MIRA PHARMACEUTICALS, INC.

NOMINATING & GOVERNANCE COMMITTEE CHARTER

The Board of Directors (the "Board") of MIRA Pharmaceuticals, Inc. (the "Company") has established a standing Nominating & Governance Committee (the "Committee") pursuant to Section 607.0825 of the Florida Business Corporation Act ("FBCA") and for the purposes described in this charter of the Committee (the "Committee Charter").

I. Purpose

The primary objectives of the Committee are to assist the Board by: (i) identifying and screening individuals qualified to become Board members and recommending to the Board a group of director nominees for the next annual meeting of the Company's stockholders; (ii) ensuring that the Audit, Compensation, and Nominating & Governance Committees of the Board shall have the benefit of qualified and experienced "independent" directors; and (iii) overseeing and making recommendations concerning the Company's corporate governance.

II. Organization

The Committee shall consist of at least three members of the Board each of whom shall be independent in accordance with the requirements of the rules of the Nasdaq Stock Exchange, and otherwise meet the qualifications set forth herein. Prior to appointing any member of the Committee, the Board shall affirmatively determine that such individual is independent under the rules of the Nasdaq Stock Exchange and, in making such determination, consider all factors specifically relevant to determining whether a director has a relationship to the Company that is material to that director's ability to be independent from management in connection with the duties of a Committee member, including, but not limited to: (A) the source of compensation of such director; and (B) whether such director is affiliated with the Company, a subsidiary of the Company, or an affiliate of a subsidiary of the Company. The Board shall appoint the members of the Committee, who shall serve until their successors are appointed and qualified, or until such member's earlier resignation or removal.

Notwithstanding the above, one director of the Company who is not independent in accordance with the requirements of the rules of the Nasdaq Stock Exchange, but is not a current officer or employee or an immediate family member of such person, may be appointed to the Committee, if the Board, under exceptional and limited circumstances, determines that membership on the Committee by the individual is required by the best interests of the Company and its stockholders, and the Board discloses, in the next annual meeting proxy statement (or in its next annual report filed with the SEC on Form 10-K if the Company does not file an annual proxy statement) subsequent to such determination, the nature of the relationship and the reasons for that determination. A director appointed to the Committee pursuant to this exception may not serve for a period in excess of two years.

The chair of the Committee (the "Chair") may be designated by the full Board or, if it does not do so, the Committee members shall elect a Chair by vote of a majority of the full Committee. The Board may remove any member from the Committee at any time with or without cause.

The Committee may form and delegate authority to subcommittees when appropriate, as permitted by the charter and bylaws of the Company and consistent with the FBCA. The Committee shall have the authority to engage independent counsel and other advisors as the Committee deems necessary to carry out its duties. The Committee shall determine and receive appropriate funding from the Company for payment of compensation to any independent counsel or other advisors engaged by the Committee and ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

III. Structure and Meetings

The Chair will preside at each meeting, and in consultation with the other members of the Committee, will set the frequency and length of each meeting and the agenda of items to be addressed at each meeting; provided, that the Committee shall meet no less frequently than annually. If a Chair is not designated or present, the members of the Committee may designate a chair of the meeting by majority vote of the Committee membership. To the extent beneficial to the Committee, the Chair, or in such person's absence the chair of the meeting, may circulate an agenda for each meeting in advance of the meeting.

The Committee may invite to its meetings any director, member of management of the Company, and such other persons as it deems appropriate in order to carry out its responsibilities; provided, however, that the Chairman of the Board and Chief Executive Officer of the Company (to the extent the latter is a director) shall each be entitled ex officio to attend, but not vote at, meetings of the Committee unless the Committee shall determine that their attendance is not appropriate.

IV. Duties and Responsibilities

The Committee shall: (i) make recommendation to the full Board on the size and composition of the Board; (ii) review possible candidates for Board membership, including candidates validly nominated by stockholders, consistent with the Board's criteria for selecting new directors; (iii) annually recommend a slate of nominees to the Board with respect to election at the annual meeting of the Company's stockholders; (iv) oversee evaluation of the Board and its directors, which may include developing and recommending an annual self-assessment process; (v) recommend to the Board director nominees to fill vacancies on the Board as necessary; (vi) develop and recommend to the Board a set of corporate governance principles applicable to the Company; (vii) review and make recommendations to the Board regarding corporate governance matters including, but not limited to, amendments to the charter and by-laws, as necessary and appropriate; (viii) develop procedures for the Committee's consideration of director candidates nominated by the stockholders of the Company and administer such process; (ix) review stockholder proposals and recommend proposed responses by the Company including, but not limited to, responses for inclusion in the Company proxy statement; (x) oversee the Company's management of operational risk and contingency planning for business continuity in areas other than information technology and cybersecurity; and (xi) develop and implement short- and long-term strategies to enhance and support each of the foregoing. The Committee may also make recommendations to the Board with

respect to committee member qualifications, committee member appointments and removals, committee structure and operations, charters for other committees of the Company, and committee reporting to the Board. The Committee will annually review and reassess the adequacy of this Committee Charter and recommend any proposed changes to the Board for approval. The Committee shall regularly review and monitor compliance with the Company's corporate governance guidelines, Conduct of Business Policy, Code of Ethics for Directors, the Principal Executive Officer, and Senior Financial Officers, and policies concerning trading in the Company's securities, and make recommendations concerning such policies and guidelines to the Board. The Committee shall conduct an annual performance assessment of the Committee.

V. Other Committee Responsibilities

The Committee shall maintain minutes of meetings, ensuring that the minutes document all significant issues that have been discussed during the meetings, and all decisions made by the Committee. The minutes of the Committee meetings will be presented to the Board for review at their Board meetings. The Chair of the Committee will provide additional comments to the Board as deemed appropriate.

VI. Disclosure of Committee Charter

This Committee Charter will be made available on the Company's website.

Approved by the MIRA Pharmaceuticals, Inc. Board of Directors on June 26, 2023.