

SIENNA BIOPHARMACEUTICALS, INC.

AUDIT COMMITTEE CHARTER

This Audit Committee Charter (this “Charter”) was adopted by the Board of Directors (the “Board”) of Sienna Biopharmaceuticals, Inc., a Delaware corporation (the “Company”), on June 14, 2017, effective upon the consummation of the Company’s initial public offering.

I. Purpose

The purpose of the Audit Committee (the “Committee”) is to oversee the accounting and financial reporting processes of the Company and the audits of the financial statements of the Company.

The Committee’s responsibilities are limited to oversight. The Company’s management is responsible for establishing and maintaining accounting policies and procedures in accordance with generally accepted accounting principles (“GAAP”) and other applicable reporting and disclosure standards and for preparing the Company’s financial statements. The Company’s independent auditors are responsible for auditing and reviewing those financial statements. Each member of the Committee is entitled to rely on the integrity of those persons within the Company and from the professionals and experts from which the Committee receives information and, absent actual knowledge to the contrary, the accuracy of the financial and other information provided to the Committee by such persons, professionals or experts.

In addition to the powers and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities delegated to it by the Board from time to time consistent with the Company’s bylaws (as in effect from time to time) and applicable law. The powers and responsibilities delegated by the Board to the Committee in this Charter or otherwise shall be exercised and carried out by the Committee as it deems appropriate without requirement of Board approval. While acting within the scope of the powers and responsibilities delegated to it, the Committee shall have and may exercise all the powers and authority of the Board.

II. Composition

The Committee must consist of at least three directors, subject to any available exception. Each Committee member must satisfy the independence requirements of The NASDAQ Stock Market LLC (“NASDAQ”) and the more rigorous independence rules for members of the Audit Committee issued by the Securities and Exchange Commission (the “SEC”), subject to any available exception. Each Committee member must be able to read and understand fundamental financial statements, including a company’s balance sheet, income statement and cash flow statement. In addition, at least one member of the Committee must be a financial expert as defined under SEC rules.

The members of the Committee shall be appointed by the Board. Committee members may be removed from the Committee, with or without cause, by the Board. Unless a Chair is designated by the Board, the Committee may designate a Chair by majority vote of the full Committee membership.

III. Meetings, Procedures and Authority

The Committee must meet at least once during each fiscal quarter.

The Chair (or in his or her absence, a member designated by the Chair) shall preside at each meeting of the Committee and set the agendas for Committee meetings. The Committee shall have the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any provisions of the Company's bylaws that are applicable to the Committee.

The Committee should meet as often as it determines advisable to fulfill its duties and responsibilities. Meetings of the Committee may be called by the Chair upon notice given at least twenty-four (24) hours prior to the meeting, or upon such shorter notice as shall be approved by the Committee. The Chair shall designate a secretary for each meeting who shall record minutes of all formal actions of the Committee. A majority of the Committee members, present in person or by phone, shall constitute a quorum. A majority of the members present shall decide any questions brought before the Committee, except to the extent otherwise required by the Company's certificate of incorporation or bylaws (each as in effect from time to time). Unless otherwise restricted by the Company's bylaws, any action required or permitted to be taken at any meeting of the Committee may be taken without a meeting if all members of the Committee consent thereto in writing (including by electronic transmission), and such writing (including any electronic transmission) is filed with the minutes of the Committee.

The Committee shall keep regular minutes of any meetings where actions are taken (unless such actions are taken and reported to the Committee's satisfaction in the minutes of the Board meetings). Any such minutes kept by the Committee shall be distributed to each member of the Committee. The Secretary of the Company shall maintain the original signed minutes for filing with the corporate records of the Company. The Chair shall report to the Board regarding the activities of the Committee at appropriate times and as otherwise requested by the Chairperson of the Board.

The Committee may retain any independent counsel, experts or advisors that the Committee believes to be necessary or appropriate. The Company must provide for appropriate funding, as determined by the Committee, for payment of compensation to the independent auditor for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, for payment of compensation to any advisors employed by the Committee and for payment of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

The Committee may conduct or authorize investigations into any matters within the scope of the duties and responsibilities delegated to the Committee.

IV. Duties and Responsibilities

Interaction with the Independent Auditor

1. *Appointment and Oversight.* The Committee is directly responsible for the appointment, compensation, retention and oversight of the work of the independent auditor

(including resolution of any disagreements between Company management and the independent auditor regarding financial reporting) and any other registered public accounting firm engaged for the purpose of preparing or issuing an audit report or related work or performing other audit, review or attest services for the Company, and the independent auditor and each such other registered public accounting firm must report directly to the Committee. The Committee, or the Chair of the Committee, must pre-approve any audit and non-audit service provided to the Company by the independent auditor, unless the engagement is entered into pursuant to appropriate preapproval policies established by the Committee or if such service falls within available exceptions under SEC rules.

2. *Annual Report on Independence.* The Committee must ensure that the independent auditor prepares and delivers, at least annually, a written statement delineating all relationships between the independent auditor and the Company, must actively engage in a dialogue with the independent auditor with respect to any disclosed relationships or services that, in the view of the Committee, may impact the objectivity and independence of the independent auditor, and, if the Committee determines that further inquiry is advisable, must take appropriate action in response to the independent auditor's report to satisfy itself of the auditor's independence.

Annual Financial Statements and Annual Audit

3. *Form 10-K Review.* The Committee must review and discuss the annual audited financial statements with management, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

4. *Audit Committee Report.* The Committee must provide the Company with the report of the Committee with respect to the audited financial statements for inclusion in each of the Company's annual proxy statements.

Quarterly Financial Statements

5. *Form 10-Q Review.* The Committee should review and discuss the quarterly financial statements with management, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Other Duties and Responsibilities

6. *Review of Earnings Releases.* The Committee should discuss the Company's earnings press releases, as well as financial information and earnings guidance provided to analysts and rating agencies.

7. *Risk Assessment and Risk Management.* The Committee should discuss the Company's policies with respect to risk assessment and risk management.

8. *Complaint Procedures.* The Committee must establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and for the confidential and anonymous submission by Company employees of concerns regarding questionable accounting or auditing matters.

9. *Reports to the Board of Directors.* The Committee must report regularly to the Board regarding the activities of the Committee.

10. *Committee Self-Evaluation.* The Committee shall, at least annually and with input from the Nominating and Corporate Governance Committee of the Board (the “Nominating and Corporate Governance Committee”) if deemed appropriate, perform an evaluation of the performance of the Committee and its members, including a review of the Committee’s compliance with this Charter, and provide any written material with respect to such evaluation to the Board or the Nominating and Corporate Governance Committee, as appropriate, including any recommendations for changes in procedures or policies governing the Committee.

11. *Review of this Charter.* The Committee shall, at least annually and with input from the Nominating and Corporate Governance Committee if deemed appropriate, review and reassess this Charter and submit any recommended changes to the Board for its consideration.

V. Delegation of Duties

In fulfilling its responsibilities, the Committee is entitled to delegate any or all of its responsibilities to a subcommittee of the Committee.