

**Charter of the Compensation and Stock Option Committee
of the Board of Directors of StemCells, Inc.**

I. Organization and Governance of the Committee. There shall be a committee of the Board of Directors (the "Board") to be known as the Compensation and Stock Option Committee (the "Committee"). The Committee shall be composed of at least two directors, each of whom shall satisfy the independence requirements of the Nasdaq Stock Market and who shall be appointed by the Board or by the Nominating and Corporate Governance Committee of the Board. Members of the Committee may be removed at the Board's discretion. In addition, each member of the Committee shall qualify as an "outside director" within the meaning of Section 162(m) of the Internal Revenue Code and shall be a "non-employee director" within the meaning of Rule 16b-3 under the Securities Exchange Act of 1934.

In order to fulfill its role, the Committee shall be organized and governed in the following manner:

- Action may be taken by the Committee upon the affirmative vote of a majority of the members;
- Any two members or the Chairman of the Committee may call a meeting of the Committee upon due notice to each other member at least 24 hours prior to the meeting. Notice of a meeting need not be given to any Committee member if a written waiver of notice, executed by him or her before or after the meeting, is filed with the records of the meeting, or to any director who attends the meeting without protesting prior thereto or at its commencement the lack of notice to him or her. Neither notice of a meeting nor a waiver of a notice need specify the purposes of the meeting;
- Action may be taken by the Committee without a meeting if all of the members of the Committee indicate their approval thereof in writing; and
- The Committee shall have the authority to delegate to subcommittees of the Committee any of the responsibilities of the full Committee.

II. Statement of Purpose and Responsibilities. The Committee has direct responsibility to perform the following duties:

- Review and approve corporate goals and objectives relevant to CEO and other executive officer compensation, evaluate the CEO's and other executive officers' performance in light of those goals and objectives and, either as a committee or together with the other independent directors (as directed by the Board), determine and approve the CEO's and other executive officers' compensation level based on this evaluation. In considering a long-term incentive component of CEO compensation, the Committee may consider such factors as the

Company's performance and relative shareholder return, the value of similar incentive awards to CEOs at comparable companies, and the awards given to StemCells' CEO in past years;

- Make recommendations to the Board regarding compensation, if any, of the Board;
- Make recommendations to the Board regarding the adoption of new employee incentive compensation plans and equity-based plans and administer the Company's existing incentive compensation plans and equity-based plans;
- Produce a compensation committee report on executive compensation for inclusion in the Company's annual proxy statement in accordance with the proxy rules.
- Review and assess the adequacy of this charter and submit any changes to the Board for approval;
- Report its actions and any recommendations to the Board on a periodic basis;
- Review such other matters as the Board or the Committee shall deem appropriate.

III. Powers of the Compensation Committee. In order to fulfill its role, the Committee shall have the power to:

- Adopt, administer, amend or terminate compensation plans applicable to any class of employees of the Company and/or any subsidiary of the Company; *provided* that no adoption, amendment or termination of any compensation plan under which stock may be issued, or in which a member of the Board may be a participant, shall be effective unless the same shall be approved by the Board and, to the extent required by law, by the stockholders; *provided, further*, that no adoption, amendment or termination of any compensation plan may be made that violates this or any other committee charter of the Company; and
- When it is determined by the Committee that a consulting firm (or other expert) is to assist in the assessment of the CEO or other senior executive officer compensation, the Committee shall have the authority to retain and terminate such firm or experts and have the authority to approve the consulting firm or other expert's fee and other retention terms. The Committee shall also have the authority to retain legal, accounting or other experts that it determines to be necessary to carry out its duties and to determine compensation for such advisors.

Note: By Board Resolutions of 8/11/04 and 8/8/06 (by unanimous written consent) the Compensation and Stock Option Committee and the Single Member Committee have the same authority, subject to the same limitations, with respect to the 2004 Equity

Incentive Plan and the 2006 Equity Incentive as they have respectively with respect to the Company' 2001 Equity Incentive Plan.