Science and Technology Committee Charter

Purpose

The science and technology committee shall advise the board of directors and management on scientific matters involving the company's discovery and development programs, including major internal projects, interaction with academic and other outside research organizations, and business development activities related to product candidates, medicines, modalities, and the acquisition of technologies. The committee shall assist the board and management to stay abreast of new developments and technologies and anticipate emerging concepts and trends in pharmaceutical research and development to help the company make well-informed choices in committing its resources. The committee shall also advise the board on scientific matters involving the safety and effectiveness of the company's marketed products and drugs in late-stage clinical development and shall assist the board in exercising reasonable oversight of product safety and medical risk management.

Composition and Term

The committee shall consist of no fewer than three non-employee directors, each of whom shall meet the New York Stock Exchange standards for director independence. The committee members shall be appointed by the board on the recommendation of the directors and corporate governance committee for one-year terms, and shall serve such terms as the board may determine, or until their earlier removal, resignation, or death. The chair shall be designated by the board.

Administrative Matters

The committee shall meet at least three times per year and at such other times as it determines to be necessary or appropriate and shall report at the next board meeting following each such committee meeting. The committee may, in its discretion, delegate all or a portion of its duties and responsibilities to the chair or a subcommittee. The committee is authorized to select and retain its own scientific, medical and risk management advisors at the company's expense. The committee and its members may talk directly and privately with any members of management in discharging committee responsibilities. The committee or its chair may request that any officer or employee of the company attend any committee meeting.

Supporting Corporate Staff

Senior research and development and quality leadership Office of the corporate secretary

The chief medical officer of the company ("CMO") shall support the committee and shall attend committee meetings as directed by the committee chair. The CMO shall report to the committee at least once annually, and more regularly at the discretion of the chair.

Duties and Responsibilities

In the discharge of its responsibilities, the committee will:

- 1. Review, evaluate, and advise the board and management regarding the long-term strategic goals and objectives and the quality and direction of the company's research and development programs.
- 2. Review and advise the board and management on the company's major technology positions and strategies relative to emerging technologies, emerging concepts of therapy and health care, and changing market requirements.
- 3. Monitor and evaluate trends in research and development, and recommend to the board and management emerging technologies for building the company's technological strength.
- 4. Recommend approaches to acquiring and maintaining technology positions (including but not limited to contracts, grants, collaborative efforts, alliances, and venture capital) and advise the board and management on the scientific aspects of major acquisitions and business development transactions.
- 5. Regularly review the company's pipeline.

- 6. Review the efficacy and safety profile of new pharmaceuticals and other products before they are launched by the company.
- 7. Assist the board with its oversight responsibility for enterprise risk management in areas affecting the company's research and development.
- 8. Obtain from management on a periodic basis (or more frequently if the CMO or the committee believes necessary) reasonable assurance of the effective design and implementation of policies and procedures designed to maintain the primacy, in matters affecting patient benefit and safety, of objective scientific inquiry, analysis and communication, including annual reports from the CMO regarding the implementation and monitoring of such policies and procedures, the identification of important medical and scientific risks, and the resolution of those risks.
- 9. Report at least annually to the board regarding its oversight of the company's efforts to maintain the primacy, in matters affecting patient benefit and safety, of objective scientific inquiry, analysis and communication.
- 10. Provide input to the talent and compensation committee in setting targets and assessing results relative to targets with respect to research and development metrics in the company's incentive compensation programs.
- 11. Annually review and assess the effectiveness of the committee and the adequacy of the reporting and information flows it is receiving, and make such changes as are required to maintain and enhance the committee's effectiveness, including recommending to the directors and corporate governance committee any changes to the committee's charter or membership.

The committee shall also undertake such additional activities within the scope of its primary functions as the committee may from time to time determine.