LEXICON PHARMACEUTICALS, INC.

AUDIT COMMITTEE CHARTER

General Purpose

The Audit Committee (the "Committee") of the Board of Directors (the "Board") of Lexicon Pharmaceuticals, Inc. (the "Company") is appointed by the Board to oversee the accounting and financial reporting processes of the Company and the audits of the Company's financial statements. In that regard, the Committee assists the Board in monitoring (a) the integrity of the financial statements of the Company, (b) the independent auditor's qualifications and independence, (c) the performance of the Company's independent auditors and (d) the compliance by the Company with legal and regulatory requirements.

Committee Membership

The Committee shall consist of no fewer than three members. Each member of the Committee shall meet the independence and experience requirements of The Nasdaq Stock Market, Inc. ("Nasdaq") (or any other exchange on which the Company's securities are listed) and the Securities Exchange Act of 1934, as amended, including all rules and regulations promulgated thereunder (the "Exchange Act"), subject to any applicable exceptions to such requirements.

All members of the Committee shall be able to read and understand fundamental financial statements. No member of the Committee shall have participated in the preparation of the financial statements of the Company in the past three years. At least one member of the Committee shall be an "audit committee financial expert" as defined by the rules of the Securities and Exchange Commission (the "Commission").

The members of the Committee and its chairman shall be appointed or replaced by the Board on the recommendation of the Corporate Governance Committee of the Board.

Meetings

The Committee (and any observers so designated by the Board) shall meet as often as necessary to carry out its responsibilities, but not less frequently than quarterly. The Committee chairman shall preside at each meeting. In the event the Committee chairman is not present at any meeting, the Committee members present at that meeting shall designate one of its members as acting chairman of such meeting.

The Committee (and any observers so designated by the Board) shall meet periodically with management and the independent auditor in separate executive sessions, and shall have such other direct and independent interaction with such persons from time to time as the Committee deems appropriate. The Committee may request any officer or employee of the Company or the Company's outside counsel or independent auditor to attend a meeting of the Committee or to meet with any members of, or advisors to, the Committee.

The Committee may keep record of all meetings and formal actions by final minutes and resolutions to the extent the Committee deems appropriate, except as to Item 21 under Authorities and Responsibilities below, for which the Committee must document all meetings and formal actions by final minutes and resolutions.

Committee Authority and Responsibilities

The Committee may form and delegate authority to subcommittees consisting of one or more members, as it deems appropriate, including the authority to grant preapprovals of audit and permitted non-audit services, provided that decisions of such subcommittee shall be presented to the full Committee at its next scheduled meeting.

The Committee shall have the sole authority to appoint and replace the Company's independent auditor (subject, if applicable, to shareholder ratification), approve the fees and other terms and conditions relating to such appointment and oversee the independent auditor's activities (including resolution of disagreements between management and the independent auditor regarding financial reporting) relating to the preparation or issuance of an audit report or related activities. The independent auditor shall report directly to the Committee.

The Committee shall have the authority, to the extent it deems necessary or appropriate, to retain and terminate independent legal, accounting or other advisors and to approve the fees and other terms and conditions relating to any such retention.

The Company shall provide for appropriate funding, as determined by the Committee, for payment of compensation to the independent auditor for the purpose of rendering or issuing an audit report and performing other audit, review or attest services for the Company, and to any advisors retained by the Committee.

In carrying out its duties, the Committee relies upon management and the independent auditor to provide relevant information and raise appropriate issues and concerns on a timely basis.

The Committee, to the extent it deems necessary or appropriate, shall:

Financial Statement and Disclosure Matters

- 1. Review and discuss with management and the independent auditor the annual audited financial statements, including disclosures made in management's discussion and analysis, and recommend to the Board whether the audited financial statements should be included in the Company's Form 10-K.
- 2. Review and discuss with management and the independent auditor the Company's quarterly financial statements prior to the filing of its Form 10-Q, including the results of the independent auditor's review of the quarterly financial statements.
- 3. Review and approve the annual Audit Committee Report for inclusion in the Company's annual proxy statement in compliance with the Exchange Act.
- 4. Review and discuss with management and the independent auditor any significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements, including any significant changes in the Company's selection or application of accounting principles.
- 5. Review and discuss with management and the independent auditor any significant issues as to the adequacy of the Company's internal controls, any special steps adopted in light of material control deficiencies and the adequacy of disclosures about changes in internal control over financial reporting.

- 6. Review and discuss quarterly reports from the independent auditor on:
 - (a) all critical accounting policies and practices to be used;
- (b) all alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditor; and
- (c) other material written communications between the independent auditor and management, such as any management letter or schedule of unadjusted differences.
- 7. Discuss with management the Company's earnings press releases, including the use of "pro forma" or "adjusted" non-GAAP information.
- 8. Discuss with management and the independent auditor the selection and application of accounting principles for the Company's significant transactions.
- 9. Discuss with management and the independent auditor the effect of financial, regulatory and accounting initiatives as well as off-balance sheet structures on the Company's financial statements.
- 10. Discuss with management the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures, including the Company's risk assessment and risk management policies.
- 11. Discuss with the independent auditor the matters required to be discussed by PCAOB Auditing Standard No. 16 relating to the conduct of the audit, including any difficulties encountered in the course of the audit work, any restrictions on the scope of activities or access to requested information, and any significant disagreements with management.
- 12. Review disclosures made to the Committee by the Company's principal executive officer and principal financial officer during their certification process for the Form 10-K and Form 10-Q about any significant deficiencies in the design or operation of internal controls or material weaknesses therein and any fraud involving management or other employees who have a significant role in the Company's internal controls.

Oversight of the Company's Relationship with the Independent Auditor

- 13. Review and evaluate the lead partner of the independent auditor team.
- 14. Obtain and review a report from the independent auditor at least annually regarding (a) the independent auditor's internal quality-control procedures, (b) any material issues raised by the most recent internal quality-control review, or peer review, of the independent auditor, or by any inquiry or investigation by governmental or professional authorities within the preceding five years respecting one or more independent audits carried out by the independent auditor and (c) any steps taken to address any such issues. Evaluate the qualifications, performance and independence of the independent auditor, including the consideration of whether the independent auditor's quality controls are adequate and the provision of permitted non-audit services is compatible with maintaining the auditor's independence, in each case taking into

account the opinions of management. The Committee shall present its conclusions with respect to the independent auditor to the Board.

- 15. Obtain from the independent auditor a formal written statement describing all relationships between the independent auditor and the Company and engage in discussions with the independent auditor with respect to any disclosed relationships or services that may impact the objectivity and independence of the independent auditor.
- 16. Ensure the proper rotation of the lead audit partner having primary responsibility for the audit and the audit partner responsible for reviewing the audit as required by law. Consider whether, in order to assure continuing auditor independence, it is appropriate to adopt a policy of rotating the independent auditing firm on a regular basis.
- 17. Meet with the independent auditor prior to the audit to discuss the planning and staffing of the audit.
- 18. Preapprove all auditing services, internal control-related services and permitted non-audit services (including the fees and terms thereof) to be performed for the Company by its independent auditor, subject to the de minimis exception for non-audit services described in Section 10A(i)(1)(B) of the Exchange Act that are approved by the Committee prior to the completion of the audit.

Compliance Oversight Responsibilities

- 19. Obtain from the independent auditor assurance that, in the course of conducting the audit, it has not detected or otherwise become aware of information indicating that any illegal act (whether or not having a material effect on the financial statements of the Company) has or may have occurred.
- 20. Obtain reports from management and the independent auditor that the Company and its subsidiary/foreign affiliated entities are in conformity with applicable legal requirements and the Company's internal policies. Advise the Board with respect to the Company's policies and procedures regarding compliance with applicable laws and regulations and with the Company's internal policies.
- 21. Review and oversee all related person transactions in accordance with the Company's Related Person Transaction Policy and Procedures.
- 22. Establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and the confidential, anonymous submission by employees of concerns regarding accounting or auditing matters.
- 23. Receive from and discuss with management and the independent auditor any correspondence with regulators or governmental agencies and any published reports that raise material issues regarding the Company's financial statements or accounting policies.
- 24. Discuss with the Company's General Counsel legal matters that may have a material impact on the financial statements or the Company's compliance policies.

In addition, the Committee shall make regular reports to the Board and shall review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board for its approval.

The Committee shall have such other authority and responsibilities as may be determined from time to time by the Board.

Limitation of Committee's Role

While the Committee has the authority and responsibilities set forth in this Charter, it is not the duty of the Committee to (a) plan or conduct audits, (b) determine that the Company's financial statements and disclosures are complete, accurate and fairly presented and are in accordance with generally accepted accounting principles and applicable rules and regulations or (c) assure compliance with the Company's internal controls and policies. These are the responsibilities of management or the independent auditor.