

REGULUS THERAPEUTICS INC.

CHARTER OF THE COMPENSATION COMMITTEE

PURPOSE AND POLICY

The purpose of the Compensation Committee (the “*Committee*”) of the Board of Directors (the “*Board*”) of Regulus Therapeutics Inc. (the “*Company*”) is to act on behalf of the Board in fulfilling the Board’s responsibilities to oversee the Company’s compensation policies, plans and programs, and to review and determine, as appropriate, the compensation to be paid to the Company’s executive officers and directors, as well as to review, discuss with management and approve the Company’s disclosures contained under the caption “Compensation Discussion and Analysis” (“*CD&A*”) for use in any of the Company’s annual reports on Form 10-K, registration statements, proxy statements or information statements and 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 Securities and Exchange Commission (the “*SEC*”), as in effect from time to time. For purposes of this charter, the term “compensation” shall include salary, long-term incentives, bonuses, performance-based cash incentive plans, perquisites, equity incentives, severance arrangements, change of control related arrangements, retirement benefits, tax gross up provisions and other related benefits and benefit plans.

The policy of the Committee shall be as follows:

- ***Compensation Structure.*** The Committee shall seek to maintain an overall compensation structure designed to attract, retain and motivate management and other employees by providing appropriate levels of risk and reward, assessed on a relative basis at all levels within the Company and in proportion to individual contribution and performance, and
- ***Long-Term Focus.*** The Committee shall seek to establish appropriate incentives for management to further the Company’s long-term strategic plan and avoid undue emphasis on short-term market value.

COMPOSITION

The Committee shall consist of at least two members of the Board. All members of the Committee shall satisfy, as determined by the Board, the independence requirements of The Nasdaq Stock Market (“*Nasdaq*”) applicable to compensation committee members, as in effect from time to time, including any exceptions permitted by these requirements. At least two of the members of the Committee shall satisfy 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*”). The members of the Committee and the Committee chairperson 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. The Chair (or in his or her absence, a member designated by the Chair) shall preside at all meetings of the Committee.

MEETINGS

The Committee shall hold such regular or special meetings as its members deem necessary or appropriate. The Chair of the Committee shall report to the Board from time to time, whenever so requested by the Board and in any case promptly with respect to any formal approvals acted upon by the Committee.

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, legal counsel or other personnel assisting in the preparation of the CD&A for the Company's filings with the SEC. 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. The Committee shall also have sole authority to retain and terminate any such external legal, accounting or other advisors and consultants, including but not limited to retaining and terminating any compensation consultant to assist in the evaluation of director, chief executive officer or senior executive compensation, including sole authority to approve such consultant's reasonable fees and other retention terms, all at the Company's expense. Other reasonable expenditures for external resources that the Committee deems necessary or appropriate in the performance of its duties are permitted and shall be incurred at the Company's expense.

The Committee may form and delegate authority to subcommittees as appropriate, including, but not limited to, (1) if an exemption from Section 16(b) of the Exchange Act under Rule 16b-3 is desired, a subcommittee composed solely of at least two members of the Committee who are "non-employee directors" under Rule 16b-3 to grant awards of equity securities and to take such other actions as may be necessary or appropriate to qualify transactions in the Company's equity securities under the Rule 16b-3 exemption or (2) if and as permitted by the applicable equity incentive plan and applicable law, a subcommittee comprised of one or more executive officers of the Company which is delegated the authority to grant awards of equity securities to consultants, advisors or employees of the Company who are not then subject to Section 16 of the Exchange Act. The operation of the Committee shall be subject to the Bylaws of the Company as in effect from time to time and Section 141 of the Delaware General Corporation Law. The approval of this charter 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 and policies, the Committee shall be charged with the following duties and responsibilities, with the understanding, however, that the Committee may supplement and, except as otherwise required by applicable law or the requirements of Nasdaq, deviate from these activities as appropriate under the circumstances:

1. ***Overall Compensation Strategy and Policies.*** The Committee shall be responsible for reviewing, modifying (as needed) and approving (or, if it deems appropriate, making recommendations to the full Board regarding) the overall compensation strategy and policies for the Company, including:

- reviewing and approving (or, if it deems appropriate, making recommendations to the full Board regarding) corporate performance goals and objectives, which shall support and reinforce the Company's long-term strategic goals, relevant to the compensation of the Company's executive officers;
- evaluating and approving (or, if it deems appropriate, making recommendations to the full Board regarding) the compensation plans and programs advisable for the Company, as well as the modification or termination of existing plans and programs;
- evaluating (including, if it deems appropriate, with the input of some or all of the other members of the Board) risks associated with and potential consequences of the Company's compensation policies and practices, as applicable to all employees of the Company, and assessing whether risks and consequences arising from the Company's compensation policies and practices for its employees, as may be mitigated by any other compensation policies and practices, are reasonably likely to have a material adverse effect on the Company;
- 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;
- establishing policies for allocating between long-term and currently paid out compensation, between cash and non-cash compensation and the factors used in deciding between the various forms of compensation;
- establishing elements of corporate performance for purposes of increasing or decreasing compensation;
- establishing policies on the timing and pricing of equity awards for newly hired employees, promotions and annual grants for executives and non-executive employees and directors;
- establishing policies with respect to votes by the Company's stockholders to approve executive compensation as required by Section 14A of the Exchange Act and determining the Company's recommendations regarding the frequency of advisory votes on executive compensation, as well as reviewing and considering the results of any advisory vote on executive compensation;
- reviewing regional and industry-wide compensation practices and trends to assess the propriety, 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;

- establishing, periodically assessing and making recommendations to the Board regarding the adequacy of director compensation;
- reviewing and approving (or, if it deems appropriate, making recommendations to the full Board regarding) the terms of any employment agreements, severance arrangements, change-of-control protections and any other compensatory arrangements (including, without limitation, any material perquisites and any other form of compensation) for the Company's executive officers (other than the Chief Executive Officer of the Company), including reviewing and approving (or, if it deems appropriate, making recommendations to the full Board regarding) any payments, compensation or other awards under such agreements and arrangements;
- reviewing and approving any compensation arrangement for any executive officer involving any subsidiary, special purpose or similar entity;
- considering and, if appropriate, establishing a policy designed to encourage executive officers and directors to acquire and hold a meaningful equity interest in the Company; 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 recommend to the Board for determination and approval the compensation and other terms of employment of the Company's Chief Executive Officer and shall evaluate the Chief Executive Officer's performance in light of relevant 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 levels of 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 any other corporate performance goals and objectives deemed relevant to the Chief Executive Officer as established by the Board; and
- achieving the Chief Executive Officer's individual performance goals and objectives established by the Committee.

Based on its evaluation, the Committee shall recommend to the Board for determination and approval the compensation and the other terms of employment of the Company's Chief Executive Officer. In making recommendations to the Board for determining the long-term incentive component of the Chief Executive Officer's compensation, the Committee shall take into consideration the Company's performance and relative stockholder return, the value of similar incentive awards given to chief executive officers of comparable companies, the awards given to the Company's Chief Executive Officer in past years, other elements of the Chief Executive Officer's compensation including total compensation and such other criteria as the Committee deems advisable. The Company's Chief Executive Officer may not be present during the voting or deliberations regarding his or her compensation.

3. *Compensation of Other Executive Officers.* The Committee shall review and approve (or, if it deems appropriate, recommend to the Board for determination and approval) the individual and corporate 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) that are periodically established. The Committee shall determine and approve (or, if it deems appropriate, recommend to the Board for determination and approval) the compensation and other terms of employment of each such executive officer, taking into consideration the executive officer's success in achieving his or her individual performance goals and objectives and the corporate performance goals and objectives deemed relevant to the executive officer as established by the Committee.

4. *Compensation of Non-Employee Directors.* The Committee shall make recommendations to the full Board regarding the type and amount of compensation to be paid or awarded to non-employee members of the Board, including consulting, retainer, Board meeting, committee and committee chair fees, equity incentives, and any deferred compensation arrangements or similar programs.

5. *Administration of Benefit Plans.* The Committee shall review and approve (or, if it deems appropriate, make recommendations to the full Board regarding) the adoption, amendment and termination of 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 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, and exercise such other power and authority as may be permitted or required under such plans.

6. *Compensation Discussion and Analysis.* To the extent applicable, 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 make recommendations 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.

7. *Committee Report.* To the extent applicable, 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.

8. *Independence of Advisors.* The Committee may select, or receive advice from, a compensation consultant, legal counsel (other than in-house legal counsel) or other advisor only after considering the factors set forth in Rule 10C-1(b)(4) of the Exchange Act, as well as any other factors identified by applicable Nasdaq rules. Under Rule 10C-1(b)(4), in selecting any advisor, the Committee shall take into consideration all factors relevant to such advisor, including:

- (a) the provision of other services to the Company;
- (b) the amount of fees received from the Company by the person or entity that employs the adviser, as a percentage of that person's or entity's total revenue;
- (c) the policies and procedures of the person employing the advisor that are designed to prevent conflicts of interest;
- (d) any business or personal relationship of the advisor with a Committee member
- (e) any stock of the Company owned by the adviser; and,
- (f) any business or personal relationship of the adviser or the person employing the adviser with an executive officer of the Company.

However, nothing in this provision requires that any advisers be independent. The Committee need not conduct this independence assessment with respect to (A) in-house legal counsel; or (B) any adviser 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 adviser and about which the adviser does not provide advice. The Committee shall have direct responsibility for the appointment, compensation and oversight of the work of any advisers engaged for the purpose of advising the Committee, and such advisers shall report directly, and be accountable, to the Committee. 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 adviser retained by the Committee. Nothing in this provision requires the Committee to implement or act consistently with the advice or recommendations of any adviser or affects the ability or obligation of the Committee to exercise its own judgment in fulfillment of its duties.

9. *Annual Evaluation and Charter Review.* The Committee shall review, discuss and assess its own performance at least annually. The Committee shall also periodically and at

least annually review and assess the adequacy of this charter and recommend any proposed changes to the Board for its consideration and approval.

10. *Conflict-of-Interest Disclosure.* The Committee shall review and discuss with management, if appropriate, any conflicts of interest raised by the work of any compensation consultant that had any role in determining or recommending the amount or form of executive or director compensation (except as set forth in clause (A) and (B) of Section 8 above) or was retained by the Committee or management and how such conflict is being addressed for disclosure in the Company's annual proxy statement in accordance with applicable SEC rules and regulations.