

Corporate Governance Guidelines

SELECTION AND COMPOSITION OF BOARD OF DIRECTORS

Size of the Board

Genzyme's charter and by-laws provide that the Board of Directors consists of not less than three Directors, with the exact number determined from time to time by resolution of the Directors. We believe a Board should neither be too small to maintain the needed expertise and independence nor too large to be efficiently functional. Our general expectation is that our Board will consist of between nine and thirteen Directors, although we will periodically review the appropriate size and mix of the Board in light of our stated objectives below.

Selection of New Directors

The Board of Directors has delegated to the Nominating and Corporate Governance Committee (the "Governance Committee") the task of identifying, reviewing, and recommending for nomination by the Board of Directors Director candidates for election by the shareholders.

Board Membership Criteria

The Governance Committee is responsible for reviewing with the entire Board and the Chief Executive Officer from time to time the appropriate skills and characteristics required of Board members in the context of the current make-up of the Board of Directors. It is the policy of our Board of Directors that Directors should possess the highest personal and professional ethics, integrity and values, and be committed to representing the long-term interests of the shareholders. It is also the policy of our Board of Directors that the composition of the Board of Directors at all times adhere to the standards of independence promulgated by The Nasdaq Stock Market and applicable to the Company.

Our Board of Directors is also intended to encompass a range of talents, ages, skills, diversity, and expertise (particularly in the areas of accounting and finance, management, domestic and international markets, leadership and corporate governance, manufacturing, biotechnology and related industries) sufficient to provide sound and prudent guidance with respect to the operations and interests of Genzyme. In addition, it is intended that discussions that occur at Board and Committee meetings be fulsome and designed to ensure that the best interests of all of the Company's shareholders are served. In this respect, we believe that the Company's Board members should be free of conflicts of interest that would prevent them from fully participating in Board or Committee discussions on a regular basis. Such conflicts would include being a member of the board of directors of a competitor, being an employee of a competitor, having a material financial interest in a competitor, or otherwise being privy to the confidential information of a competitive company.

We also require that each of our Board members be able to dedicate the time and resources sufficient to ensure the diligent performance of his or her duties on our behalf, including attending all Board and applicable committee meetings. In this respect, we believe that Board members should not serve on more than five other public company boards of directors. In

addition, we believe that Board members who hold the position of chief executive officer of a public company should not serve on more than three other public company boards (including the board of their own company).

Director Independence

At least two-thirds of the members of our Board of Directors will be independent. The Governance Committee is responsible for assessing compliance with this standard on an annual basis. An “independent” director is one who satisfies the independence definition of The Nasdaq Stock Market and who:

1. has not been employed by Genzyme or any of its subsidiaries at any time within the previous three years;
2. is not a Family Member of an individual who is, or within the past three years was, an executive officer of Genzyme or any subsidiary, where "Family Member" means a person's spouse, parents, children and siblings, whether related by blood, marriage or adoption, or anyone who shares the same residence;
3. does not accept and has not accepted, and does not have a non-employee Family Member who accepts or has accepted, payments from Genzyme in excess of \$120,000 during the current fiscal year or any of the past three fiscal years, other than payments for board or committee service, travel or related expenses, benefits under a tax-qualified retirement plan, or non-discretionary compensation, payments arising solely from investment in Genzyme securities, or compensation paid to a Family Member who is a non-executive employee of Genzyme or any subsidiary;
4. is not part of an interlocking directorate in which an executive officer of Genzyme serves, or has served during the past three years, on the compensation committee of another company that employs such Director or a Family member of such Director as an executive officer;
5. is not, and does not have a Family Member who is, a partner in, a controlling shareholder of, or an executive officer of, any organization to which Genzyme made, or from which Genzyme received, payments in the current fiscal year or any of the past three fiscal years that exceed the greater of 5% of the recipients consolidated gross revenues for that year, or \$200,000, other than payments arising solely from investments in Genzyme securities or payments made under non-discretionary charitable contribution matching programs;
6. is not, and does not have a Family member who is, a current partner in Genzyme's outside auditor, or was a partner or employee of Genzyme's outside auditor who worked on Genzyme's audit at any time during any of the past three years; and
7. does not otherwise have a relationship that the Board determines would interfere with the exercise of independent judgment in carrying out the responsibilities of a Director.

In addition to the above independence requirements, the members of the Audit Committee, Compensation Committee and Governance Committee may not receive, directly or indirectly, any fees from Genzyme other than those described below under “Board Compensation Policy and Stock Ownership.”

Selection of Chairman of the Board

As permitted by Genzyme's by-laws, our Chief Executive Officer serves as Chairman of the Board. The Board of Directors recognizes that there may be circumstances in the future that would lead it to separate these offices, although it does not believe there is any reason to do so at this time. The Board of Directors believes that this issue is primarily a matter of the

succession planning process and that it is in the best interest of Genzyme for the Board to make this determination when it elects a new Chief Executive Officer or at such other times that it believes is best for Genzyme.

Selection of Lead Director

As long as the Chief Executive Officer is also Chairman of the Board, a Lead Director will be appointed by a majority of the independent Directors. The position of Lead Director will be held by an independent Director who has served as a Director of Genzyme for at least one year prior to his or her appointment. The Lead Director will have the duties set forth in these corporate governance guidelines and will serve as a liaison between the Chairman of the Board and the independent Directors. The Lead Director will preside over all Board meetings where the Chairman of the Board is not present. The Board of Directors shall consider the rotation of the Lead Director role at appropriate intervals.

Directors Who Change Their Present Job Responsibility/CEO Resignation

It is the sense of the Board of Directors that Directors who retire or otherwise change from the principal occupation or background association they held when they were originally elected to our Board of Directors should tender their resignation from the Board. In addition, when the Chief Executive Officer resigns or is removed from that position, he should tender his resignation from the Board. Whether a Director tendering his resignation continues to serve on the Board of Directors is a matter for discussion between the Board of Directors, through the Governance Committee, the individual Director, and the then Chief Executive Officer.

The Board of Directors also believes that each outside Director should advise the Governance Committee in advance of accepting an invitation to serve as a member on another public company board of directors.

Director Term Limits

The Board of Directors does not believe it should establish term limits. While term limits could help insure that there are fresh ideas and viewpoints available to the Board, they hold the disadvantage of losing the contribution of Directors who over time have developed increasing insight into Genzyme and its operations and therefore provide an increasing contribution to the Board of Directors as a whole.

BOARD COMPENSATION AND PERFORMANCE

Board Compensation Policy and Stock Ownership

The Compensation Committee shall have the responsibility for recommending to the entire Board of Directors the compensation and benefits for non-employee Directors. It is appropriate for the Compensation Committee to report from time to time to the entire Board of Directors on the status of director compensation in relation to peer companies in the biotechnology, pharmaceutical or specialty pharmaceutical industries.

An executive officer of the company serving as a member of the Board of Directors shall not receive additional compensation for his or her service as Director.

Any proposed changes in director compensation should come at the suggestion of the Compensation Committee, but with full discussion and concurrence by the entire Board of

Directors. It is the policy of the Board of Directors that a portion of director compensation should be in the form of stock or stock based instruments in order to align their interest with those of shareholders.

Evaluation of Board Performance

The Governance Committee is responsible for annually reporting to the Board of Directors on the overall performance of the Board of Directors and each of its standing committees. If the Governance Committee so desires, it may be assisted by an outside consultant in making its assessment of the overall performance of the Board of Directors and its standing committees. The report should be delivered following the end of each fiscal year and should be discussed with the full Board at the same time, if applicable, as Board and committee membership criteria are discussed.

The report should include an evaluation of, among other things, (i) the composition and independence of the Board, (ii) the Board's access to and review of information from management, (iii) responsiveness of the Board to shareholder concerns, and (iv) maintenance and implementation of these corporate governance guidelines.

The evaluation to be provided by the Governance Committee should be of the contribution of the Board of Directors and each committee as a whole, and should specifically review areas in which the Board of Directors, Governance Committee and/or management believes a better contribution could be made. The purpose of the evaluation is to increase the effectiveness of the Board of Directors and each committee, not to criticize individual Directors.

Interaction with Institutional Investors, Press, Customers, Etc.

The Board of Directors believes that management speaks for Genzyme. Our individual non-management Board members may, from time to time, meet or otherwise communicate with various constituencies that are involved with Genzyme, but it is expected that these members would do this with the knowledge of management and, in most instances, at the request of management. Notwithstanding the above, the Lead Director is expected to be available for consultation and direct communication upon the request of major shareholders of Genzyme and with the knowledge of management.

In all instances, Board members are required to keep confidential and not disclose discussions and matters considered in meetings of the Board and Board committees, and all materials distributed to Board members in connection with such discussions and consideration, in each case unless previously disclosed publicly by the Company. In addition, Board members are expected to comply with applicable law governing the handling of material non-public information, including the Securities and Exchange Commission's Regulation Fair Disclosure, which restricts the selective disclosure of the Company's material non-public information, and Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder, which prohibits securities trading while aware of material non-public information. Absent compelling and stated reasons, Directors who fail to adhere to these disclosure and trading restraints should not be re-nominated for an additional term.

MEETINGS OF THE BOARD OF DIRECTORS

Scheduling and Selection of Agenda Items for Board Meetings

The Chairman of the Board and the Lead Director, in consultation with other members of the Board of Directors as they deem necessary or desirable, will determine the frequency and length of Board meetings. It is the sense of the Board of Directors that regular meetings held at least once a quarter are in general desirable for the performance of their responsibilities. In addition to regularly scheduled meetings, additional unscheduled meetings may be called upon appropriate notice at any time to address any special needs. Prior to sending notice of any Board meeting, the Chairman of the Board and the Lead Director will agree on a proposed schedule for the Board meeting in order to assure that there is sufficient time for discussion of agenda items.

The Chairman of the Board, the Secretary of the Company and the Lead Director working together will establish the agenda for each Board meeting. The Chairman of the Board and the Secretary of the Company will propose an agenda for each Board meeting to the Lead Director, and once approved by the Lead Director, will distribute it in advance to Board members. Each Director is free to suggest the inclusion of items on an agenda, to raise at any Board meeting subjects that are not on the agenda for that meeting or to request the presence of or a report by any member of management.

During at least one Board meeting each year, the Board of Directors will be presented the long-term strategic plan for Genzyme and the principal issues that it expects to face in the future.

Board Material and Presentations

The Lead Director will approve the information that is proposed to be sent to Board members. Information that is important to the understanding of the business and matters to be considered at the Board meeting should be first sent to the Lead Director, and following approval by the Lead Director, distributed in writing and in advance to Board members. As a general rule, materials on specific subjects should be sent to the Board members sufficiently in advance so Directors will be prepared to discuss questions that they may have about the material. The Board of Directors encourages management to schedule managers to present at Board meetings who (i) can provide additional insight into the specific matters being discussed because of personal involvement in these areas or (ii) have future potential that management believes should be given exposure to the Board of Directors.

Participation in Board Meetings

We expect our Board members to rigorously prepare for, attend and participate in all Board and applicable committee meetings. Absent compelling and stated reasons, Directors who attend fewer than 75 percent of regularly scheduled Board and committee meetings in each of two consecutive years should not be re-nominated. Each Board member is expected to ensure that other existing and planned future commitments do not materially interfere with their service as a Director.

Attendance at Annual Shareholder Meeting

It is expected that all of our Board members will attend our annual meeting of shareholders.

Access to Management

Each Director is encouraged to keep himself informed of the affairs of the Company between Board meetings through direct contact with members of senior management and each Director will have complete access to any such member of senior management.

Meetings of the Independent Directors

The independent members of the Board of Directors will meet separately in executive session at least twice a year. The Lead Director has the authority to call meetings of the independent Directors and will preside over all meetings of the independent Directors. The independent Directors shall not take any formal actions at these meetings, although they may subsequently recommend matters for full consideration by the Board of Directors.

COMMITTEES OF THE BOARD OF DIRECTORS

Number of Committees

Our Board of Directors will establish committees from time to time to facilitate and assist in the execution of its responsibilities. These committees shall generally address issues that, because of their complexity and technical nature, level of detail and time requirements or because of proper corporate governance principles cannot be adequately addressed at larger Board meetings.

We currently have five committees, the Compensation Committee, the Audit Committee, the Governance Committee, the Risk Oversight Committee and the Strategic Planning and Capital Allocation Committee. There will, from time to time, be occasions on which the Board of Directors may want to form a new committee or disband a current committee depending upon the circumstances. Genzyme complies with all applicable requirements of the Massachusetts Business Corporation Act, The Nasdaq Stock Market, federal securities laws, and the rules and regulations of the Securities and Exchange Commission relating to the delegation of duties and the constitution of key committees, including requirements relating to the independence of committee members. Accordingly, only independent Directors serve on the Compensation, Audit and Governance Committees.

Each committee shall have a written charter that shall be periodically reviewed by that committee and made publicly available on our web site for review by our shareholders.

Assignment and Term of Service of Committee Members

The Board of Directors is responsible for the appointment of committee members and committee chairpersons, taking into account the desires of individual members, the recommendations of the Governance Committee and the comments of the Chief Executive Officer. It is expected that each committee chair will have had previous service on the applicable committee. In making such appointments, the Board of Directors shall consider the rotation of committee membership and chairs at appropriate intervals, although the Board does not believe that rotation should be mandated as a policy.

Frequency and Length of Committee Meetings and Committee Agenda

The committee chair, in consultation with the other committee members, will determine the

frequency and length of committee meetings and, in consultation with the Chief Executive Officer and appropriate members of senior management, develop the agenda for committee meetings. Any Director who is not a member of a particular committee may attend any committee meetings with the concurrence of the committee chair.

LEADERSHIP DEVELOPMENT

Succession Planning

The Chief Executive Officer reviews succession planning for senior management positions with the Compensation Committee on an annual basis. The Governance Committee is responsible for the development of policies and principles for succession planning for the Chief Executive Officer, including succession in the event of an emergency.

RESPONSE TO SHAREHOLDER PROPOSALS

If a proposal submitted by a shareholder for inclusion in a Company proxy statement for any annual meeting of shareholders pursuant to Rule 14a-8 of the Securities Exchange Act of 1934, as amended, receives the approval of a majority of the votes cast at that meeting, then:

for the purpose of providing any additional information for Director reconsideration of the proposal, the shareholder proponent will be invited to attend a meeting of the Governance Committee scheduled to occur no later than one month prior to the deadline for submission of shareholder proposals for inclusion in the Company proxy for the next annual meeting; and

the Governance Committee thereafter will present information relevant to the proposal, including its recommendation, to the full Board of Directors for action consistent with the Company's charter and by-laws and the exercise of the Directors' fiduciary duties.

EXPECTATIONS WITH RESPECT TO MAJORITY VOTING FOR THE ELECTION OF DIRECTORS

In an uncontested election of Directors (as defined in our bylaws), any nominee for re-election for whom a greater number of votes are cast "against" than are cast "for" his or her election is expected to offer to tender his or her resignation from the Board of Directors promptly after certification of the shareholder vote. The Governance Committee will promptly consider the offer and recommend to the full Board whether to accept or reject it. In making its recommendation, the Governance Committee will consider all factors it considers relevant, including the stated reasons shareholders did not vote in favor of the nominee, other actions that the Company intends to take to address such reasons, the length of service and qualifications of the Director, the Director's contributions to the Company, the overall composition of the Board, and whether accepting the resignation would cause the Company to fail to meet any applicable listing standards or would violate state law. We expect that any Director who offers to tender his or her resignation pursuant to this provision will also recuse himself or herself from participating in the Governance Committee's and the Board's deliberations regarding the resignation. If a majority of the members of the Governance Committee are expected to offer to tender their resignations because of this provision, then the remaining independent directors will appoint a special committee from among themselves for the purpose of considering the offers to resign and recommending whether to accept or reject them.

The Board will act on the Governance Committee's recommendation no later than 90 days following certification of the shareholder vote. Promptly thereafter, the Company will publicly disclose the outcome.

To the extent that one or more Directors resign, the Governance Committee will recommend to the Board whether to fill such vacancy or vacancies or to reduce the size of the Board.

The Board also anticipates that any Director who is expected to offer to tender his or her resignation and fails to do so, or who fails to resign after the Board has accepted his or her offer to resign, will not be re-nominated for an additional term.

*Adopted by the Board of Directors February 27, 2003
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