MOLECULIN BIOTECH, INC.

CHARTER OF THE COMPENSATION COMMITTEE

MEMBERSHIP

The Compensation Committee (the "Committee") of the board of directors (the "Board") of Moleculin Biotech, Inc. (the "Company") shall consist of three or more directors. Each member of the Committee shall be independent in accordance with the rules of the Nasdaq Stock Market.

Each member of the Committee must qualify as "non-employee directors" for the purposes of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and as "outside directors" for the purposes of Section 162(m) of the Internal Revenue Code, as amended.

The members of the Committee shall be appointed by the Board based on recommendations from the nominating and corporate governance committee of the Board. The members of the Committee shall serve for such term or terms as the Board may determine or until earlier resignation or death. The Board may remove any member from the Committee at any time with or without cause.

PURPOSE

The purpose of the Committee is to carry out the responsibilities delegated by the Board relating to the review and determination of executive compensation.

DUTIES AND RESPONSIBILITIES

The Committee shall have the following authority and responsibilities:

- 1. To annually review and recommend for approval by the Board the corporate goals and objectives applicable to the compensation of the chief executive officer ("CEO"), evaluate at least annually the CEO's performance in light of those goals and objectives, and recommend for approval by the Board, the CEO's compensation level based on this evaluation. In evaluating and determining CEO compensation, the Committee shall consider the results of the most recent stockholder advisory vote on executive compensation ("Say on Pay Vote") when such vote is required by Section 14A of the Exchange Act. The CEO cannot be present during any voting or deliberations by the Committee on his or her compensation.
- 2. To review and recommend for approval by the Board the compensation of all other executive officers. In evaluating executive compensation, the Committee shall consider the results of the most recent Say on Pay Vote.

- 3. To review, approve and, when appropriate, recommend to the Board for approval, incentive compensation plans and equity-based plans, and where appropriate or required, recommend for approval by the stockholders of the Company, which includes the ability to adopt, amend and terminate such plans. The Committee shall also have the authority to administer the Company's incentive compensation plans and equity-based plans, including designation of the employees to whom the awards are to be granted, the amount of the award or equity to be granted and the terms and conditions applicable to each award or grant, subject to the provisions of each plan. In reviewing and making recommendations regarding incentive compensation plans and equity-based plans, including whether to adopt, amend or terminate any such plans, the Committee shall consider the results of the most recent Say on Pay Vote.
- 4. To the extent such disclosure is required by the Exchange Act, to review and discuss with management the Company's Compensation Discussion and Analysis ("CD&A") and the related executive compensation information, recommend that the CD&A and related executive compensation information be included in the Company's annual report on Form 10-K and proxy statement and produce the compensation committee report on executive officer compensation required to be included in the Company's proxy statement or annual report on Form 10-K.
- 5. To review and make recommendations to the Board regarding any employment agreements and any severance arrangements or plans, including any benefits to be provided in connection with a change in control, for the CEO and other executive officers.
- 6. To review and discuss annually the Company's compensation arrangements to determine whether they encourage excessive risk-taking and to evaluate compensation policies and practices that could mitigate any such risk.
- 7. To 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.
- 8. The Committee shall discuss with the Audit Committee of the Board, the Committee's assessment of the Company's performance of its annual objectives for the purpose of confirming the accuracy of the Company's financial statements, including compensation reserves and accruals.
- 9. To review director compensation for service on the Board and Board committees at least once a year and to recommend any changes to the Board.

OUTSIDE ADVISORS

The Committee shall have the authority, in its sole discretion, to select, retain and obtain the advice of a compensation consultant as necessary to assist with the execution of its duties and responsibilities as set forth in this Charter. The Committee shall set the compensation and oversee the work of the compensation consultant. The Committee shall have the authority, in its sole discretion, to retain and obtain the advice and assistance of outside legal counsel and such other advisors as it deems necessary to fulfill its duties and responsibilities under this Charter. The Committee shall set the compensation and oversee the work of its outside legal counsel and other advisors. The Committee shall receive appropriate funding from the Company, as determined by the Committee in its capacity as a committee of the Board, for the payment of compensation to its compensation consultants, outside legal counsel and any other advisors. However, the Committee shall not be required to implement or act consistently with the advice or recommendations of its compensation consultant, outside legal counsel or other advisor to the Committee, and the authority granted in this Charter shall not affect the ability or obligation of the Committee to exercise its own judgment in fulfillment of its duties under this Charter.

The Committee may select a compensation consultant, outside legal counsel or other advisors only after taking into consideration all relevant factors, including the following: (i) the provision of other services to the Company by the person that employs the compensation consultant, outside legal counsel or other advisor; (ii) the amount of fees received from the Company by the person that employs the compensation consultant, outside legal counsel or other advisor, as a percentage of the total revenue of the person that employs the compensation consultant, outside legal counsel or other advisor; (iii) the policies and procedures of the person that employs the compensation consultant, outside legal counsel or other advisor that are designed to prevent conflicts of interest; (iv) any business or personal relationship of the compensation consultant, outside legal counsel or other advisor with a member of the compensation committee; (v) any stock of the Company owned by the compensation consultant, outside legal counsel or other advisor; and (vi) any business or personal relationship of the compensation consultant, outside legal counsel, other advisor or the person employing the advisor with an executive officer of the Company. The Committee may retain, or receive advice from, any compensation advisor they prefer, including ones that are not independent, after considering the above factors.

The Committee is not required to assess the independence of any compensation consultant or other advisor that acts in a role limited to consulting on any broad-based plan that does not discriminate in scope, terms or operation in favor of executive officers or directors and that is generally available to all salaried employees or providing information that is not customized for a particular company or that is customized based on parameters that are not developed by the consultant or advisor, and about which the consultant or advisor does not provide advice.

The Committee shall evaluate whether any compensation consultant retained or to be retained by it has any conflict of interest in accordance with Item 407(e)(3)(iv) of Regulation S-K.

STRUCTURE AND OPERATIONS

The Board shall designate a member of the Committee as the chairperson. The Committee shall meet as often as it deems necessary to perform its responsibilities. The Committee shall report regularly to the Board regarding its actions and make recommendations to the Board as appropriate. The Committee is governed by the same rules regarding meetings (including meetings in person or by telephone or other similar communications equipment), action without meetings, notice, waiver of notice, and quorum and voting requirements as are applicable to the Board.

The Committee may invite such members of management to its meetings as it deems appropriate. However, the Committee shall meet regularly without such members present, and in all cases the CEO and any other such officers shall not be present at meetings at which their compensation or performance is discussed or determined.

The Committee shall review this Charter at least annually and recommend any proposed changes to the Board for approval.

DELEGATION OF AUTHORITY

The Committee shall have the authority to delegate any of its responsibilities, along with the authority to take action in relation to such responsibilities, to one or more subcommittees as the Committee may deem appropriate in its sole discretion. The Chair may represent the entire Committee, as a subcommittee, with respect to functions of the Committee undertaken between meetings. Any actions of a subcommittee shall be presented to the full Committee at its next scheduled meeting.

PERFORMANCE EVALUATION

The Committee shall conduct an annual evaluation of the performance of its duties under this Charter and shall present the results of the evaluation to the Board. The Committee shall conduct this evaluation in such manner as it deems appropriate.

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