SEASTAR MEDICAL HOLDING CORPORATION
COMPENSATION COMMITTEE CHARTER
(as amended and restated on August 11, 2026)

This Compensation Committee Charter (this "Charter") was adopted by the Board of Directors (the "Board") of SeaStar Medical Holding Corporation, a Delaware corporation (the "Company"), on October 28, 2022 and was amended and restated on August 11, 2026.

I. Purpose

The purpose of the Compensation Committee (the "Committee") is to assist the Board with its responsibilities by:

(i) designing, implementing, evaluating and administering the compensation plans, policies and programs of the Company to attract, motivate and retain personnel with the requisite skills and abilities to enable the Company to achieve superior operating results;

(ii) reviewing and approving the compensation of the Chief Executive Officer, other executive officers and non-management directors; and

(iii) producing an annual report on executive compensation for inclusion in the Company's proxy materials if required by applicable rules and regulations.

II. Membership

The Committee shall consist of at least two members of the Board, or such other number of members as required under the applicable rules of the Nasdaq Stock Market ("Nasdaq"), with the exact number to be determined by the Board. Each member of the Committee shall, to the extent required by applicable laws or regulations: (i) satisfy the independence requirements of Nasdaq, the Securities and Exchange Commission and the Company's Corporate Governance Guidelines; and (ii) be a "non-employee director" within the meaning of Rule 16b-3 of the Securities Exchange Act of 1934 (as amended, the "Exchange Act");

The members of the Committee shall be appointed by the Board on the recommendation of the Nominating and Corporate Governance Committee. Vacancies on the Committee will be filled by majority vote of the Board. Any Committee member may resign effective upon giving oral or written notice to the Chair of the Board, the Corporate Secretary or the Board (unless the notice specifies a later time for the effectiveness of such resignation).

Unless a Chair of the Committee is designated by the Board, the Committee may designate a Chair by a majority vote of the full Committee membership. Committee members may be removed from the Committee, with or without cause, by the affirmative vote of the majority of the Board.

III. Meetings and Procedures

The Committee shall meet on such occasions as the Chair may from time to time determine or as circumstances may dictate. Meetings of the Committee shall be held upon call by the Chair of the Board or the Chair of the Committee. A quorum of the Committee shall consist of a majority of the members of the Committee vote of a majority of the members of the Committee present at the time of a vote, if a quorum is present at that time, shall be the act of the Committee except to the extent otherwise required by the Company's certificate of incorporation or bylaws (each as in effect from time to time). The Chair of the Committee (or in his or her absence, another member designated by the Chair of the Committee), shall preside at each meeting of the Committee and set the agenda for Committee meetings. Meetings of the Committee may be held in person, by conference call or by electronic means including videoconference. Unless otherwise restricted by the Company's certificate of incorporation or bylaws, any action required or permitted to be taken at any meeting of the Committee may be taken without a meeting if all members of the Committee consent thereto in writing.

All non-management directors that are not members of the Committee may attend and observe meetings of the Committee at the invitation of the Committee Chair but may not vote and shall not participate in any discussion or deliberation unless invited to do so by the Committee. The Committee may, at its discretion, include in its meetings members of the Company's management, members of the Company's legal, tax and accounting departments and any other personnel employed or retained by the Company or any other persons whose presence the Committee believes to be necessary or appropriate. The Chief Executive Officer may attend meetings of the Committee in respect of compensation of other officers and directors, but may not be present during voting or deliberations of the Committee regarding his or her own compensation. Notwithstanding the foregoing, the Committee may also exclude from its meetings any persons it deems appropriate, including but not limited to, any member of management.

The Committee shall have the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any provisions of the Company's bylaws that are applicable to the Committee.

The Chair shall report to the Board following meetings of the Committee and as otherwise requested by the Chair of the Board or by other directors. The Committee will maintain a record of written minutes of its meetings and written actions without meetings, which minutes and actions will be filed with the minutes of the meetings of the Board. All adopted compensation plans or changes to existing plans, whether for executives, directors or other personnel, shall be detailed and attached as appropriate to the minutes of the appropriate meeting or written action without a meeting. This includes any grants of options or loans made outside of any official Company plan.

IV. Responsibilities

The Committee shall be responsible for:

(i) reviewing and, if necessary, revising the compensation philosophy of the Company, and overseeing the development and implementation of compensation programs aligned with the Company's business strategy;

(ii) obtaining information on market trends in executive compensation and reviewing the competitiveness of the Company's executive compensation programs to ensure (a) the attraction and retention of executive officers; (b) the motivation of executive officers to achieve the Company's business objectives; and (c) the alignment of the interests of executive officers with the long-term interests of the Company's stockholders;

(iii) reviewing and approving corporate goals and objectives relating to the compensation of the Chief Executive Officer and other executive officers, evaluating the performance of the Chief Executive Officer and other executive officers in light of these goals and objectives and reviewing and approving the compensation of the Chief Executive Officer and other executive officers based on such evaluation;

(iv) recommending to the Board the employment and appointment of executive officers, as well as promotion, removal and other changes in position of incumbent executive officers upon review of their performance;

(v) establishing and administering the Company's incentive and equity-based compensation plans as well as other bonus arrangements (the "Incentive Plans") and approving, or recommending to the Board for approval, amendments thereto;

(vi) approving awards granted under the Incentive Plans and the reacquisition of securities from terminated employees;

(vii) reviewing and approving any employment, severance or termination arrangements with any executive officers;

(viii) reviewing and recommending to the Board appropriate compensation programs for service as directors, committee chairs and committee members, consistent with any applicable requirements of the listing standards for independent directors;

(ix) providing oversight with respect to compensation policies applicable to all employees of the Company, including periodic reviews of the Company's compensation structure, performance review procedures, employee turnover and retention, and other human resource issues;

(x) reviewing employee pension and benefit plans;

(xi) reviewing the grant of perquisite benefits;

(xii) facilitating the Board's review of a succession plan for all executive officers of the Company;

(xiii) reviewing the Company's practices and policies of employee compensation as they relate to risk management and risk-taking incentives, to determine whether such compensation policies and practices are reasonably likely to have a material adverse effect on the Company;

(xiv) forming subcommittees for any purpose that the Committee deems appropriate and delegating to such subcommittees such power and authority as the Committee deems appropriate, including without limitation forming a subcommittee or delegating authority to the Chief Executive Officer to make non-executive grants under the Company's employee stock purchase plan; provided, however, that no subcommittee will consist of fewer than two members; and provided further that the Committee will not delegate any power or authority required by any law, regulation or listing standard to be exercised by the Committee as a whole;

(xv) reviewing any employee loans, and monitoring the Company's compliance with the requirements under the Sarbanes-Oxley Act of 2002 relating to loans to directors and officers, and with all other applicable laws affecting employee compensation and benefits;

(xvi) reviewing and discussing with management of the Company the Compensation Discussion and Analysis ("CD&A"), if required, and based on such discussions, determining whether to recommend to the Board that the CD&A be included in the Company's proxy statement and its Annual Report on Form 10-K;

(xvii) preparing and approving the Compensation Committee Report, if required to be included as part of the Company's annual proxy statement; and

(xviii) reviewing the results of any advisory stockholder votes on executive compensation and considering whether to recommend adjustments to the Company's executive compensation policies and practices in response to such votes.

(xix) The Committee shall review and reassess this Charter at least annually and submit any recommended changes to the Board for its consideration.

In addition to the specific powers and responsibilities delegated to the Committee in this Charter, the Committee shall also carry out and may exercise any other powers or responsibilities as are assigned by law, the Company's certificate of incorporation or bylaws or as may be delegated to it by the Board from time to time. The powers and responsibilities delegated by the Board to the Committee in this Charter or otherwise shall be exercised and carried out by the Committee as it deems appropriate without requirement of Board approval, and any decision made by the Committee (including any decision to exercise or refrain from exercising any of the powers delegated to the Committee hereunder) shall be at the Committee's sole discretion.

V. Committee Resources

Consistent with applicable requirements of the Exchange Act and Nasdaq listing standards, the Committee shall: (i) have the authority, in its sole discretion, to retain or obtain the advice of, and terminate, any compensation consultant, legal counsel, or other advisers ("compensation advisers"); (ii) be directly responsible for the appointment, determination of compensation and oversight of the work of any compensation advisers retained by the Committee; (iii) subject to any exceptions under Nasdaq listing standards, undertake an analysis of the independence of each compensation adviser under the independence factors specified in the applicable requirements of the Exchange Act and Nasdaq listing standards, with such analysis to occur prior to selection of such compensation adviser and as appropriate thereafter; and (iv) have such additional authority and responsibility as may be required from time to time under the rules and guidelines under the Exchange Act and Nasdaq listing standards. The Committee may also utilize the services of the Company's regular legal counsel or other advisors to the Company. The Company shall provide for appropriate funding, as determined by the Committee, for payment of compensation to the compensation advisers retained by the Committee.