

NORTHSTAR NEUROSCIENCE, INC.
CHARTER OF THE AUDIT COMMITTEE
OF THE BOARD OF DIRECTORS

(adopted March 1, 2006)

I. STATEMENT OF POLICY

This Charter specifies the scope of the responsibilities of the Audit Committee (the “Committee”) of the Board of Directors (the “Board”) of Northstar Neuroscience, Inc. (the “Company”) and the manner in which those responsibilities shall be performed, including its structure, processes and membership requirements.

The primary purpose of the Committee is to oversee the accounting and financial reporting processes of the Company and the audits of the Company’s financial statements. The Committee shall also review the qualifications, independence and performance, and approve the terms of engagement, of the Company’s independent auditor, and prepare any reports required of the Committee under rules of the Securities and Exchange Commission (the “SEC”).

The Company shall provide appropriate funding, as determined by the Committee, to permit the Committee to perform its duties under this Charter, to compensate its advisors and to compensate any registered public accounting firm engaged for the purpose of rendering or issuing an audit report or related work or performing other audit, review or attest services for the Company. The Committee, at its discretion, has the authority to initiate investigations, and hire legal, accounting or other outside advisors or experts to assist the Committee, as it deems necessary to fulfill its duties under this Charter. The Committee may also perform such other activities consistent with this Charter, the Company’s Bylaws and governing law, as the Committee or the Board deems necessary or appropriate.

II. ORGANIZATION AND MEMBERSHIP REQUIREMENTS

The Committee shall be comprised of at least three directors, each of whom shall satisfy the independence and experience requirements of The Nasdaq Stock Market, Inc., (“Nasdaq”), provided that one director who does not meet the independence criteria of Nasdaq, but is not a current employee or officer, or an immediate family member of an employee or officer, may be appointed to the Committee, subject to the approval of the Board pursuant to, and subject to the further limitations under, the “exceptional and limited circumstances” exceptions as provided under the rules of Nasdaq. In addition, the Committee shall not include any member who: has participated in the preparation of the financial statements of the Company or any current subsidiary at any time during the past three (3) years, or accepts any consulting, advisory, or other compensatory fee, directly or indirectly, from the Company, other than in his or her capacity as a member of the Committee, the Board, or any other committee of the Board, or is an affiliate of the Company or any subsidiary of the Company.

Each member of the Committee must be able to read and understand fundamental financial statements, including a balance sheet, income statement and cash flow statement. In

addition, at least one member shall have past employment experience in finance or accounting, professional certification in accounting, or other comparable experience or background resulting in the individual being financially sophisticated, which may include being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities.

The members of the Committee shall be appointed by the Board on the recommendation of the Nominating and Corporate Governance Committee and shall serve until their successors are duly elected and qualified or their earlier death, resignation or removal. Any member of the Committee may be replaced by the Board on the recommendation of the Nominating and Corporate Governance Committee. Unless a chairman is elected by the full Board, the members of the Committee may designate a chairman by majority vote of the full Committee membership.

III. MEETINGS

The Committee shall meet as often as it deems appropriate, but not less frequently than quarterly. A majority of the members shall represent a quorum of the Committee, and, if a quorum is present, any action approved by at least a majority of the members present shall represent the valid action of the Committee. The Committee may form and delegate authority to subcommittees, or to one or more members of the Committee, when appropriate. The Committee shall meet with management and the independent auditor in separate executive sessions as appropriate. The Committee shall meet with the independent auditor and management on a quarterly basis to review the Company's financial statements and financial reports. The Committee shall maintain written minutes of its meetings, which minutes will be filed with the minutes of the meetings of the Board.

IV. COMMITTEE AUTHORITY AND RESPONSIBILITIES

To fulfill its responsibilities and duties, the Committee shall:

A. **Oversight of the Company's Independent Auditor**

1. Be directly and solely responsible for the appointment, compensation, retention and oversight of any independent auditor (including resolution of disagreements between management and the independent auditor regarding financial reporting) engaged by the Company for the purpose of preparing or issuing an audit report or related work, with each such auditor reporting directly to the Committee.

2. Periodically review and discuss with the independent auditor (i) the matters required to be discussed by Statement on Auditing Standards No. 61, as amended, and (ii) any formal written statements received from the independent auditor consistent with and in satisfaction of Independence Standards Board Standard No. 1, as amended, including without limitation, descriptions of (x) all relationships between the independent auditor and the Company, (y) any disclosed relationships or services that may impact the independent auditor's objectivity and independence and (z) whether any of the Company's senior finance personnel were recently employed by the independent auditor.

3. Approve in advance the engagement of the independent auditor for all audit services and non-audit services, based on independence, qualifications and, if applicable, performance, and approve the fees and other terms of any such engagement; provided, however, that (i) the Committee may establish pre-approval policies and procedures for any engagement to render such services, provided that such policies and procedures (x) are detailed as to particular services, (y) do not involve delegation to management of the Committee's responsibilities hereunder and (z) provide that, at its next scheduled meeting, the Committee is informed as to each such service for which the independent auditor is engaged pursuant to such policies and procedures, and (ii) the Committee may delegate to one or more members of the Committee the authority to grant pre-approvals for such services, provided that the decisions of such member(s) to grant any such pre-approval shall be presented to the Committee at its next scheduled meeting.

4. Meet with the independent auditor prior to the audit to discuss the planning and staffing of the audit.

5. Approve as necessary the termination of the engagement of the independent auditor.

6. Establish policies for the hiring of employees or former employees of the independent auditor who participate in any capacity in the audit of the Company, taking into account the impact of such policies on auditor independence.

7. Regularly review with the independent auditor any significant difficulties encountered during the course of the audit, any restrictions on the scope of work or access to required information and any significant disagreement among management and the independent auditor in connection with the preparation of the financial statements. Review with the independent auditor any accounting adjustments that were noted or proposed by the independent auditor but that were "passed" (as immaterial or otherwise), any communications between the audit team and the independent auditor's national office respecting auditing or accounting issues presented by the engagement, any "management" or "internal control" letter or schedule of unadjusted differences issued, or proposed to be issued, by the independent auditor to the Company, or any other material written communication provided by the independent auditor to the Company's management.

8. Review with the independent auditor the critical accounting policies and practices used by the Company, all alternative treatments of financial information within generally accepted accounting principles ("GAAP") that the independent auditor has discussed with management, the ramifications of the use of such alternative disclosures and treatments and the treatment preferred by the independent auditor.

B. Review of Financial Reporting, Policies and Processes

1. Review and discuss with management and the independent auditor the Company's annual audited financial statements and any certification, report, opinion or review rendered by the independent auditor, and recommend to the Board whether the audited financial statements should be included in the Company's annual report on Form 10-K.

2. Review and discuss with management and the independent auditor the Company's quarterly financial statements.
3. Review and discuss with management and the independent auditor the Company's disclosure under "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing in the Company's periodic reports.
4. Review and discuss earnings press releases and other information provided to securities analysts and rating agencies, including any "pro forma" or adjusted financial information.
5. Periodically meet separately with management and with the independent auditor.
6. Review with management and the independent auditor any significant judgments made in management's preparation of the financial statements and the view of each as to appropriateness of such judgments.
7. Review with management its assessment of the effectiveness and adequacy of the Company's internal control structure and procedures for financial reporting ("Internal Controls"), review annually with the independent auditor the attestation to and report on the assessment made by management when such assessment and attestation is required, and consider with management and the independent auditor whether any changes to the Internal Controls are appropriate in light of management's assessment or the independent auditor's attestation.
8. Periodically review with management its evaluation of the Company's procedures and controls designed to assure that information required to be disclosed in its periodic public reports is recorded, processed, summarized and reported in such reports within the time periods specified by the SEC for the filing of such reports ("Disclosure Controls"), and consider whether any changes are appropriate in light of management's evaluation of the effectiveness of such Disclosure Controls.
9. Review and discuss with management and the independent auditor any off-balance sheet transactions or structures and their effect on the Company's financial results and operations, as well as the disclosure regarding such transactions and structures in the Company's public filings.
10. Review with management and the independent auditor the effect of regulatory and accounting initiatives on the financial statements. Review any major issues regarding accounting principles and financial statement presentations, including any significant changes in selection of an application of accounting principles. Consider and approve, if appropriate, changes to the Company's auditing and accounting principles and practices as suggested by the independent auditor or management.
11. Review any special audit steps adopted in light of material control deficiencies.

C. Risk Management, Related Party Transactions, Legal Compliance and Ethics

1. Review with the chief executive officer and chief financial officer of the Company any report on significant deficiencies in the design or operation of the Internal Controls that could adversely affect the Company's ability to record, process, summarize or report financial data, any material weaknesses in Internal Controls identified to the auditors, and any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's Internal Controls.
2. Review and approve any related-party transactions, as defined pursuant to Nasdaq rules, after reviewing each such transaction for potential conflicts of interests and other improprieties.
3. Establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters. Adopt, as necessary, appropriate remedial measures or actions with respect to such complaints or concerns.
4. Adopt a Code of Conduct for all employees and directors that meets the requirements of Item 406 of the SEC's Regulation S-K and Nasdaq rules, and provide for and review any public disclosure of any change in, or waiver of, the Code of Conduct. Review such Code of Conduct periodically and recommend such changes to such Code of Conduct as the Committee shall deem appropriate, and adopt procedures for monitoring and enforcing compliance with the Code of Conduct.
5. As requested by the Board, review and investigate conduct alleged by the Board to be in violation of the Company's Code of Conduct, and adopt as necessary or appropriate, remedial, disciplinary, or other measures with respect to such conduct.
6. Discuss with management and the independent auditor any correspondence with regulators or governmental agencies that raise material issues regarding the Company's financial statements or accounting policies.
7. Review with the Company's legal counsel and report to the Board on litigation, material government investigations and compliance with applicable legal requirements and the Company's Code of Conduct.
8. Prepare the report required by the rules of the SEC to be included in the Company's annual proxy statement.
9. Monitor and recommend to the Board any modification to the Insider Trading Policy, if necessary or advisable.
10. Review and evaluate the Committee's performance on an annual basis.

11. Regularly report to the Board on the Committee's activities, recommendations and conclusions.
12. Review and reassess the Charter's adequacy at least annually.
13. Assess and respond to requests made by director, officers, or other signatories to the Company's Indemnification Agreement in accordance with such agreement.