VOR BIOPHARMA INC.

CHARTER OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS

I. PURPOSE

The primary purpose of the Compensation Committee (the "*Committee*") of the Board of Directors (the "*Board*") of Vor Biopharma Inc. (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*") 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 (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 in effect from time to time.

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 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.

II. 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 phase-in periods permitted by these requirements, (ii) any other qualifications determined by the Board or the Nominating and Corporate Governance Committee from time to time, (iii) the "non-employee director" standard within the meaning of Rule 16b-3 promulgated under the Securities Exchange Act of 1934, as amended from time to time (the "*Exchange Act*") and (iv) any other requirements imposed by applicable law.

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 appointed by the Board, or if the Board does not do so, the Committee members shall designate a chairperson by vote of a majority of the full Committee.

III. MEETINGS AND MINUTES

The Committee shall hold such regular or special meetings as its members shall deem necessary or appropriate, but in no event shall it meet less than annually. 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.

IV. AUTHORITY

Each member of 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 when and as required.

The Committee shall have authority to pay, at the expense of the Company, ordinary administrative expenses 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 Compensation Consultants.

The Committee may form and delegate authority to subcommittees as appropriate (but only to the extent consistent with the Company's amended and restated certificate of incorporation, amended and restated bylaws (the "Bylaws"), Corporate Governance Guidelines (as defined below), rules of Nasdaq and other applicable law), including, but not limited to a subcommittee composed of one or more members of the Board or officers of the Company to grant stock awards under the Company's equity incentive plans to persons who are not then subject to Section 16 of the Exchange Act. Without limiting the generality of the foregoing, the Committee may form and delegate authority to a committee composed solely of employees of the Company to serve as an administrative and/or investment committee, with fiduciary responsibilities under the Employee Retirement Income Security Act of 1974 ("ERISA"), with respect to one or more Company plans that are subject to ERISA. 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 Bylaws as in effect from time to time and Section 141 of the Delaware General Corporation Law (or any successor section). The approval

of this charter by the Board shall be construed as a delegation of authority to the Committee with respect to the responsibilities set forth herein.

V. **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 capital stock is then listed):

A. 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 corporate goals and objectives relevant to the compensation of the Company's Chief Executive Officer (the "*CEO*") and, to the extent applicable, other executive officers and senior management, as appropriate;
- 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;
- establishing policies with respect to 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;
- reviewing and approving 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;

- monitoring the Company's compliance with the requirements of the Sarbanes Oxley Act of 2002 relating to loans to officers and directors and with all other applicable laws affecting employee compensation and benefits;
- 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;
- review and consider the results of any advisory vote on executive compensation if required by Section 14A of the Exchange Act and the rules and regulations promulgated thereunder; 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.

B. Compensation of Chief Executive Officer. The Committee shall review and recommend to the Board for approval, the compensation and other terms of employment of the Company's CEO and shall evaluate the CEO's performance in light of relevant corporate goals and objectives, taking into account, among other things, the policies of the Committee and the CEO'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 stockholder value;
- achieving specified corporate goals and objectives; and
- achieving other individual or corporate goals and objectives deemed relevant to the CEO as established by the Committee.

In determining any long-term incentive component of the CEO'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 stockholder 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 CEO 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 CEO. The CEO may not be present during the voting or deliberations regarding his or her compensation.

C. Compensation of Other Officers and Senior Management. The Committee shall evaluate and approve, or recommend to the Board for approval, the achievement of

individual performance goals and objectives of the Company's other officers (as that term is defined in Section 16 of the Exchange Act and Rule 16a-1 thereunder) and other senior management, as appropriate, that are established annually by the CEO. 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 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 CEO.

D. 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. E. 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 capital stock 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.

F. Administration of Benefit Plans. The Committee shall have full power and authority to adopt, amend and terminate the Company's stock option plans, stock appreciation rights plans, pension and profit sharing plans, incentive plans, stock bonus plans, stock 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. Notwithstanding anything 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.

G. Compensation Discussion and Analysis. When and as required by applicable rules and regulations of the SEC 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 recommendation to the Board that the CD&A be approved for inclusion in the Company's annual reports on Form 10-K, registration statements.

H. Compensation Proposals. The Committee shall provide recommendations to the Board on compensation related proposals to be considered at the Company's annual meeting of stockholders, including the frequency of advisory votes on executive compensation.

I. Conflict of Interest Disclosure. The Committee shall review and discuss with management any conflicts of interest raised by the work of a Compensation Consultant 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.

J. 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.

K. Charter. The Committee shall review and assess the adequacy of this charter annually and shall recommend any proposed changes to the Board for its consideration.

L. 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.

VI. PUBLICATION

The Company shall make this charter freely available to stockholders on request and, provided that the Company is subject to the periodic reporting requirements of the Exchange Act, shall publish it on the Company's website.

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