

**AUDIT COMMITTEE CHARTER
OF
CORTEX PHARMACEUTICALS, INC.
(As Revised November 2009)**

The Purpose of the Audit Committee

The purpose of the Audit Committee is to oversee the accounting and financial reporting processes of the company and the audits of the company's financial statements. Management is responsible for (a) the preparation, presentation and integrity of the company's financial statements; (b) accounting and financial reporting principles; and (c) the company's internal control over financial reporting and disclosure controls and procedures designed to promote compliance with accounting standards and applicable laws and regulations. The company's independent auditing firm is responsible for performing an independent audit of the consolidated financial statements in accordance with generally accepted auditing standards.

The Audit Committee members are not professional accountants or auditors and their functions are not intended to duplicate or to certify the activities of management and the independent auditor. The Audit Committee serves a board level oversight role where it oversees the relationship with the independent auditor, as set forth in this charter, and provides advice, counsel and general direction, as it deems appropriate, to management and the auditors on the basis of the information it receives, discussions with the auditor, and the experience of the Audit Committee's members in business, financial and accounting matters.

Membership

The Audit Committee shall be comprised of at least three directors determined by the Board of Directors to meet the independence requirements of Sections 803A and 803B(2) of The NYSE Amex (the "NYSEA") Company Guide and Rule 10A-3 promulgated under the Securities Exchange Act of 1934, as amended, each as amended from time to time. All members of the Audit Committee shall have a working familiarity with basic finance and accounting practices in accordance with the NYSEA requirements, including the ability to read and understand fundamental financial statements, and at least one member shall be an "Audit Committee Financial Expert" as defined in the rules promulgated by the Securities and Exchange Commission (the "Commission"), as amended from time to time. Appointment to the Audit Committee, including the designation of the Chair of the Audit Committee and the designation of any Audit Committee members as "Audit Committee Financial Experts" as determined by applicable federal laws, shall be made on an annual basis by the Board of Directors. If an Audit Committee Chair is not designated or present, the members of the Audit Committee may designate a Chair by a majority vote of the Audit Committee members.

Responsibilities

The Audit Committee shall:

- Be directly responsible for the appointment, retention, compensation, and oversight of the work of the independent auditor. The independent auditor shall report directly to the Audit Committee.

- Obtain and review annually a report by the independent auditor describing the firm’s internal control over financial reporting procedures; any material issues raised by the most recent internal control over financial reporting review or peer review 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 firm, and any steps taken to deal with any such issues.
- Oversee independence of the independent auditors by:
 - receiving from the independent auditors, on a periodic basis, a formal written statement delineating all relationships between the independent auditors and the company consistent with Independence Standards Board Standard 1;
 - reviewing, and actively discussing with the Board of Directors, if necessary, and the independent auditors, on a periodic basis, any disclosed relationships or services between the independent auditors and the company or any other disclosed relationships or services that may impact the objectivity and independence of the independent auditors; and
 - recommending, if necessary, that the Board of Directors take certain action to satisfy itself of the auditor’s independence.
- Review and discuss with the independent auditor: (a) its audit plans, and audit procedures, including the scope, fees and timing of the audit; (b) the results of the annual audit examination and accompanying management letters; and (c) the results of the independent auditor’s procedures with respect to interim periods.
- Review and discuss reports from the independent auditors on (a) all critical accounting policies and practices used by the company, (b) alternative accounting treatments within GAAP related to material items that have been discussed with management, including the ramifications of the use of the alternative treatments and the treatment preferred by the independent auditor, and (c) other material written communications between the independent auditor and management.
- Review with the independent auditor its judgments as to the quality, not just the acceptability, of the company’s accounting principles and such matters as are required to be discussed with the Audit Committee under generally accepted auditing standards.
- Ensure that the independent auditor completes its audit partner rotation in conformance with applicable law.
- Review and pre-approve all related-party transactions in accordance with NYSEA requirements.
- Discuss with management and the independent auditor quarterly earnings press releases, including any interim financial information included therein, reviews the year-end audited financial statements and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and, if deemed appropriate, recommend to the Board of Directors that the audited financial statements be included in the Annual Report on Form 10-K for the year.
- Review and discuss with management and the independent auditor various topics and events that may have significant financial impact on the company or that are the subject of discussions between management and the independent auditors.

- Review and discuss with management the company's major financial risk exposures and the steps management has taken to monitor and control such exposures.
- Pre-approve all audit and non-audit services provided to the company by the independent auditors (or subsequently approving non-audit services in those circumstances where a subsequent approval is necessary or permissible under the rules promulgated by the Commission). The Audit Committee may, at its discretion, establish written policies and procedures for the pre-approval of audit and non-audit service engagement arrangements, provided the policies are detailed as to the particular service, the Audit Committee is informed of each service and the policies do not delegate the Audit Committee's responsibilities to management.
- Review and discuss with management and the independent auditor: (a) the adequacy and effectiveness of the company's internal control over financial reporting (including any significant deficiencies and significant changes in internal control over financial reporting reported to the Audit Committee by the independent auditor or management); (b) the company's internal audit procedures; and (c) the adequacy and effectiveness of the company's disclosures controls and procedures, and management reports thereon.
- Review annually with the management the scope of the internal audit program, and review annually the performance of both the company's internal audit group and the independent auditor in executing their plans and meeting their objectives.
- Review the use of auditors other than the independent auditor in cases such as management's request for second opinions.
- Review matters related to the corporate compliance activities of the company, including the review of reports from any compliance committee or other related groups.
- Establish procedures for the receipt, retention and treatment of complaints received by the company regarding accounting, internal accounting controls and procedures, or auditing matters, and the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters.
- Establish policies for the hiring of employees and former employees of the independent auditor.
- Publish the report of the Audit Committee required by the rules of the Commission to be included in the company's annual proxy statement.
- When appropriate, designate one or more of its members to perform certain of its duties on its behalf, subject to such reporting to or ratification by the Audit Committee as the Audit Committee shall direct.
- Engage in an annual self-assessment with the goal of continuing improvement, and will annually review and reassess the adequacy of its charter, and recommend any changes to the Board of Directors.
- Have the sole authority to engage independent legal, accounting and other advisers, as it determines necessary to carry out its duties.

- Have the sole authority to determine appropriate funding for payment of (i) the compensation for any registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, (ii) the compensation for independent counsel and other advisors engaged by the Audit Committee from time to time and (iii) ordinary administrative expenses of the Audit Committee that are necessary or appropriate in carrying out its duties.
- Meet at least once per quarter at such times and places as the Audit Committee shall determine. The Audit Committee shall meet in executive sessions with the independent auditor and management periodically. The Chairman of the Audit Committee shall report on Audit Committee activities to the Board of Directors.

The Chairman of the Audit Committee is to be contacted directly by the company's outside legal counsel or the independent auditor (1) to review items of a sensitive nature that can impact the accuracy of financial reporting or (2) to discuss significant issues relative to the overall responsibility of the Board of Directors that have been communicated to management but, in their judgment, may warrant follow-up by the Audit Committee.

Compensation

Members of the Audit Committee shall receive such fees, if any, for their service as Audit Committee members as may be determined by the Board of Directors in its sole discretion. Such fees may include retainers or per meeting fees. Fees may be paid in such form of consideration as determined by the Board of Directors.

Members of the Audit Committee (and their family members) may not receive any compensation, including fees for professional services, from the company except the fees that they receive for service as a member of the Board of Directors or any committee thereof and reasonable expense reimbursement.