

NOVELOS THERAPEUTICS, INC.

NOMINATING AND CORPORATE GOVERNANCE COMMITTEE CHARTER

as Approved by the Board of Directors

March 21, 2006

I. Statement of Purpose

The Nominating and Corporate Governance Committee (the “Committee”) is a standing committee of the Board of Directors. The purpose of the Committee is to identify individuals qualified to become members of the Board of Directors, to recommend Director nominees for each annual meeting of stockholders and nominees for election to fill any vacancies on the Board of Directors and to address related matters. The Committee shall also develop and recommend to the Board of Directors corporate governance principles applicable to the Company and be responsible for leading an annual review of the performance of both the Board of Directors as a whole and its individual members.

II. Organization

A. **Charter.** At least annually, this charter shall be reviewed and reassessed by the Committee and any proposed changes shall be submitted to the Board of Directors for approval.

B. **Members.** The members of the Committee shall be appointed by the Board of Directors and shall meet the independence and other requirements of applicable law and the listing standards of The Nasdaq Stock Market, Inc. The Committee shall consist of at least three members. Committee members may be removed by the Board of Directors. The Board of Directors shall also designate a Committee Chairperson; other officers of the Committee, if any, shall be elected by members of the Committee.

C. **Meetings.** In order to discharge its responsibilities, the Committee shall each year establish a schedule of meetings, including the tasks to be accomplished during the upcoming year; additional meetings may be scheduled as required. The Committee shall meet at least one time per year. The Committee shall meet periodically in executive session as it deems appropriate and shall have the opportunity to meet in executive session at each of its meetings.

D. **Quorum; Action by Committee.** A quorum of any Committee meeting shall be a majority of its members then in office. All determinations of the Committee shall be made by a majority of its members present at a meeting duly called and held, except as specifically provided herein (or where only two members are present, by unanimous vote). A decision or determination of the Committee reduced to writing and signed by all of the members of the Committee shall be fully as effective as if it had been made at a meeting duly called and held.

E. **Agenda, Minutes and Reports.** The Chairperson of the Committee shall be responsible for establishing the agendas for meetings of the Committee. An agenda, together

with materials relating to the subject matter of each meeting, shall be sent to members of the Committee prior to each meeting. Minutes for all meetings of the Committee shall be prepared to document the Committee's discharge of its responsibilities. The minutes shall be circulated in draft form to all Committee members to ensure an accurate final record, shall be approved at a subsequent meeting of the Committee and shall be distributed periodically to the full Board of Directors. The Committee shall make regular reports to the Board of Directors.

F. Performance Evaluation. The Committee shall evaluate its performance on an annual basis.

III. Responsibilities

The following shall be the principal responsibilities of the Committee:

A. Director Selection Criteria. In selecting new Directors, the Committee shall consider any requirements of applicable law or listing standards, a candidate's strength of character, judgment, business experience and specific area of expertise, factors relating to the compensation of the Board (including its size and structure), principles of diversity, and such other factors as the Committee shall deem appropriate.

B. Director Recruitment. The Committee shall consider (in consultation with the Chairman of the Board and the Chief Executive Officer) and recruit candidates to fill positions on the Board of Directors, including as a result of the removal, resignation or retirement of any Director, an increase in the size of the Board of Directors or otherwise. The Committee shall also review any candidate recommended by stockholders of the Company in light of the Committee's criteria for selection of new Directors. As part of this responsibility, the Committee shall be responsible for conducting, subject to applicable law, any and all inquiries into the background and qualifications of any candidate for the Board of Directors and such candidate's compliance with the independence and other qualification requirements established by the Committee or imposed by applicable law or listing standards.

C. Selection of Director Nominees. The Committee shall select the slate of Director nominees to be recommended by the Board of Directors at each annual meeting of stockholders.

D. Consideration of Term and Age Limits. The Committee shall review the desirability of term and age limits for Directors and recommend to the Board of Directors policies in this regard from time to time.

E. Governance Guidelines. The Committee shall recommend to the Board of Directors corporate governance guidelines addressing, among other matters, the size, composition and responsibilities of the Board of Directors and its Committees, including its oversight of management and consultations with management. The corporate governance guidelines shall be reviewed not less frequently than annually by the Committee, and the Committee shall make recommendations to the Board of Directors with respect to changes to the guidelines.

F. Advice as to Committee Membership and Operations. The Committee shall (in consultation with legal counsel) advise the Board of Directors with respect to the charters,

structure and operations of the various Committees of the Board of Directors and qualifications for membership thereon, including policies for removal of members and rotation of members among other Committees of the Board of Directors. The Committee shall also consult with the Chief Executive Officer and make recommendations to the Board of Directors regarding which Directors should serve on the various Committees of the Board, taking into account, among other things, independence and other requirements for membership of such committees.

G. Evaluation of Board of Directors. The Committee shall oversee an annual evaluation of the Board of Directors as a whole and a periodic evaluation of its individual members at such intervals as the Committee shall deem appropriate (such as in connection with the expiration of a term of service on the Board and the decision whether the director with the expiring term should be nominated to serve for another term). In discharging this responsibility, the Committee shall elicit comments from all Directors and report annually to the Board of Directors on the results of the evaluation.

H. Other Delegated Responsibilities. The Committee shall also carry out such other duties as may be delegated to it by the Board of Directors from time to time.

IV. Other

A. Access to Records, Advisers and Others. In discharging its responsibilities, the Committee shall have full access to any relevant records of the Company and may retain, at Company expense, independent advisers (including legal counsel, accountants and consultants) as it determines necessary to carry out its duties. The Committee shall have the ultimate authority and responsibility to engage or terminate any such independent advisers and to approve the terms of any such engagement and the fees to be paid to any such adviser. The Committee may also request that any officer or other employee of the Company, the Company's outside counsel or any other person meet with any members of, or independent adviser to, the Committee.

B. Delegation. The Committee may delegate any of its responsibilities to a subcommittee comprised of one or more members of the Committee.