

LEXICON GENETICS INCORPORATED

AUDIT COMMITTEE CHARTER

General Purpose

The Audit Committee of Lexicon Genetics Incorporated (the “Company”) is appointed by the Board of Directors of the Company (the “Board”) to assist the Board in monitoring (1) the integrity of the financial statements of the Company, (2) the independent auditor’s qualifications and independence, (3) the performance of the Company’s independent auditors and (4) the compliance by the Company with legal and regulatory requirements.

Committee Membership

The Audit Committee shall consist of no fewer than three members. The members of the Audit Committee shall meet the independence and experience requirements of The Nasdaq Stock Market, Inc. (or any other exchange on which the Company’s securities are listed) and the Securities Exchange Act of 1934, including all rules and regulations promulgated thereunder (the “Exchange Act”). At least one member of the Audit 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 Audit Committee shall be appointed or replaced by the Board on the recommendation of the Chairman of the Board.

Meetings

The Audit Committee shall meet as often as it determines, but not less frequently than quarterly. The Audit Committee shall meet periodically with management and the independent auditor in separate executive sessions. The Audit 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.

Committee Authority and Responsibilities

The Audit Committee shall have the sole authority to appoint or replace the independent auditor (subject, if applicable, to shareholder ratification). The Audit Committee shall be directly responsible for the determination of appropriate compensation and oversight of the work of the independent auditor (including resolution of disagreements between management and the independent auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work. The independent auditor shall report directly to the Audit Committee.

The Audit Committee shall preapprove all auditing 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 exceptions for non-audit services described in Section 10A(i)(1)(B) of the Exchange Act which are approved by the Audit Committee prior to the completion of the audit. The Audit Committee may form and delegate authority to subcommittees consisting of one or more members when appropriate, including the authority to grant preapprovals of audit and permitted non-audit services, provided that decisions of such subcommittee to grant preapprovals shall be presented to the full Audit Committee at its next scheduled meeting.

The Audit Committee shall have the authority, to the extent it deems necessary or appropriate, to retain independent legal, accounting or other advisors.

The Company shall provide for appropriate funding, as determined by the Audit Committee, for payment of compensation to the independent auditor for the purpose of rendering or issuing an audit report or related work and to any advisors retained by the Audit Committee.

The Audit Committee shall make regular reports to the Board and shall prepare the report required by the Exchange Act to be included in the Company's annual proxy statement. The Audit Committee shall review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board for its approval. The Audit Committee shall annually review the Audit Committee's own performance.

The Audit 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. Discuss with management and the independent auditor 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, any major issues as to the adequacy of the Company's internal controls and any special steps adopted in light of material control deficiencies.

4. Review and discuss quarterly reports from the independent auditors 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.

(c) Other material written communications between the independent auditor and management, such as any management letter or schedule of unadjusted differences.

5. Discuss with management the Company's earnings press releases, including the use of "pro forma" or "adjusted" non-GAAP information, as well as financial information and earnings guidance provided to analysts and rating agencies. Such discussion may be done generally (consisting of discussing the types of information to be disclosed and the types of presentations to be made).

6. Discuss with management and the independent auditor the selection and application of accounting principles for the Company's significant transactions.

7. 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.

8. 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.

9. Discuss with the independent auditor the matters required to be discussed by Statement on Auditing Standards No. 61 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.

10. Review disclosures made to the Audit Committee by the Company's CEO and CFO 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

11. Review and evaluate the lead partner of the independent auditor team.

12. 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 firm, 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, (c) any steps taken to deal with any such issues, and (d) all relationships between the independent auditor and the Company. Evaluate the qualifications, performance and independence of the independent auditor, including considering whether the auditor's quality controls are adequate and the provision of permitted non-audit services is compatible with maintaining the auditor's independence, taking into account the opinions of management. The Audit Committee shall present its conclusions with respect to the independent auditor to the Board.

13. Ensure the rotation of the audit partners 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.

14. Recommend to the Board policies for the Company's hiring of employees or former employees of the independent auditor who participated in any capacity in the audit of the Company.

15. Discuss with the national office of the independent auditor issues on which they were consulted by the Company's audit team and matters of audit quality and consistency.

16. Meet with the independent auditor prior to the audit to discuss the planning and staffing of the audit.

Compliance Oversight Responsibilities

17. Obtain from the independent auditor assurance that Section 10A(b) of the Exchange Act has not been implicated.

18. 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. Review reports and disclosures of insider and affiliated party transactions. 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.

19. 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 questionable accounting or auditing matters.

20. Discuss with management and the independent auditor any correspondence with regulators or governmental agencies and any published reports which raise material issues regarding the Company's financial statements or accounting policies.

21. 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.

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

Limitation of Audit Committee's Role

While the Audit Committee has the authority and responsibilities set forth in this Charter, it is not the duty of the Audit Committee to (1) plan or conduct audits, (2) 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 (3) assure compliance with the Company's internal controls and policies. These are the responsibilities of management or the independent auditor.