



Creating Tomorrow's Vaccines

**Amended and Restated
Audit Committee Charter
(As adopted August 4, 2014)**

Purpose

The primary purpose of the Audit Committee (the “Committee”) is to assist the Board of Directors (the “Board”) in fulfilling its responsibilities for oversight of: the Company’s accounting and financial reporting processes; the preparation, presentation and integrity of the financial reports and other financial information provided by the Company to any government or regulatory body, the public or other users thereof; the adequacy and efficacy of the Company’s systems of internal accounting, auditing and financial controls, the Company’s compliance with legal and regulatory requirements; the conduct, independence and qualifications of the Company’s outside auditor; and the performance of the annual independent audit of the Company’s financial statements.

In discharging its oversight role, the Committee is empowered to investigate any matter brought to its attention with full access to all books, records, facilities and personnel of the Company and to retain outside counsel, auditors, and other experts for this purpose.

The Committee shall review the adequacy of this Charter on an annual basis and recommend to the Board any necessary changes. The Committee shall also engage in an annual self-assessment with the goal of continuing improvement.

Membership

Each member of the Committee shall be appointed annually by the Board upon the recommendation of the Nominating and Corporate Governance Committee (the “Governance Committee”), and shall serve until the earlier of his or her resignation or removal or replacement by the Board in its discretion. Upon the recommendation of the Governance Committee, the Board shall designate one member of the Committee as Chairperson. Vacancies on the Committee shall be filled by the Board upon the recommendation of the Governance Committee. The Committee shall be comprised of not less than three members of the Board who possess the ability to read and understand the Company’s fundamental financial statements and are financially literate. Each member shall not have any relationship to the Company or its subsidiaries that may interfere with the exercise of his or her independent judgment. The Committee’s composition shall meet the director independence requirements of the U.S. Securities and Exchange Commission (the “SEC”) and The NASDAQ Stock Market, Inc. In addition, at least one member of the Committee shall be, in the judgment of the Board, an audit committee financial expert in accordance with the rules and regulations of the SEC.

Responsibilities and Duties

The Committee's job is generally one of oversight. It recognizes that the Company's management is responsible for preparing the Company's financial statements and that the outside auditor is responsible for auditing those financial statements. Consequently, in carrying out its oversight responsibilities, the Committee is not providing any expert or special assurance as to the Company's financial statements or any professional certification as to the outside auditor's work.

The following functions shall be the common recurring activities of the Committee in carrying out its oversight function. These functions are set forth as a guide with the understanding that the Committee may diverge from this guide as it deems appropriate.

Audits and the Relationship with the Outside Auditor

- Except as otherwise specified in this Charter, the Committee shall be directly responsible for the appointment, compensation, retention and oversight of the work of any registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company. The outside auditor and any other registered public accounting firm engaged by the Company shall report directly to the Committee.
- Annually, the Committee shall select the outside auditor. Factors considered in making the selection include the auditor's independence, effectiveness and fees. In particular, the Committee shall consider whether the outside auditor's quality controls are adequate and whether the provision of non-audit services by the outside auditor is compatible with maintaining the outside auditor's independence.
- In furtherance of the above, the Committee shall evaluate the performance of the outside auditor, and obtain and review written periodic reports (at least annually) from the outside auditor describing:
 - the outsider auditor's internal quality-control procedures;
 - any material issues raised by the most recent internal quality-control review, or peer review, of the outside auditor, or by any inquiry or investigation by governmental or professional authorities (including the Public Company Accounting Oversight Board), within the preceding five years respecting one or more of the independent audits carried out by the outside auditor; and
 - any steps taken to deal with such issues.
- The Committee shall adopt and implement procedures for the review and pre-approval of audit and permissible non-audit services by any registered public accounting firm, and

review and approve the fees and terms for all such services. The Committee delegates the authority to pre-approve audit and non-audit services between regularly scheduled meetings as follows:

- for specified services that exceed \$50,000, to the Chairman of the Committee or one or more of its designated members *provided* that such approvals are reported to the full Committee at its next meeting;
 - the Chief Financial Officer may engage accounting firms, other than the Company's named independent registered public accounting firm, to perform certain services capped at \$25,000 per engagement, which, in the best judgment of the Chief Financial Officer, would not create a conflict of interest or the appearance of a conflict of interest in the performance by such firms of any duties and responsibilities, and with the understanding that each such engagement shall be reviewed with and ratified by the Committee at its next scheduled meeting; and
 - the Chief Financial Officer may engage the Company's named independent registered public accounting firm to perform certain services capped at a cumulative amount of \$25,000 per year running from April 1 to the following March 31, which, in the best judgment of the Chief Financial Officer, would not create a conflict of interest or the appearance of a conflict of interest in the performance by such firm of any duties and responsibilities, and with the understanding that each such engagement shall be reviewed with and ratified by the Committee at its next scheduled meeting.
- The Committee shall, at least annually and more frequently as circumstances dictate:
 - obtain and review from the outside auditor a formal written statement delineating all relationships between the auditor and the Company consistent with Independence Standards Board Standard Number 1, as amended;
 - actively engage in a dialogue with the outside auditor with respect to any disclosed relationships or services and their impact on the outside auditor's objectivity and independence; and
 - if necessary, take (or recommend that the Board take) appropriate action to oversee the independence of the outside auditor.
 - The Committee shall review with the outside auditor any problems or difficulties encountered during the course of its audit work, any management letter provided by the auditor and the Company's response to such letter, and any disputes between management and the outside auditor. The Committee shall also obtain and review timely reports from the outside auditor with respect to material written communications between management and the auditor and related matters.
 - The Committee shall establish procedures for the Company regarding the hiring of employees or former employees of the outside auditor.

- The Committee may elect to meet with the outside auditor to review the planning of the audit, including the scope, staffing, locations, reliance on management, and general audit approach.

Financial Statements and Disclosures

- The Committee shall review with management and the outside auditor the audited 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 the Form 10-K) and the report thereon, and including any disclosures with respect thereto in *Management's Discussion and Analysis*, and review and consider with the outside auditor the matters required to be discussed by Statement of Auditing Standards ("SAS") No. 61. Such review shall take place prior to the publication of the annual audited financial statements, and the Committee shall make its recommendation to the Board with respect to their inclusion in the Company's Annual Report on Form 10-K or Annual Report to Stockholders, as appropriate.
- As a whole, or between meetings through the Committee chair, the Committee shall review with the outside auditor the Company's interim financial results to be included in the Company's quarterly reports to be filed with the SEC, and including any disclosures with respect thereto in *Management's Discussion and Analysis*, and the matters required to be discussed by SAS Nos. 61 and 71. Such review will occur prior to the Company's publication of the interim financial results.
- The Committee, as a whole, or between meetings through the Committee chair, shall review with management and the outside auditor the Company's earnings press releases prior to their release to the public, and periodically review and discuss the financial information and earnings guidance provided to analysts by the Company.
- The Committee shall discuss with management and the outside auditor any significant issues regarding the accounting principles, practices and judgments made in connection with the preparation of the Company's financial statements. In this regard, the Committee shall obtain and review a report from the outside auditor regarding all critical accounting policies and practices to be used in the Company's financial statements and any major changes thereto, all alternative treatments of financial information within GAAP that have been discussed with management, the ramifications of the use of such alternative disclosures and treatments and the treatment preferred by the outside auditor, and other material written communications between the outside auditor and management.
- The Committee shall review the Company's disclosure controls and procedures, and management's assessment thereof.
- As necessary, the Committee shall review with the outside auditor and management:

- significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements;
- the clarity of the financial disclosures made by the Company;
- potential changes in GAAP and other regulatory and accounting initiatives, and their effects on the Company's financial statements; and
- the effect of any off-balance sheet structures and aggregate contractual obligation on the Company's financial statements.

Internal Controls

- The Committee shall discuss with management and the outside auditor the quality, adequacy and effectiveness of the Company's accounting, financial and other internal controls and procedures, and elicit recommendations for both the improvement of existing controls and adoption of new controls.
- The Committee shall obtain from management and the outside auditor and review the disclosures made in connection with the certification process regarding the effectiveness of the Company's internal control structure and procedures for financial reporting, including all significant deficiencies and material weaknesses in the design and operation of internal control over financial reporting, any fraud (whether or not material) that involves management or other employees having a significant role in internal control over financial reporting, and all changes to internal control over financial reporting, including corrective actions, since the last report.

Compliance Oversight and Other Responsibilities

- The Committee shall establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls and auditing matters, and the confidential and anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.
- The Committee shall review with the Company's general and/or outside counsel legal matters that may have material impact on the financial statements, the Company's compliance with legal and regulatory requirements, and the Company's Code of Business Conduct and Ethics, and any material reports or inquiries received from, or correspondence with, regulators or governmental agencies.
- The Committee shall discuss with the outside auditor the annual review of the executive officers' and directors' expense accounts and perquisites. The Committee shall obtain from the outside auditor the reports required to be furnished under Section 10A of the Exchange Act of 1934, as amended, and any information with respect to illegal or improper acts in accordance therewith.

- The Committee shall review transactions between the Company, members of management, directors and associates and affiliates thereof, in accordance with the rules and regulations of NASDAQ.
- The Committee shall review and discuss guidelines and policies by which the Company undertakes risk assessment and risk management, and discuss with management the Company's major financial risk exposures and the steps taken or to be taken to monitor and control such exposures.

Authority

The Committee shall have the resources and authority necessary to discharge its duties and responsibilities, including the authority to engage independent counsel and other advisers as it determines necessary. The Committee shall determine, in its capacity as a committee of the Board, appropriate funding for payment of, among other things, compensation to any registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company, compensation to any advisers employed by the Committee, and ordinary administrative expenses of the Committee that are deemed necessary or appropriate in carrying out its duties. In discharging its oversight role, the Committee shall be empowered to investigate any matters brought to its attention.

Reports and Communications

The Committee shall prepare the annual report required by the rules of the SEC to be included in the Company's proxy statement relating to its annual stockholders' meeting. The Committee is expected to maintain free and open communications with the Company's outside auditor, internal audit personnel, and management.

Meetings

The Committee shall meet at least four times a year and at such other times as it deems necessary to fulfill its responsibilities. The Committee shall periodically meet separately, in executive session, with management, the outside auditor and the Company's internal audit personnel, and report (either as a Committee or through the Committee chair) regularly to the Board with respect to its activities.