PRIME MEDICINE, INC.

Nominating and Corporate Governance Committee Charter

I. General Statement of Purpose

The purposes of the Nominating and Corporate Governance Committee (the "Nominating Committee") of the Board of Directors (the "Board") of Prime Medicine, Inc. (the "Company") are to (i) identify individuals qualified to become Board members, (ii) evaluate candidates recommended by stockholders for election to the Board and stockholder proposals submitted for inclusion in the Company's proxy materials, consistent with criteria approved by the Board, (iii) recommend that the Board select the director nominees for election at each annual meeting of stockholders and, (iv) in the case of vacancies on the Board, recommend director nominees to the Board to fill any such vacancies. In addition, the Nominating Committee is responsible for developing and recommending to the Board a set of corporate governance guidelines applicable to the Company, annually reviewing such guidelines and recommending any changes thereto, and overseeing the evaluation of the Board and management. In order to fulfill these responsibilities, the Nominating Committee shall, within the scope of their duties, have unrestricted access to Company personnel and documents, and may consider information provided by the Company's management, as appropriate.

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 Nasdaq Stock Market Rules, subject to any applicable exceptions in the Nasdaq Stock Market Rules. In determining the members of the Nominating Committee, the Board will consider whether the members qualify as "non-employee directors" as defined in Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

The Board shall appoint the members of the Nominating Committee annually and may replace or remove them at any time, with or without cause. Resignation or removal of a director from the Board, for whatever reason, shall automatically constitute resignation or removal, as applicable, from the Nominating Committee. Vacancies, for whatever reason, may be filled only by the Board. The Board shall designate one member of the Nominating Committee to serve as chair of the Nominating Committee (the "Chair").

III. Meetings

The Nominating Committee shall meet as often as it determines appropriate in person or by conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other. 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. If the Nominating Committee consists of only two members, then both members of the Nominating Committee must be present to constitute a quorum. A Secretary, designated by the Nominating Committee members, shall keep minutes of all meetings. In lieu of a meeting, the Nominating

Committee may act by unanimous written consent (which may include electronic consent) in accordance with the Company's By-laws. The Chair of the Nominating Committee, in consultation with the other members and management, may set meeting agendas consistent with this Nominating Committee Charter (this "Charter").

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. Annual Performance Evaluation of the Nominating Committee

• Perform an annual 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 for its approval 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 nominee, and a description of any specific qualities or skills that the Nominating Committee believes one or more of the directors should possess, and annually reassess the adequacy of such criteria and submit any proposed changes to the Board for approval. Such criteria will also include consideration of a candidate's diversity and other differentiating characteristics in accordance with diversity guidelines applicable to the Company. The current criteria for Board and committee membership are set forth in Exhibit A hereto.
- Establish a policy with regard to the consideration of director candidates recommended by stockholders and establish procedures to be followed by stockholders in submitting recommendations for director candidates to the Nominating Committee. The current policies and procedures to be followed by securityholders in submitting recommendations for director candidates to the Nominating Committee are set forth in Exhibit A hereto.
- Establish a process for identifying and evaluating nominees for election to the Board, including nominees recommended by stockholders (a "Stockholder Nomination") and any policies or procedures for consideration of Stockholder Nominations. The current policy and procedures for consideration of Stockholder Nominations are set forth in Exhibit A hereto.

- Upon identifying individuals qualified to become members of the Board, consistent with the criteria approved by the Board, recommend that the Board select these individuals as 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 the ability to nominate individuals for election to the Board, the selection and nomination of such nominees shall not be the responsibility of the Nominating Committee.
- Recommend to the Board the Directors for appointment as Chair and as members of Board committees.
- Review all Stockholder Nominations and proposals submitted to the Company under the Exchange Act, or otherwise, and 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 for its approval a set of Corporate Governance Guidelines applicable to the Company.
- Review and assess the adequacy of the Corporate Governance Guidelines and Code of Conduct and Business Ethics on an annual basis, or more frequently if appropriate, and recommend any proposed changes to the Board for approval.

E. Evaluation of Board of Directors and Management

• Oversee an annual evaluation of the Board and its committees, including individual directors, and the Company's management for the prior fiscal year.

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

 Exercise sole authority on whatever terms it approves to retain and terminate any search firm that is to be used by the Company to assist it in identifying director candidates.

G. Succession Planning

 Review and discuss with the Board corporate succession plans for the CEO and other key officers of the Company.

H. Continuing Education

• Annually prepare or assemble materials and conduct sessions for directors on topics that will assist them in discharging their duties.

VI. General

- The Nominating Committee may establish and delegate authority to one or more 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, advisers 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 advisers to the Nominating Committee.
- The Nominating Committee shall have the authority on whatever terms it approves to engage legal, accounting and other advisers to assist it in performing its responsibilities.
- The Nominating Committee may perform such other functions as may be requested by the Board from time to time.

Effective Date: December 5, 2024

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Exhibit A

NOMINATING AND CORPORATE GOVERNANCE COMMITTEE POLICIES AND PROCEDURES FOR DIRECTOR CANDIDATES

The Nominating and Corporate Governance Committee (the "Nominating Committee") of the Board of Directors (the "Board") of Prime Medicine, Inc. (the "Company") and the Board, as applicable, has adopted this policy in accordance with proxy disclosure requirements set forth in rules adopted by the Securities and Exchange Commission ("SEC") and the Nasdaq Stock Market LLC.

I. Securityholder Recommendations and Nominations

A. Candidate Recommendations

The Nominating Committee is responsible for identifying individuals qualified to become members of the Board and its committees and recommending candidates for the Board's selection as nominees for election to the Board at the next annual or other properly convened meeting of stockholders. 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.

The procedures to be followed by securityholders in submitting recommendations to the Nominating Committee for director candidates are set forth below:

- Securityholder recommendations for director candidates must be submitted in writing to the Secretary of the Company at 60 First Street, Cambridge, MA 02141 not less than 120 calendar days prior to the date on which the Company's proxy statement was released to stockholders in connection with its previous year's annual meeting.
- Securityholders recommendations for director candidates must include the following information:
 - o The name and address of record of the securityholder;
 - 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;
 - 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 recommended director candidate;
 - A description of the qualifications and background of the recommended director candidate that addresses the criteria for Board membership approved by the Board

from time to time and set forth in this Policy, including any diversity considerations;

- A description of all arrangements or understandings between the securityholder and the recommended director candidate;
- The consent of the recommended director candidate (i) to be named in the proxy statement for the Company's next meeting of securityholders and (ii) to serve as a director if elected at that meeting; and
- Any other information regarding the recommended director candidate that is required to be included in a proxy statement filed pursuant to the rules of the SEC.

B. Candidate Nominations

A securityholder desiring to nominate a person directly for election to the Board at an annual meeting of the securityholders must meet the deadlines and other requirements in the Company's by-laws and the rules and regulations of the SEC. The Secretary of the Company will provide a copy of the Company's by-laws upon written request from a securityholder.

II. Identifying and Evaluating Nominees for Director

The Nominating Committee will use the following guidelines to identify and evaluate any individual recommended by a securityholder for nomination to the Board:

- The Nominating Committee will consider candidates properly recommended by securityholders holding at least three percent (3%) of the Company's common stock continuously for at least twenty four (24) months before the date the recommendation was submitted in the same manner as candidates recommended to the Nominating Committee from other sources.
- In evaluating director candidates, including directors eligible for re-election, the Nominating Committee will consider the following:
 - The current size and composition of the Board and the needs of the Board and its respective committees;
 - Such factors as character, integrity, judgment, diversity, independence, skills, education, expertise, business acumen, business experience, length of service, understanding of the Company's business and industry, conflicts of interest, and other commitments. The Nominating Committee need not assign any particular weight or priority to any one factor; and
 - o Any other factors the Nominating Committee considers appropriate.
- The Nominating Committee requires the following qualifications to be satisfied by any nominee for a position on the Board:

- o High standards of personal and professional ethics and integrity;
- Proven achievement and competence in the nominee's field and the ability to exercise sound business judgment;
- o Skills that are complementary to those of members of the existing Board;
- The ability to assist and support management and make significant contributions to the Company's success; and
- An understanding of the fiduciary responsibilities required of a director and a commitment to devote the time and energy necessary to perform those responsibilities.
- If the Nominating Committee decides that an additional or replacement director is required, it may do whatever it considers appropriate to evaluate a director candidate, including interviewing the candidate and the securityholder(s) recommending the candidate, engaging an outside search firm to gather additional information, and relying on the knowledge of the members of the Nominating Committee, other directors and management.
- The Nominating Committee may propose to the Board a candidate recommended or offered for nomination by a securityholder as a nominee for election to the Board.

III. Decision by Board of Directors

After receiving the Nominating Committee's recommendations, the Board will have final authority to determine the candidates to be nominated by the Board.

IV. Modification of Policies and Procedures

These policies and procedures may be modified at any time by the Nominating Committee or the Board.