

COMPENSATION COMMITTEE CHARTER OF VYNE THERAPEUTICS INC.

This Compensation Committee Charter (the “Charter”) was adopted by the Board of Directors (the “Board”) of VYNE Therapeutics Inc., a Delaware corporation (formerly known as Menlo Therapeutics Inc.) (the “Company”), on August 5, 2020, effective as of such date.

I. Purpose

The purpose of the Compensation Committee of the Board (the “Committee”) is (1) to assist the Board in discharging the Board’s responsibilities regarding: (a) the establishment and maintenance of compensation and benefit plans, policies and programs designed to attract, motivate and retain personnel with the requisite skills and abilities; (b) the compensation of the Company’s Chief Executive Officer (the “CEO”), the Company’s other executive officers, as defined by Rule 3b-7 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), the Company’s non-executive officers and the Company’s directors; and (c) compliance with applicable compensation rules, regulations and guidelines promulgated by The NASDAQ Stock Market LLC (“NASDAQ”), the Securities and Exchange Commission (the “SEC”) and other law, as applicable.

In addition to the powers and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities delegated to it by the Board from time to time consistent with the Company’s bylaws (as in effect from time to time) and applicable law. 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. While acting within the scope of the powers and responsibilities delegated to it, the Committee shall have and may exercise all the powers and authority of the Board.

II. Membership

The Committee shall be composed of at least two (2) directors as determined by the Board, each of whom shall satisfy the independence and other eligibility requirements of NASDAQ rules, as amended from time to time and meet all other eligibility requirements of applicable law.

Unless a Chairperson of the Committee (the “Chair”) is designated by the Board, the Committee may designate a Chair by majority vote of the full Committee membership. Any action duly taken by the Committee shall be valid and effective, whether or not the members of the Committee at the time of such action are later determined not to have satisfied the requirements for membership provided herein. Committee members may be removed from the Committee, with or without cause, by the Board. Committee members may resign from the Committee at any time without resigning from the Board. Unless otherwise directed by the Board, each member shall serve until their respective successors are duly elected and qualified.

III. Meetings and Procedures

The Chair (or in his or her absence, a member designated by the Chair) shall preside at each meeting of the Committee and set the agendas for Committee meetings. 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 Committee should hold such regular or special meetings as its members deem necessary or appropriate, but in no event less than twice annually. Meetings of the Committee may be called by the Chair upon notice given at least twenty-four (24) hours prior to the meeting, or upon such shorter notice as shall be approved by the Committee. The Chair shall designate a secretary for each meeting who shall record minutes of all formal actions of the Committee. A majority of the Committee members, present in person or by phone, shall constitute a quorum. A majority of the members present shall decide any questions brought before 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). Unless otherwise restricted by the Company's 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 (including by electronic transmission), and such writing (including any electronic transmission) is filed with the minutes of the Committee.

The Committee may, at its discretion, include in its meetings members of the Company's management, compensation and benefits consultants or any other person whose presence the Committee believes to be necessary or appropriate. Notwithstanding the foregoing, the CEO and other officers may not be present during voting or deliberations concerning his, her or their compensation, and the Committee may exclude from its meetings any persons it deems appropriate, including, but not limited to, any non-management director who is not a member of the Committee.

Consistent with applicable requirements of the Exchange Act and NASDAQ listing standards, the Committee shall (i) have the sole authority to retain and/or replace, as needed, any independent legal counsel, compensation and benefits consultants and other outside experts or advisors as the Committee believes to be necessary or appropriate (each a "Compensation Advisor", and collectively, "Compensation Advisors"); (ii) be directly responsible for the appointment, determination of compensation and oversight of the work of any Compensation Advisors retained by the Committee; (iii) subject to any exceptions under NASDAQ listing standards, undertake an analysis of the independence of each Compensation Advisor 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 Advisor 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 of 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 as Compensation Advisors. The Company shall provide for appropriate funding, as determined by the Committee in its sole discretion, for payment of compensation to any

such Compensation Advisors retained by the Committee and for the payment of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

The Committee shall keep regular minutes of any meetings where actions are taken (unless such actions are taken and reported to the Committee's satisfaction in the minutes of the Board meetings). Any such minutes kept by the Committee shall be distributed to each member of the Committee. The Secretary of the Company shall maintain the original signed minutes for filing with the corporate records of the Company. The Chair shall report to the Board regarding the activities of the Committee at appropriate times and as otherwise requested by the Chairperson of the Board.

IV. Duties and Responsibilities

1. *Compensation Philosophy and Strategy.* The Committee shall periodically review, consider and approve a philosophy for compensation of the Company's executive officers and other employees in order to attract, retain, engage and reward employees in a competitive market and to maintain a link between compensation and Company and executive performance. The Committee shall periodically review and approve general compensation and benefit strategies and policies of the Company in support of the Company's compensation philosophy. The Committee shall receive periodic reports on the Company's compensation programs as they affect all employees.

2. *CEO Compensation.* With respect to the CEO compensation, the Committee shall review the CEO compensation in light of market trends in executive compensation and shall approve the compensation of the CEO based on such review. The Committee shall, periodically and as and when appropriate, review and approve or recommend to the Board for approval the following as they affect the CEO: (a) any employment agreement and severance arrangement; (b) any change-in-control agreement and change-in-control provisions affecting any elements of compensation and benefits; and (c) any special or supplemental compensation and benefits for the CEO and individuals who formerly served as CEO, including supplemental retirement benefits and the perquisites provided to them during and after employment. The Committee may approve or recommend to the Board: (x) the corporate goals and objectives relevant to CEO compensation, (y) its evaluation and determination of CEO performance in light of such corporate goals and objectives, (z) approval of the compensation of the CEO.

3. *Other Executive Officer Compensation.* With respect to the compensation of the other officers who report directly to the CEO who, due to the nature of his or her role or responsibilities the Committee deems appropriate to include within its purview (each, a "Non-CEO Executive Officer" and collectively, the "Non-CEO Executive Officers" and with the CEO, the "Executive Officers"), the Committee shall, at least annually, (a) review and approve the corporate goals and objectives relevant to the Non-CEO Executive Officer compensation, (b) review the CEO's evaluation of Non-CEO Executive Officer performance in light of those goals and objectives and (c) approve all compensation of the Non-CEO Executive Officer based on such evaluation. The Committee shall, periodically and as and when appropriate,

review and approve the following as they affect a Non-CEO Executive Officer: (x) any employment agreement and severance arrangement; (y) any change-in-control agreement and change-in-control provisions affecting any elements of compensation and benefits; and (z) any special or supplemental compensation and benefits for a Non-CEO Executive Officer, including supplemental retirement benefits and the perquisites provided to them during and after employment. The Committee shall report to the Board all compensation determinations relevant to the Executive Officers.

4. *Incentive and Equity Compensation.* The Committee shall oversee the Company's compliance with requirements under NASDAQ rules applicable to equity compensation plans. Subject to such stockholder approval, or otherwise required by the Exchange Act, the Code or other applicable law and the terms of such equity compensation plans, the Committee shall have the power to establish, amend, manage, periodically review and, where appropriate, terminate all annual bonus, long-term incentive compensation, stock option, employee pension and welfare benefit plans including 401(k) plans, employee stock purchase plans, long-term incentive plans, equity-based plans and arrangements, and management incentive plans and others and with respect to each plan shall have general administrative responsibility over such plans and reviewing compensation risk assessments relating to such plans. In addition, the Committee shall approve the grant of all stock options or other stock awards under the Company's stock plans to employees and directors. The Committee will determine, or recommend for determination, eligibility, the number and type of awards available for grant, and the terms and conditions of such grants. The Committee may delegate its authority under this section to directors or officers of the Company, except as it may apply to incentive and equity compensation awards covered under Section 16 of the Exchange Act.

5. *Other Compensation Oversight.* The Committee shall determine the Company's policies with respect to change of control payments and stock ownership guidelines. The Committee shall monitor the Company's compliance with such policies as well as with applicable legal requirements of the Sarbanes Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act relating to employee compensation and benefits, including clawback, anti-hedging and pledging policies.

6. *Say on Pay and Say on Frequency.* The Committee shall consider the results of any say on pay vote in connection with the Committee's ongoing determinations and recommendations regarding executive compensation policies and practices. The Committee shall review and recommend to the Board for approval the frequency with which the Company will conduct Say on Pay Votes, taking into account the results of the most recent stockholder advisory vote on frequency of Say on Pay Votes required by Section 14A of the Exchange Act, and review and approve the proposals regarding the Say on Pay Vote and the frequency of the Say on Pay Vote to be included in the Company's proxy statement, in each case to the extent such proposals are required under SEC rules to be included in the Company's proxy statement. The Committee shall also advise as to shareholder proposals related to compensation matters.

7. *Compensation Disclosure and Analysis.* The Committee shall review and discuss with the management of the Company the Compensation Discussion and Analysis (the "CD&A"), and based on such discussions, determine whether to recommend to the Board that the CD&A be included in the Company's annual proxy statement and annual report on

Form 10-K, to the extent the CD&A is required under SEC rules to be included therein. In addition, and as appropriate, review and discuss with management any further disclosures related to executive compensation not contained in the CD&A but provided elsewhere in the Company's proxy statement or annual report, as applicable.

8. *Compensation Committee Report.* The Committee shall produce the annual Compensation Committee Report for inclusion in the Company's proxy statement and annual report on Form 10-K in compliance with the rules and regulations promulgated by the SEC.

9. *Director Compensation.* The Committee shall periodically review and make recommendations to the Board with respect to the compensation of the Board's directors.

10. *Committee Self-Evaluation.* The Committee shall, at least annually and with input from the Nominating and Corporate Governance Committee of the Board (the "Nominating and Corporate Governance Committee") if deemed appropriate, perform an evaluation of the performance of the Committee and its members, including a review of the Committee's compliance with this Charter, and provide any written material with respect to such evaluation to the Board or the Nominating and Corporate Governance Committee, as appropriate, including any recommendations for changes in procedures or policies governing the Committee.

11. *Review of this Charter.* The Committee shall, at least annually and with input from the Nominating and Corporate Governance Committee if deemed appropriate, review and reassess this Charter and submit any recommended changes to the Board for its consideration.

V. Delegation of Duties

In fulfilling its responsibilities, the Committee shall be entitled to delegate any or all of its responsibilities to a subcommittee of the Committee, but only to the extent consistent with the Company's certificate of incorporation, bylaws, Section 162(m) of the Code, applicable laws, regulations and NASDAQ rules.