Rules;
- not have participated in the preparation of the financial statements of the Company or any current subsidiary of the Company at any time during the past three years;

- have the ability to read and understand fundamental financial statements and meet the financial sophistication and experience requirements of the Exchange Act, the Commission Rules and the Exchange Rules;
- be free from any relationship that, in the opinion of the Board, would interfere with the exercise of independent judgment as a Committee member; and
- meet any other requirements imposed by applicable law, regulations or rules, subject to any applicable exemptions and transition provisions.

In addition, at least one member of the Committee will have prior experience in accounting, financial management or financial oversight, as required by the Exchange Rules, and be an “audit committee financial expert” as defined in Item 407 of Regulation S-K promulgated by the Commission.

All members of the Committee will be appointed by, and will serve at the discretion of, the Board. The Board may appoint a member of the Committee to serve as the chairperson of the Committee (the “*Chair*”). If the Board does not appoint a Chair, the Committee members may designate a Chair by their majority vote. The Chair will set the agenda for Committee meetings and conduct the proceedings of those meetings.

### **III. RESPONSIBILITIES AND DUTIES**

The principal responsibilities and duties of the Committee in serving the purposes outlined in Section I of this Charter are set forth below. These duties are set forth as a guide, with the understanding that the Committee will carry them out in a manner that is appropriate given the Company’s needs and circumstances. The Committee may engage in such other activities, and establish such policies and procedures, from time to time as it deems necessary or advisable in implementing this Charter and fulfilling its responsibilities.

The Committee will:

#### **Financial Statements and Disclosures**

1. Review and discuss with management the Company’s quarterly and annual financial results and the related earnings press release prior to distribution to the public.
2. Review the Company’s quarterly and annual financial statements.
3. In connection with the Committee’s review of the annual financial statements:
  - discuss the financial statements and the results of the Independent Auditors’ audit of the financial statements with the Independent Auditors, any internal audit department and management;
  - discuss any items required to be communicated by the Independent Auditors in accordance with the applicable requirements of the Public Company Accounting Oversight Board (the “*PCAOB*”);

- discuss with the Company’s management and the Independent Auditors the Company’s selection, application and disclosure of critical accounting policies and practices;
  - review the Company’s specific disclosures under “Management’s Discussion and Analysis of Financial Condition and Results of Operations;” and
  - recommend to the Board whether the annual financial statements should be included in the Company’s Annual Report on Form 10-K.
4. In connection with the Committee’s review of the quarterly financial statements:
- discuss with the Independent Auditors and the Company’s management the quarterly financial statements and the results of the Independent Auditors’ SAS No. 100, *Interim Financial Information* (Codification of Statements on Auditing Standards, AU § 722), or similar, review of the quarterly financial statements;
  - discuss significant issues, events and transactions and any significant changes regarding accounting principles, practices, policies, judgments or estimates with the Company’s management and the Independent Auditors; and
  - review the Company’s specific disclosures under “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”
5. Discuss on a general basis the type of information to be disclosed and type of presentation to be made regarding financial information and earnings guidance to analysts and rating agencies.
6. As a Committee and with the Independent Auditors, review any major issues regarding accounting principles, presentation of financial statements, the Company's internal control over financial reporting, the effect of alternative generally accepted accounting principle methods, the impact of any regulatory or accounting initiatives or off-balance sheet arrangements, and any other audit difficulties or problems, including management’s response to such issues.
7. Resolve any disagreements between management and the Independent Auditors regarding financial reporting.

**Internal Controls**

8. Periodically discuss with the Company’s principal accounting officer and principal legal counsel the function of the Company’s disclosure controls and procedures and any disclosure committee that may be established by the Company. Discuss with the Company’s Chief Executive Officer and Chief Financial Officer their conclusions regarding the effectiveness of the Company’s disclosure controls and procedures.
9. Review and discuss with the Independent Auditors and the Company’s management their periodic reviews of the adequacy of the Company’s accounting and financial reporting processes and systems of internal control, including any control deficiencies, significant deficiencies or material weaknesses in their design or operation.

10. Review any fraud involving management or any employee of the Company with a significant role in the Company's internal controls over financial reporting that are disclosed to the Committee.

11. Discuss any comments or recommendations of the Independent Auditors outlined in their annual management letter, internal control reports or other required communications. If appropriate, approve a schedule for implementing any recommended changes and monitor compliance with the schedule.

12. Periodically consult with the Independent Auditors out of the presence of the Company's management about internal controls, the fullness and accuracy of the Company's financial statements and any other matters that the Committee or the Independent Auditors believe should be discussed privately with the Committee.

13. Meet separately, periodically, with management and with internal auditors (or other personnel responsible for the internal audit function).

14. Review with management the Company's major financial risk exposures and the steps management has taken to monitor such exposures, including the Company's procedures and any related policies, with respect to risk assessment and risk management.

15. Establish procedures for the review of any complaints and submissions that have been received under the Company's Whistleblower and Complaint Policy, Code of Conduct and Ethics or other compliance policies, including the current status and the resolution if one has been reached, and retain authority to determine the appropriate response and remedy.

16. Consider the establishment, and oversee the design, implementation and activities, of any internal audit function within the Company.

### **Independent Auditors**

17. Be directly responsible for the appointment, compensation, retention and oversight of the work of the Independent Auditors. The Independent Auditors will report directly to the Committee.

18. Review the continuing independence of the Independent Auditors, including:

- obtaining and reviewing, on an annual basis, a formal written statement from the Independent Auditors describing all relationships between the Independent Auditors and the Company required to be disclosed by applicable requirements of the PCAOB;
- reviewing and discussing with the Independent Auditors their objectivity and independence, including the nature and scope of any such relationships; and
- taking, or recommending that the Board take, appropriate action to oversee the independence of the Independent Auditors, including discontinuing any relationships that the Committee believes compromise the independence of the Independent Auditors.

19. Set hiring policies for the Company's hiring of employees or former employees of the Independent Auditors, as required by regulations and by applicable listing standards.

20. Review the Independent Auditors' audit planning, scope and staffing.

21. Approve the fees and other compensation to be paid to the Independent Auditors. The Committee may establish pre-approval policies and procedures, as permitted by the Exchange Rules, Commission Rules and applicable law, for the engagement of the Independent Auditors to render services to the Company.

22. Review and discuss the reports delivered by the Independent Auditors regarding the following: (a) critical accounting policies, estimates and practices used; (b) alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, the ramifications of the alternatives, and the treatment preferred by the Independent Auditors; and (c) other material written communications between the Independent Auditors and the Company's management.

23. Conduct an annual review of the Independent Auditor's report describing its internal quality-control procedures, any material issues raised within the preceding five years respecting one or more independent audits carried out by the firm and any steps taken to deal with any such issues, and (to assess the auditor's independence) all relationships between the Independent Auditor and the Company.

### **General**

24. On a regular basis, review the status of any legal matters that could have a significant impact on the Company's financial statements.

25. Annually prepare a report to the Company's stockholders for inclusion in the Company's annual proxy statement as required by the Commission Rules.

26. Review and approve any proposed transaction between the Company and any related party (other than transactions that are subject to review by another independent body of the Board), as defined by applicable law, the Commission Rules and the Exchange Rules.

27. Perform any other activities required by applicable law, rules or regulations, including the Commission Rules and the Exchange Rules, and take such other actions and perform and carry out any other responsibilities and duties delegated to it by the Board or as the Committee deems necessary or appropriate consistent with its purpose.

## **IV. STUDIES AND ADVISERS**

The Committee, in discharging its responsibilities, may conduct, direct, supervise or authorize studies of, or investigations into, any matter that the Committee deems appropriate, with full and unrestricted access to all books, records, documents, facilities and personnel of the Company. The Committee has the sole authority and right, at the expense of the Company, to retain and terminate legal and other consultants, accountants, experts and advisers of its choice to assist the Committee in connection with its functions, including any studies or investigations. The

Committee will have the sole authority to approve the fees and other retention terms of such advisers. The Company will provide for appropriate funding, as determined by the Committee, for

- payment of compensation to any legal and other consultants, accountants, experts and advisers retained by the Committee; and
- ordinary administrative expenses of the Committee that are necessary and appropriate in carrying out its functions.

## **V. MEETINGS, ACTIONS WITHOUT A MEETING AND STAFF**

Meetings of the Committee will be held at least once each quarter or more frequently, as determined appropriate by the Committee. The Chair, in consultation with the other member(s) of the Committee, will set the dates, times and places of such meetings. The Chair or any other member of the Committee may call meetings of the Committee by notice in accordance with the Company's Bylaws. A quorum of the Committee for the transaction of business will be a majority of its members. Meetings may be held via telephonic or video conference. The Committee also may act by unanimous written consent in lieu of a meeting in accordance with the Company's Bylaws. Subject to the requirements of this Charter, applicable law, the Exchange Rules and the Commission Rules, the Committee and the Chair may invite any director, executive or employee of the Company, or such other person, as it deems appropriate in order to carry out its responsibilities, to attend and participate (in a non-voting capacity) in all or a portion of any Committee meeting. The Committee may exclude from all or a portion of its meetings any person it deems appropriate in order to carry out its responsibilities. The Chair will designate a secretary for each meeting, who need not be a member of the Committee. The Secretary of the Company will provide the Committee such staff support as it may require.

## **VI. MINUTES AND REPORTS**

The Committee will maintain written minutes of its meetings and copies of its actions by written consent, and will cause such minutes and copies of written consents to be filed with the minutes of the meetings of the Board. The Chair will report to the Board from time to time with respect to the activities of the Committee, including on significant matters related to the Committee's responsibilities and the Committee's deliberations and actions. The minutes of the Committee and actions by the unanimous written consent of the Committee members will be made available to the other members of the Board.

## **VII. COMPENSATION**

Members of the Committee will receive such fees, if any, for their service as Committee members as may be determined by the Board, which may include additional compensation for the Chair. Such fees may include retainers or per meeting fees and will be paid in such form of consideration as is determined by the Board in accordance with applicable law, the Exchange Rules and the Commission Rules.

## **VIII. REVIEW OF COMMITTEE COMPOSITION, PERFORMANCE AND CHARTER**

The Committee will evaluate the Committee's composition and performance on an annual basis and submit a report to the Board. The Committee will also review and reassess the adequacy

of this Charter periodically (at least annually), and recommend to the Board any changes the Committee determines are appropriate.

## **IX. PUBLICATION**

The Company will make this Charter freely available to stockholders on request and, provided that the Company is subject to the periodic reporting requirements of the Exchange Act, will publish it on the Company's website.