

TARGACEPT, INC.

COMPENSATION COMMITTEE CHARTER

I. Compensation Committee Purpose

The primary purposes of the Compensation Committee of the Board of Directors of Targacept, Inc. are to establish the compensation for the Company's executive officers and to administer the Company's stock-based and incentive compensation programs for employees generally, subject to the provisions of this Charter and the limitations and requirements of applicable law.

II. Compensation Committee Composition and Procedure

The Compensation Committee will consist of at least three members. Each member will qualify as an independent director under applicable NASDAQ rules, subject to any permitted exception under such rules. In addition, unless otherwise determined by the Board, each member will qualify as a "non-employee director" as defined in Rule 16b-3 promulgated under the Securities Exchange Act of 1934, as amended, and as an "outside director" as defined in Section 162(m) of the Internal Revenue Code, as amended.

The Board will appoint the members of the Compensation Committee. Each member will serve until his or her successor is appointed or until his or her earlier death, retirement, resignation or removal. The Board will designate the chairman of the Compensation Committee or, if it does not do so, the members of the Compensation Committee will elect a chairman by majority vote. Subject to applicable law and NASDAQ rules, the Board will have the power at any time to change the size and membership of the Compensation Committee and to fill any vacancy on the Compensation Committee, provided that any new member satisfies the requirements of this Charter and applicable law and NASDAQ rules. The rules and procedures of the Compensation Committee will be governed by this Charter, any guidelines adopted by the Board from time to time, the Company's bylaws and applicable law.

The Compensation Committee will meet (either in person or by conference telephone or other means by which the Compensation Committee is permitted to meet) at least four times per year and at such other times as it considers necessary or appropriate to carry out its responsibilities. Any of the chairman of the Compensation Committee, the chairman of the Board or the Company's chief executive officer may call meetings of the Compensation Committee.

The Compensation Committee will record and maintain minutes of its meetings. The chairman of the Compensation Committee or a Compensation Committee member designated by the chairman will make a report to the Board of the Compensation Committee's meetings, actions taken at meetings or by consent and recommendations made since the most recent Board meeting, in each case except to the extent such matter or matters have been addressed in an interim report circulated by the Compensation Committee.

III. Compensation Committee Authority and Responsibilities

The authority and responsibilities of the Compensation Committee are as follows:

A. review and reassess the adequacy of this Charter annually and recommend any proposed changes to the Board for approval;

B. review periodically and approve the Company's general philosophy concerning executive compensation and the components of the Company's executive compensation program to align them with the Company's compensation philosophy;

C. review and approve corporate, divisional and/or individual goals and objectives that it considers relevant to the compensation of the Company's chief executive officer;

D. evaluate annually the performance of the Company's chief executive officer and establish his or her compensation, including the components thereof;

E. establish the compensation of each of the Company's other executive officers (the Company's chief executive officer may be present when the Compensation Committee sets the compensation of the Company's other executive officers);

F. approve employment agreements, severance agreements and change in control agreements for the Company's chief executive officer and other executive officers and all amendments to such agreements;

G. review and discuss with management, prior to filing with the Securities and Exchange Commission, the Company's Compensation Discussion and Analysis disclosure and formally recommend to the Board that such Compensation Discussion and Analysis disclosure be included in the Company's annual report on Form 10-K (either directly or by incorporation by reference to the Company's subsequently filed annual proxy statement);

H. assess annually risks associated with the Company's compensation policies and practices (i.e., whether and to what extent they are reasonably likely to have a material adverse effect on the Company);

I. prepare the compensation committee report to be included in the Company's annual report on Form 10-K (either directly or by incorporation by reference to the Company's subsequently filed annual proxy statement);

J. recommend to the Board:

1. that the Board recommend that stockholders (A) approve, on a non-binding, advisory basis, the compensation of the Company's named executive officers as disclosed in the Company's proxy statement and (B) when such matter is put to the stockholders for a vote, vote, on a non-binding, advisory basis, for the frequency recommended by the Board for future non-binding, advisory votes on the Company's executive compensation; and

2. at least once every six years, whether to put the Company's executive compensation to a non-binding, advisory vote of stockholders every one, two or three years;

K. periodically evaluate the Company's long-term and short-term incentive plans and employee benefit plans, whether cash or equity-based, consider whether to amend or terminate

existing plans or to adopt new plans and determine (with the advice of legal counsel) whether to submit a recommendation that the Board approve a proposal to amend or terminate an existing plan or to adopt a new plan and whether to submit such a proposal to a vote of the stockholders;

L. administer (or oversee the administration of) the Company's stock option and other equity-based plans and other employee benefit and incentive plans, to the extent consistent with their respective terms;

M. evaluate periodically the methodology for awarding equity-based and other incentive compensation to all non-executive employees (including new hires) and other service providers and the levels of such compensation and, as appropriate, approve changes to such methodology;

N. form and delegate authority to subcommittees when it considers appropriate; and

O. undertake such additional actions within the scope of its primary responsibilities as the Board determines.

The Compensation Committee may condition its approval of any compensation on ratification by the Board if Board action is required to comply with applicable law or regulation or is otherwise deemed necessary or appropriate.

IV. Additional Resources

The Compensation Committee will have the right to utilize reasonable amounts of the time of the Company's personnel and also will have the right to retain independent compensation experts, outside accountants, legal counsel and other advisors as it may deem appropriate to assist and advise it in connection with its responsibilities and to approve related fees and engagement terms. The Compensation Committee will keep the Company's chief financial officer advised as to the general range of anticipated expenses for outside consultants and advisers.

Adopted: June 16, 2004
Last Modified: December 8, 2011