

LEXICON GENETICS INCORPORATED
CORPORATE GOVERNANCE COMMITTEE CHARTER

General Purpose

The Corporate Governance Committee (the “Committee”) of Lexicon Genetics Incorporated (the “Company”) is appointed by the Board of Directors of the Company (the “Board”) to make recommendations to the Board regarding (1) the identification of individuals qualified to become Board members, (2) the selection of candidates or nominees for director positions to be filled by the Board or the stockholders of the Company and (3) the development of corporate governance principles applicable to the Company.

Committee Membership

The members of the Committee shall meet the independence requirements of The Nasdaq Stock Market, Inc. (or any other exchange on which the Company’s securities are listed). The members of the Committee shall be appointed or replaced by the Board on the recommendation of the Chairman of the Board.

Meetings

The Committee shall meet as often as it determines is necessary to perform the Committee’s responsibilities. The Committee may request any officer or employee of the Company or the Company’s outside counsel to attend a meeting of the Committee or to meet with any members of, or advisors to, the Committee.

Committee Authority and Responsibilities

The Committee may form and delegate authority to subcommittees consisting of one or more members when appropriate, provided that decisions of such subcommittee shall be presented to the full Committee at its next scheduled meeting.

The Committee shall have the authority, to the extent it deems necessary or appropriate, to retain independent legal experts or other advisors. The Company shall provide for appropriate funding, as determined by the Committee, for payment of compensation to any advisors retained by the Committee.

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 annually review the Committee’s own performance.

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

Board Selection and Composition Matters

1. Establish criteria for the identification and selection of new members of the Board.
2. Identify and evaluate individuals believed to be qualified as candidates to serve on the Board and conduct all necessary and appropriate inquiries into the backgrounds and

qualifications of such possible candidates. In identifying and evaluating candidates for membership on the Board, the Committee shall consider all factors it deems appropriate, which may include independence, experience, diversity, leadership qualities and strength of character.

3. Make recommendations to the Board regarding the selection of director nominees to be presented for stockholder approval or necessary to fill vacancies on the Board.

4. Review and make recommendations regarding the size and composition of the Board in order to ensure the Board has the requisite expertise and its membership consists of individuals with sufficiently diverse and independent backgrounds.

Corporate Governance Matters

5. Develop and recommend to the Board corporate governance principles applicable to the Company and keep abreast of developments with regard to corporate governance to enable the Committee to make recommendations to the Board in light of such developments, as may be appropriate.