

**DICERNA PHARMACEUTICALS, INC.
CHARTER OF THE AUDIT COMMITTEE OF
THE BOARD OF DIRECTORS**

This Charter governs the operations of the Audit Committee (the “*Committee*”) of the Board of Directors of Dicerna Pharmaceuticals, Inc., a Delaware corporation (the “*Company*”). The Committee shall review and reassess the adequacy of the Charter annually or at such other times as the Committee deems appropriate and recommend any proposed changes to the Board of Directors of the Company (the “*Board*”) for approval.

COMPOSITION OF THE COMMITTEE

The Board shall appoint members and the chairperson of the Committee (the “*Chairperson*”). The Committee shall be comprised of at least three (3) directors who shall satisfy the independence and financial literacy requirements established by applicable law, rules and regulations of the Securities and Exchange Commission (“*SEC*”) and the rules of the Nasdaq Stock Market (“*Nasdaq*”). All Committee members shall have a working familiarity with basic finance or accounting practices and be able to read and understand financial statements. Additionally, at least one member of the Committee shall be an “audit committee financial expert” as defined under Regulation S-K promulgated under the Securities Exchange Act of 1934, as amended.

STATEMENT OF POLICY

The Committee shall act on behalf of the Board in fulfilling the Board’s oversight responsibility to the stockholders, potential stockholders and the investment community relating to the Company’s financial statements, financial reporting process, systems of internal accounting and financial controls and applicable financial risk assessment and financial risk management processes, the annual independent audit of the Company’s financial statements and the qualifications, the independence and performance of the certified public accountants engaged as the Company’s outside auditors.

In so doing, it is the responsibility of the Committee to maintain free and open communication between the Committee, the Company’s independent auditors and the Company’s management. In discharging its oversight role, the Committee is empowered to investigate at the Company’s expense any matter brought to its attention with full access to all books, records, facilities, and personnel of the Company.

The operation of the Committee shall be subject to the Bylaws of the Company as in effect from time to time and Section 141 of the Delaware General Corporation Law.

RESPONSIBILITIES AND PROCESSES

The primary responsibility of the Committee is to oversee the Company’s financial reporting process (including direct oversight of the auditors) on behalf of the Board and report these activities to the Board. Management is responsible for preparing the Company’s financial statements, and the independent auditors are responsible for auditing those financial statements.

The Committee's policies and procedures should remain flexible, in order to best react to changing conditions and circumstances. The Committee should take the appropriate actions based on the information it receives, such as financial statements and audits, to assure the stockholders and the Board that the Company maintains high quality financial reporting, sound financial risk practices, and ethical behavior relating to accounting, internal accounting controls, auditing matters and financial disclosure and reporting.

To the extent the Committee believes appropriate based upon its periodic review thereof, the following shall be the principal recurring processes of the Committee in carrying out its oversight responsibilities. The processes are set forth as a guide with the understanding that the Committee may supplement or, except as otherwise required by applicable laws, rules and regulations, deviate from them as appropriate. The Committee shall:

1. Evaluate the performance of the independent auditors, assess their qualifications, determine whether to retain or to terminate the existing auditors or to appoint and engage new independent auditors for the ensuing year. The Committee shall have the sole and exclusive authority with respect to such matters and the oversight of the independent auditors as a whole, and the independent auditors shall report directly to the Committee.
2. Review and determine the engagement of the independent auditors, including the overall scope and plans for their respective audits, the adequacy of staffing and compensation. Negotiate and execute, on behalf of the Company, any engagement letters with the Company's independent auditors with respect to such engagement, which actions may be pursuant to preapproval policies and procedures, including the delegation of preapproval authority to one or more Committee members so long as any such preapproval decisions are presented to the full Committee at the next scheduled meeting.
3. Establish guidelines and procedures with respect to the rotation of the lead (or coordinating) audit partners (having primary responsibility for the audit) and the audit partner responsible for reviewing the audit in accordance with applicable law and SEC and Nasdaq regulations (including regulations with respect to the independence of the independent auditors) and confirm that the independent auditors are in compliance with such policies.
4. Review and approve the retention of the independent auditors for any permissible non-audit services in accordance with applicable law and SEC and Nasdaq regulations and the fees or other compensation for such services (such approval may be delegated to one or more Committee members, provided that all approvals of permissible non-audit services pursuant to this delegated authority be presented to the full Committee at its next meeting).
5. At least annually, obtain and review a formal written statement prepared by the independent auditor delineating all relationships between the independent auditor and the Company, consistent with Rule 3526 of the Public Company Accounting Oversight Board ("*PCAOB*"), discuss with the independent auditors and review the auditors' independence from management and the Company, including the provision of non-audit services, past employment by the independent auditors of current or prospective Company personnel,

the matters included in the written disclosures required by the Independence Standards Board and other relationships or services that could affect the objectivity of the independent auditors, and assess and otherwise take, or recommend that the Board take, appropriate action to oversee the independence of the independent auditors.

6. Review with the independent auditors any management or internal control letter issued or, to the extent practicable, proposed to be issued by the independent auditors and management's response, if any, to such letter, as well as additional material written communications between the independent auditors and management.
7. Review with management and the independent auditors the scope, adequacy and effectiveness of the Company's financial reporting controls, including analysis reports prepared by management and the independent auditors of significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements, including any special audit steps taken in the event of material control deficiencies, and an analysis of the effect of alternative GAAP methods on the Company's financial statements.
8. Review and discuss with management, any internal auditor, and the independent auditors, as appropriate, the Company's major financial risks, the Company's policies for assessment and management of such risks, and the steps to be taken to control such risks. Provide oversight to the Company regarding such risks, which may include the areas of finance, internal audit or other risks as the Committee deems appropriate
9. Establish (at such time as legally required) and maintain procedures for the receipt, retention and treatment of complaints received by the Company (whether initiated by employees of the Company or third parties) with respect to accounting, internal accounting controls or auditing matters, which shall include procedures for the confidential and anonymous submission by employees of concerns regarding accounting or auditing matters.
10. Undertake the responsibility to investigate and resolve any disagreements between the Company's management and the independent auditors regarding the Company's financial reporting, accounting practices or accounting policies. Review with the independent auditor any other problems or difficulties regarding the preparation of financial statements or internal controls the independent auditor may have encountered during the course of the audit work, including any restrictions on the scope of audit activities or access to required information and any significant changes in the planned scope of the audit.
11. Meet at least once during each fiscal quarter and as deemed necessary by the Committee. In addition, meet not less than twice annually with senior management and the independent auditors in separate executive sessions. In connection with separate executive sessions held with the independent auditors, discuss matters relevant to the quality and integrity of the Company's financial reporting, the results of the independent auditors' examinations, engage in appropriate inquiry as to the independent auditors' evaluation of the Company's financial and accounting policies and controls and discuss

any other matter that the Committee, the independent auditors or management feel should be discussed in private.

12. Discuss with management and the independent auditors the results of the independent auditors' review of the Company's quarterly financial statements, prior to public disclosure or prior to the filing of the Company's Quarterly Report on Form 10-Q with the SEC. Such review shall include all matters required by applicable laws, rules and regulations to be discussed with the independent auditors prior to the filing of such report as well as such matters required to be communicated to the Committee by the independent auditors under the applicable requirements of the PCAOB and the SEC.
13. Review and discuss with management and the independent auditors the financial statements to be included in the Company's Annual Report on Form 10-K (or the annual report to stockholders if distributed prior to the filing of Form 10-K). Review and discuss with management and the independent auditors the results of the annual audit, including the auditors' judgment about accounting principles, any changes in accounting procedures, the reasonableness of significant judgments and estimates (including material changes in estimates), the clarity of the disclosures in the financial statements and any audit adjustments noted or proposed by the auditors (whether "passed" or implemented in the financial statements). Such review shall include all matters required by applicable laws, rules and regulations to be discussed with the independent auditors prior to the filing of such report as well as such matters required to be communicated to the Committee by the independent auditors under the applicable requirements of the PCAOB and SEC. Recommend to the Board whether, based on the discussion with management and the independent auditors, the financial statements should be included in the Company's Annual Report on Form 10-K.
14. Review and discuss with management and the independent auditors as appropriate, the Company's other disclosures contained in its periodic reports to be filed with the SEC, including disclosures under the captions "Management's Discussion and Analysis of Financial Condition and Results of Operations", "Risk Factors and "Business" (as applicable), in connection with assisting the Board in the review of such documents.
15. Review and discuss with management and the independent auditors any material financial arrangements of the Company which do not appear in the financial statements of the Company and any transactions or courses of dealing with parties related to the Company which transactions are material to the Company's financial statements (as required by applicable Nasdaq rules) or involve terms or other aspects that materially differ from those that would likely be negotiated with independent parties, and which arrangements or transactions are material to an understanding of the Company's financial statements.
16. Review with management and the independent auditors significant issues that arise regarding accounting principles and financial statement presentation, including the adoption of new, or material changes to, existing critical accounting policies or to the application of those policies, the potential effect of alternative accounting policies available under GAAP, the potential impact of regulatory and accounting initiatives and

other matters required by applicable laws, rules and regulations to be communicated by the independent auditors to the Committee or which represent significant reporting issues or judgments.

17. Discuss with management and the independent auditors any correspondence from or with regulators or governmental agencies, any employee complaints or any published reports that raise material issues regarding the Company's financial statements, financial reporting process or accounting policies.
18. Review the Company's investment policy for its cash reserves.
19. Review the Company's financial fraud monitoring practices and procedures, including the maintenance and monitoring of a whistleblower hotline.
20. Submit the minutes of all meetings of the Committee to, or discuss the matters discussed at each Committee meeting with, the Board.
21. Investigate any matter brought to the Committee's attention that is within the scope of the Committee's charter.
22. Prepare a report for inclusion in the Company's annual report or proxy statement that describes the Committee's composition and responsibilities and how those responsibilities were discharged.
23. Review with management, the independent auditors, and the Company's counsel, as appropriate, any legal or regulatory matters that may have a material impact on the financial statements, related compliance policies, including the Company's Insider Trading Policy, and programs and reports received from financial regulators.
24. Establish policies governing, or otherwise determine the appropriateness of, the hiring by the Company of any current or former employee of the Company's independent auditor.
25. Review and approve in advance any proposed related-party transactions consistent with the Related Party Transactions Policy and report to the Board on any approved transactions. If advance approval of any related-party transaction is not feasible, then the transaction shall be considered and, if the Committee determines it to be appropriate, ratified at the Committee's next regularly scheduled meeting.
26. Perform such other functions and have such powers as may be necessary or appropriate in the efficient and lawful discharge of the foregoing.

AUTHORITY

The Committee shall have the authority to retain special legal, accounting or other consultants to advise the Committee as it deems necessary, at the Company's expense, to carry out its duties and to determine the compensation of any such advisors. The Committee shall have the authority to require any officer or employee of the Company or outside counsel or independent auditor to attend a meeting of the Committee or meet with its counsel or advisors.

The Committee shall have the authority to exclude any person from its meetings who is not a member of the Committee as it deems appropriate.

The Committee shall also have the authority to determine the appropriate funding to be provided by the Company for payment of ordinary administrative expenses of the Committee necessary or appropriate in carrying out the duties of the Committee.

While the Committee has the responsibilities and powers set forth in this Charter, the Committee does not itself prepare financial statements or perform audits and its members are not auditors or certifiers of the Company's financial statements. The Committee may act in reliance on management, the Company's independent auditor and any other advisors and experts as it deems necessary or appropriate. The Committee shall have the authority to delegate any of its functions to a subcommittee thereof to the extent permitted by applicable law.

MINUTES AND REPORTS

Minutes of each meeting will be kept and distributed to each member of the Committee, each member of the Board who is not a member of the Committee and the Secretary of the Company. The Chairperson will report to the Board from time to time or whenever so requested by the Board.