REPARE THERAPEUTICS INC.

CHARTER OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS

PURPOSE AND POLICY

The primary purpose of the Compensation Committee (the "Committee") of the Board of Directors (the "Board") of Repare Therapeutics Inc. (together with its consolidated subsidiaries, the "Company") shall be to act on behalf of the Board in fulfilling the Board's oversight responsibilities with respect to the Company's compensation policies, plans and programs, and to review and determine (or recommend to the Board for approval) the compensation to be paid to the Company's executive officers and directors. In addition, the Committee shall (i) review and discuss with management the Company's disclosures contained under the caption "Compensation Discussion and Analysis" ("CD&A"), when and as required by applicable rules and regulations of the Securities and Exchange Commission (the "SEC") and Canadian Securities Administrators (the "CSA") in effect from time to time, for use in any of the Company's annual reports on Form 10-K, registration statements, proxy statements or information statements filed with the SEC and the CSA, (ii) prepare and review the Committee report on executive compensation included in the Company's annual proxy statement in accordance with applicable rules and regulations of the SEC and the CSA, if applicable, in effect from time to time, and (iii) administer the Company's incentive compensation plans, to the extent provided for thereunder, equity-based plans and such other benefit plans as designated from time to time by the Board, in each case in accordance with the terms of such plans.

The term "compensation" shall include salary, long-term incentives, bonuses, perquisites, equity incentives, severance arrangements, retirement benefits and other related benefits and benefit plans. The term "executive officer" means the individuals designated by the Company as officers for purposes of Section 16 of the Securities Exchange Act of 1934, as amended from time to time (the "Exchange Act"), or Canadian securities laws.

The policy of the Committee shall be to maintain an overall compensation structure designed to attract, retain and motivate management and other employees by providing appropriate levels of risk and reward in proportion to individual contribution and performance.

COMPOSITION

The Committee shall consist of at least two (2) members of the Board. All members of the Committee shall satisfy, as determined by the Board, (i) the independence requirements imposed by The Nasdaq Stock Market LLC ("Nasdaq") applicable to compensation committee members, as in effect from time to time, when and as required, including any exceptions permitted by these requirements, and shall be independent within the meaning of Section 1.4 of Regulation 52-110 respecting Audit Committees, (ii) any other qualifications determined by the Board or the Nominating and Corporate Governance Committee of the Board from time to time,

(iii) unless otherwise approved by the Board, the "non-employee director" standard within the meaning of Rule 16b-3 promulgated under the Exchange Act and (iv) any other requirements imposed by applicable law or determined by the Board. A director shall not serve as a member of the Committee if the Chief Executive Officer or another executive officer of the Company serves on the compensation committee of another company that employs that director as an executive officer.

Any subsequent determination that any member of the Committee does not qualify as a "non-employee director" will not invalidate any previous actions by the Committee, except to the extent required by law or determined to be appropriate to satisfy regulatory standards.

The members of the Committee shall be appointed by and serve at the discretion of the Board. Vacancies occurring on the Committee shall be filled by the Board. The Committee's chairperson shall be designated by the Board, or if it does not do so, the Committee members shall elect a chairperson by vote of a majority of the full Committee, provided that the Board may replace any chairperson designated by the Committee at any time.

MEETINGS AND MINUTES

The Committee shall hold such regular or special meetings as its members shall deem necessary or appropriate. Any member of the Committee or the Board may call a meeting of the Committee. Minutes of each meeting of the Committee shall be prepared and distributed to each director of the Company and the Secretary of the Company promptly after each meeting. The chairperson of the Committee shall report to the Board from time to time and whenever requested to do so by the Board. In addition, the chairperson of the Committee or his or her delegate shall be available to answer any questions the other directors may have regarding the matters considered and actions taken by the Committee.

A majority of the members shall represent a quorum of the Committee, and, if a quorum is present, any action approved by a majority of the members present shall represent the valid action of the Committee. Any actions taken by the Committee during any period in which one or more members fail for any reason to meet the membership requirements set forth above shall be nonetheless duly authorized actions of the Committee for all corporate purposes. The Committee may act by unanimous written consent; when it does so, those actions will be filed in the Company's minute book.

AUTHORITY

The Committee shall have full access to all books, records, facilities and personnel of the Company as deemed necessary or appropriate by any member of the Committee to discharge his or her responsibilities hereunder, including human resources personnel preparing the CD&A for inclusion in the Company's filings with the SEC and the CSA, as applicable, when and as required. The Committee shall have the authority to obtain, at the expense of the Company, advice and assistance from internal or external legal, accounting or other advisors and consultants. In addition, the Committee shall have sole authority to select, retain and terminate any Compensation Consultant to assist the Committee in the evaluation of director, chief executive officer, executive officer or senior executive compensation or any other matter deemed

appropriate by the Committee, including sole authority to approve such consultant's reasonable fees and other retention terms, all at the Company's expense. The Committee shall also have authority to pay, at the expense of the Company, ordinary administrative expenses (including expenditures for external resources) that the Committee deems necessary or appropriate in carrying out its duties, unless prohibited by Nasdaq listing rules or applicable law. Except as limited by applicable law, rules and regulations, the Committee shall have authority to request that any of the Company's personnel, counsel, accountants or investment bankers, or any other consultant or advisor to the Company, attend any meeting of the Committee or meet with any member of the Committee or any of its special, outside legal, accounting or other, advisors or consultants.

The Committee may form and delegate authority to subcommittees as appropriate, consisting of one or more members of the Board (whether or not he, she or they are on the Committee) to the extent allowed under applicable law and Nasdaq listing rules, including, but not limited to, a subcommittee composed of one or more members of the Board (whether or not he, she or they are on the Committee) or officers of the Company to grant share awards under the Company's equity incentive plans. Delegation by the Committee to any subcommittee shall not limit or restrict the Committee on any matter so delegated, and, unless the Committee alters or terminates such delegation, any action by the Committee on any matter so delegated shall not limit or restrict future action by such subcommittee on such matters. The operation of the Committee shall be subject to the amended and restated bylaws of the Company as in effect from time to time. The approval of this Compensation Committee Charter (the "Charter") by the Board shall be construed as a delegation of authority to the Committee with respect to the responsibilities set forth herein.

RESPONSIBILITIES

To implement the Committee's purpose, the Committee shall have the following responsibilities. The Committee may supplement and deviate from these activities as appropriate under the circumstances (except as otherwise required by applicable law or the requirements of any stock exchange on which any of the Company's share capital is then listed):

- 1. **Overall Compensation Strategy.** The Committee shall review, modify (as needed) and approve, or review and recommend, as applicable, the overall compensation strategy and policies for the Company, including:
 - reviewing and approving, or reviewing and recommending to the Board for approval, annual individual and corporate performance goals and objectives relevant to the compensation of the Company's Chief Executive Officer and, reviewing and approving, to the extent applicable, other executive officers and senior management, as appropriate, which powers shall include the power to exercise discretion to adjust compensation based on such goals and objectives;
 - evaluating and approving, or recommending to the Board for approval, the Company's performance against corporate goals and objectives;

- evaluating and approving, or recommending to the Board for approval, the compensation plans and programs advisable for the Company, as well as evaluating and approving, or recommending to the Board for approval, the modification or termination of existing plans and programs;
- reviewing equity compensation arrangements with the objective of appropriately balancing the perceived value of equity compensation and the dilutive and other costs of that compensation to the Company;
- reviewing compensation practices and trends to assess the adequacy and competitiveness of the Company's executive compensation programs among comparable companies in the Company's industry; however, the Committee shall exercise independent judgment in determining the appropriate levels and types of compensation to be paid;
- reviewing and approving the terms of any employment agreements, severance
 arrangements, change-of-control protections and any other compensatory
 arrangements (including, without limitation, perquisites and any other form of
 compensation) for the Company's executive officers and other senior
 management, as appropriate, which includes the ability to adopt, amend and
 terminate such agreements or arrangements and recommending to the Board
 for approval those relating to the Chief Executive Officer;
- reviewing and approving (or in the case of the Chief Executive Officer, recommending to the Board for approval) any compensation arrangement for any executive officer involving any subsidiary, special purpose or similar entity, taking into account the potential for conflicts of interest in such arrangements and whether the arrangement has the potential to benefit the Company;
- approving, or recommending to the Board for approval, any loans by the Company to employees, provided, however, that in compliance with the Sarbanes-Oxley Act of 2002, the Company shall not directly or indirectly extend or maintain credit, arrange for the extension of credit, or renew an extension of credit, in the form of a personal loan to or for any director or executive officer of the Company;
- 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;
- reviewing and considering the results of any advisory vote on executive compensation; and
- evaluating the efficacy of the Company's compensation policy and strategy in achieving expected benefits to the Company and otherwise furthering the Committee's policies.

- 2. Compensation of Chief Executive Officer. The Committee shall review and approve, or review and recommend to the Board for approval, the compensation and other terms of employment of the Chief Executive Officer and shall evaluate the Chief Executive Officer's performance in light of relevant corporate performance goals and objectives, taking into account, among other things, the policies of the Committee and the Chief Executive Officer's performance in:
 - fostering a corporate culture that promotes the highest level of innovation, integrity and the highest ethical standards;
 - developing and executing the Company's long-term strategic plan and conducting the business of the Company in a manner appropriate to enhance long-term shareholder value;
 - achieving specified corporate goals and objectives; and
 - achieving other individual or corporate goals and objectives deemed relevant to the Chief Executive Officer as established by the Committee.

In determining any long-term incentive component of the Chief Executive Officer's compensation, the Committee should seek to achieve an appropriate level of risk and reward, taking into consideration the Company's long-term performance, need for a sustainable pipeline of products and relative shareholder return, the potential benefits and costs to the Company of the award, the value of similar incentive awards given to chief executive officers of comparable companies, the awards given to the Chief Executive Officer in past years and such other criteria as the Committee deems advisable. Based on its evaluation, the Committee shall determine and approve, or recommend to the Board for determination and approval, the compensation and other terms of employment of the Chief Executive Officer. The Chief Executive Officer may not be present during the voting or deliberations regarding his or her compensation.

- Compensation of Other Executive Officers and Senior Management. The Committee shall review and approve, or recommend to the Board for approval, the achievement of individual and corporate performance goals and objectives of the Company's other executive officers and other senior management, as appropriate, that are periodically established. The Committee shall determine and approve, or review and recommend to the Board for approval, all elements of the compensation and other terms of employment of these executive officers and other senior management, as appropriate, taking into consideration the person's success in achieving his or her individual performance goals and objectives and the corporate performance goals and objectives deemed relevant to the person as established by the Committee or the Board, as appropriate, and in fostering a corporate culture that promotes the highest level of innovation, integrity and the highest ethical standards. In evaluating and determining, or making recommendations regarding, officer compensation, the Committee may, at its sole discretion, give consideration to the recommendations of the Chief Executive Officer. The Chief Executive Officer may be present during these deliberations, but may not vote.
- 4. *Compensation of Directors.* The Committee shall review and recommend to the Board the type and amount of compensation to be paid or awarded to non-employee Board

members, including any consulting, retainer, meeting, committee and committee chair fees, as well as equity awards

- Selection of Compensation Consultants, Legal Counsel and Other Advisors. The Committee shall have the authority to obtain, at the expense of the Company, advice and assistance from internal or external legal, accounting or other advisors, experts and consultants (collectively, "Compensation Consultants") as the Committee deems necessary or appropriate for carrying out its duties under this charter. The Committee shall have direct responsibility for the appointment, compensation and oversight of the work of Compensation Consultants. Such Compensation Consultants shall report directly, and be accountable, to the Committee. The Committee may retain, or receive advise from, Compensation Consultants only after assessing the independence of such person in accordance with Nasdaq Listing Rule 5605(d)(3) or the requirements of any stock exchange on which any of the Company's share capital is listed. However, nothing in this provision requires that any Compensation Consultants be independent. The Committee need not conduct this independence assessment with respect to: (a) the Company's in-house legal counsel; or (b) any Compensation Consultant whose role is limited to (i) consulting on any broad-based plan that does not discriminate in scope, terms or operation in favor of executive officers or directors of the Company and that is available generally to all salaried employees or (ii) providing information that either is not customized for a particular company or that is customized based on parameters that are not developed by the Compensation Consultant and about which the Compensation Consultant does not provide advice. The Committee shall have sole authority to approve the reasonable fees and the other terms and conditions of such engagement, including authority to terminate the engagement. The Company must provide for appropriate funding, as determined by the Committee, for payment of reasonable compensation to any such Compensation Consultant retained by the Committee. Nothing in this provision requires the Committee to implement or act consistently with the advice or recommendations of any Compensation Consultant or affects the ability or obligation of the Committee to exercise its own judgment in fulfillment of its duties.
- 6. Administration of Benefit Plans. The Committee shall recommend to the Board for approval any compensatory plan pursuant to which Company shares may be issued. Subject to the preceding sentence, the Committee shall have full power and authority to adopt, amend and terminate the Company's share option plans, share appreciation rights plans, pension and profit sharing plans, incentive plans, share bonus plans, share purchase plans, bonus plans, deferred compensation plans and sub-plans thereof and similar programs. The Committee shall have full power and authority to administer these plans, establish guidelines, interpret plan documents, select participants, approve grants and awards, approve modifications to awards, and exercise such other power and authority as may be permitted or required under such plans, provided that grants and awards pursuant to which Company shares may be issued and grants and awards to the Chief Executive Officer shall require approval by the Board. Notwithstanding anything herein to the contrary, the Board shall retain the right to act on all such matters without limiting the Committee's authority, subject to compliance with applicable laws and regulations.
- 7. Compensation Discussion and Analysis. When and as required by applicable rules and regulations of the SEC and the CSA, as applicable, in effect from time to time, the Committee shall review and discuss with management the Company's disclosures contained under the caption "Compensation Discussion and Analysis" for use in any of the Company's

annual reports on Form 10-K, registration statements, proxy statements or information statements and determine whether to recommend to the Board that the CD&A be approved for inclusion in the Company's annual reports on Form 10-K, registration statements, proxy statements or information statements.

- **8.** Compensation Proposals. The Committee shall provide recommendations to the Board on compensation related proposals to be considered at the Company's annual meeting of shareholders, including the frequency of advisory votes on executive compensation if required by applicable law.
- 9. Conflict of Interest Disclosure. The Committee shall review and discuss with management any conflicts of interest raised by the work of a Compensation Consultant or advisor retained by the Committee or management and how such conflict is being addressed, and prepare any necessary disclosure in the Company's annual proxy statement in accordance with applicable SEC rules and regulations and corporate law.
- 10. *Clawback and Recoupment.* The Committee will approve and modify, as needed, or recommend to the Board for approval or modification, clawback policies allowing the Company to recoup compensation paid to employees in accordance with applicable law and stock exchange requirements.
- 11. *Committee Report.* The Committee shall prepare and review the Committee report on executive compensation to be included in the Company's annual proxy statement in accordance with applicable SEC rules and regulations.
- 12. **Risk Assessment.** When required, the Committee will review the Company's practices and policies of employee compensation as they relate to risk management and risk-taking incentives, to determine if such compensation policies and practices are reasonably likely to have a material adverse effect on the Company.
- 13. Committee Self-Assessment, Charter. The Committee shall review, discuss and assess its own performance at least annually. The Committee shall also review and assess the adequacy of this Charter annually and shall recommend any proposed changes to the Board for its consideration.
- 14. *General Authority*. The Committee shall perform such other functions and have such other powers as may be necessary or appropriate in the discharge of any of the foregoing.

PUBLICATION

The Company will post this Charter on the Company's website as required by applicable rules and regulations.

Approved: May 8, 2020 Effective: June 18, 2020 Last Updated: November 8, 2023