

BLUEPRINT MEDICINES CORPORATION

Nominating and Corporate Governance Committee Charter

I. General Statement of Purpose

The Nominating and Corporate Governance Committee of the Board of Directors (the “Nominating Committee”) of Blueprint Medicines Corporation (the “Company”) on behalf of the Board of Directors (the “Board”) is responsible for identifying individuals qualified to become board members, consistent with criteria approved by the Board, and recommending that the Board select the director nominees for election at each annual meeting of stockholders. The Nominating Committee is also responsible for developing and recommending to the Board a set of corporate governance guidelines applicable to the Company, periodically reviewing such guidelines and recommending any changes thereto, and overseeing the evaluation of the Board and management.

II. Nominating Committee Composition

The number of individuals serving on the Nominating Committee shall be fixed by the Board from time to time but shall consist of no fewer than two members, each of whom shall satisfy the independence standards established pursuant to Rule 5605(a)(2) of the Listing Rules of the NASDAQ Stock Market LLC.

The members of the Nominating Committee shall be appointed annually by the Board and may be replaced or removed by the Board at any time with or without cause. Resignation or removal of the Director from the Board, for whatever reason, shall automatically constitute resignation or removal, as applicable, from the Nominating Committee. Vacancies occurring, for whatever reason, may be filled by the Board. The Board shall designate one member of the Nominating Committee to serve as Chairperson of the Nominating Committee.

III. Meetings

The Nominating Committee generally is to meet such number of times per year, in person or by telephone conference or other communications equipment by means of which all persons participating in the meeting can hear each other, as it determines appropriate to carry out its responsibilities. A majority of the members of the Nominating Committee shall constitute a quorum for purposes of holding a meeting and the Nominating Committee may act by a vote of a majority of members present at such meeting. In lieu of a meeting, the Nominating Committee may act by unanimous written consent.

IV. Nominating Committee Activities

The Nominating Committee’s purpose and responsibilities shall be to:

A. Review of Charter

- Review and reassess the adequacy of this Charter annually and submit any proposed changes to the Board for approval.

B. Performance Evaluation of the Nominating Committee

- Periodically, perform a performance evaluation of the Nominating Committee and report to the Board on the results of such evaluation.

C. Selection of New Directors

- Recommend to the Board criteria for Board and committee membership, which shall include a description of any specific, minimum qualifications that the Nominating Committee believes must be met by a Nominating Committee-recommended nominee, and a description of any specific qualities or skills that the Nominating Committee believes are necessary for one or more of the Company's directors to possess, and annually reassess the adequacy of such criteria and submit any proposed changes to the Board for approval.
- Establish a policy with regard to the consideration of director candidates recommended by stockholders.
- Establish procedures to be followed by securityholders in submitting recommendations for director candidates to the Nominating Committee. The current procedures to be followed by securityholders are set forth below:
 1. All securityholder recommendations for director candidates must be submitted to the Secretary of the Company at the principal executive offices of the Company, who will forward all recommendations to the Nominating Committee.
 2. All securityholder recommendations for director candidates must be submitted to the Company not less than 120 calendar days prior to the date on which the Company's proxy statement was released to stockholders in connection with the previous year's annual meeting.
 3. All securityholder recommendations for director candidates must include the following information:
 - a. The name and address of record of the securityholder.
 - b. A representation that the securityholder is a record holder of the Company's securities, or if the securityholder is not a record holder, evidence of ownership in accordance with Rule 14a-8(b)(2) of the Securities Exchange Act of 1934, as amended.
 - c. The name, age, business and residential address, educational background, current principal occupation or employment, and principal occupation or employment for the preceding five (5) full fiscal years of the proposed director candidate.

- d. A description of the qualifications and background of the proposed director candidate which addresses the minimum qualifications and other criteria for Board membership approved by the Board from time to time and set forth in this Charter.
 - e. A description of all arrangements or understandings between the securityholder and the proposed director candidate.
 - f. The consent of the proposed director candidate (i) to be named in the proxy statement relating to the Company's annual meeting of stockholders and (ii) to serve as a director if elected at such annual meeting.
 - g. Any other information regarding the proposed director candidate that is required to be included in a proxy statement filed pursuant to the rules of the Securities and Exchange Commission.
- Establish a process for identifying and evaluating nominees for the Board, including nominees recommended by securityholders. The current process for identifying and evaluating nominees for the Board is as follows:
 1. The Nominating Committee may solicit recommendations from any or all of the following sources: non-management directors, the Chief Executive Officer, other executive officers, third-party search firms, or any other source it deems appropriate.
 2. The Nominating Committee will review and evaluate the qualifications of any such proposed director candidate, and conduct inquiries it deems appropriate.
 3. The Nominating Committee will evaluate all such proposed director candidates in the same manner, with no regard to the source of the initial recommendation of such proposed director candidate.
 4. In identifying and evaluating proposed director candidates, the Nominating Committee may consider, in addition to the minimum qualifications and other criteria for Board membership approved by the Board from time to time, all facts and circumstances that it deems appropriate or advisable, including, among other things, the skills of the proposed director candidate, his or her depth and breadth of business experience or other background characteristics, his or her independence and the needs of the Board.
 - Upon identifying individuals qualified to become members of the Board, consistent with the minimum qualifications and other criteria approved by the Board from time to time, recommend to the Board for selection the director nominees for election at each annual meeting of stockholders; provided that, if the Company is legally required by contract or otherwise to provide third

parties with the ability to nominate individuals for election as a member of the Board (pursuant, for example, to the rights of holders of preferred stock to elect directors upon a dividend default or in accordance with stockholder agreements or management agreements), the selection and nomination of such director nominees shall be governed by such contract or other arrangement and shall not be the responsibility of the Nominating Committee.

- Consider recommendations in light of the requirement that a majority of the Board be comprised of directors who meet the independence requirements set forth in Rule 5605(a)(2) of the Listing Rules of the NASDAQ Stock Market LLC.
- Recommend that the Board select the directors for appointment to committees of the Board.
- Review all stockholder nominations and proposals submitted to the Company (including any proposal relating to the procedures for making nominations or electing directors), determine whether the nomination or proposal was submitted in a timely manner and, in the case of a director nomination, whether the nomination and the nominee satisfy all applicable eligibility requirements, and recommend to the Board appropriate action on each such nomination or proposal.

D. Corporate Governance Guidelines

- Develop and recommend to the Board a set of Corporate Governance Guidelines applicable to the Company that satisfy the standards set forth in Rule 5605 of the Listing Rules of the NASDAQ Stock Market LLC.
- Review and reassess the adequacy of the Corporate Governance Guidelines annually and recommend any proposed changes to the Board for approval.

E. Evaluation of Board of Directors

- Oversee the periodic evaluation of the Board and its committees.

F. Matters Relating to Retention and Termination of Search Firms to Identify Director Candidates

- Exercise sole authority to retain and terminate any search firm that is to be used by the Company to assist in identifying director candidates. The Nominating Committee shall also have sole authority to approve any such search firm's fees and other retention terms.

V. General

- The Nominating Committee may establish and delegate authority to subcommittees consisting of one or more of its members, when the Nominating Committee deems it appropriate to do so in order to carry out its responsibilities.
- The Nominating Committee shall make regular reports to the Board concerning areas of the Nominating Committee's responsibility.
- In carrying out its responsibilities, the Nominating Committee shall be entitled to rely upon advice and information that it receives in its discussions and communications with management and such experts, advisors and professionals with whom the Nominating Committee may consult. The Nominating Committee shall have the authority to request that any officer or employee of the Company, the Company's outside legal counsel, the Company's independent auditor or any other professional retained by the Company to render advice to the Company attend a meeting of the Nominating Committee or meet with any members of or advisors to the Nominating Committee. The Nominating Committee shall also have the authority to engage legal, accounting or other advisors to provide it with advice and information in connection with carrying out its responsibilities and shall have sole authority to approve any such advisor's fees and other retention terms.
- The Nominating Committee may perform such other functions as may be requested by the Board from time to time.

ADOPTED: March 22, 2015

EFFECTIVE: May 5, 2015