1. **Board Membership Criteria**

The Nominating and Corporate Governance Committee should periodically review, and recommend to the Board, the appropriate skills, experience, characteristics and other criteria for identifying and evaluating directors. This assessment will be based on Board membership criteria established by the Board. The Board’s criteria include the highest standards of personal and professional integrity; the ability and judgment to serve the long-term interest of our stockholders; background, experience and expertise that will contribute to the overall effectiveness and diversity of the Board, including diversity of race, ethnicity, gender and sexual orientation; broad business and social perspective; the ability to communicate openly with other directors and to meaningfully and civilly participate in the Board’s decision-making process; commitment to serve on the Board for an extended period of time to ensure continuity and to develop knowledge about our business; willingness to devote appropriate time and effort to fulfill the duties and responsibilities of a Board member; independence from any particular constituency; and the ability and willingness to objectively appraise the performance of management.

2. **Size of the Board**

The Board should periodically review its size, and determine the number of directors that it deems most effective for future operations. At this time, the Board believes that 9 to 13 members is the optimum size for the Board.

3. **Composition of the Board**

A substantial majority of the Board shall consist of independent directors. The Board should periodically consider, based on the recommendations of the Nominating and Corporate Governance Committee, the need for refreshment and succession planning. The Board believes that in most situations the Chief Executive Officer should be the only employee director, but certain circumstances may warrant the addition of others.

4. **Board Leadership**

The Board regularly reviews its leadership structure to evaluate whether the structure remains appropriate for the Company.

The Board should remain free to decide whether the position of Chairperson of the Board (the “Chairperson”) should be held by a director employed by the Company. If the Chairperson is an employee of the Company, a Lead Independent Director (who shall be an independent director) will be selected by the independent directors to coordinate their efforts and activities. When the Board meets without the Chairperson, a chairperson of that meeting should be designated.
5. **Selection of Director Candidates and Director Nominations**

The Nominating and Corporate Governance Committee is responsible for identifying candidates for membership and recommending nominees, for nomination by the full Board. As part of the search process for each new director, the Nominating and Corporate Governance Committee includes, and instructs any search firm it engages to include, qualified candidates with diverse backgrounds in the pool from which director candidates are chosen, including female and racially or ethnically diverse candidates. The Nominating and Corporate Governance Committee also considers director candidates recommended by Company stockholders in accordance with the procedures set forth in the proxy statement.

The Nominating and Corporate Governance Committee shall report to the Board from time to time, whenever called upon to do so.

The Board and the Company shall have an appropriate orientation process for new directors that includes background material and meetings with senior management.

6. **Annual Election of Directors**

The Nominating and Corporate Governance Committee will annually recommend to the full Board the slate of directors for election by the stockholders. An affirmative vote of a majority of the independent directors shall be required to nominate the slate of directors for election by the stockholders or for an appointment by the Board.

**BOARD MEETING PROCEDURES:**

7. **Board Meetings**

The Board is expected to meet at least once per quarter and may hold additional meetings as necessary to carry out its responsibilities.

8. **Agendas for Board Meetings**

The Chairperson and Lead Independent Director establish the agenda for each Board meeting. Once established, the Chairperson distributes the agenda to the full Board in advance of the meeting. Although the final agenda will be determined by the Chairperson and Lead Independent Director, other directors and executive officers may suggest additional agenda items and may raise subjects that are not on the agenda at any meeting.

The Board reviews the Company’s annual and long-term strategic plans and full year financial results at least annually and monitors implementation of the Company’s strategic plans through the year.
9. **Board Materials Distributed in Advance**

Information that is important to the Board’s or a committee’s understanding of the business to be conducted shall be distributed to the members in advance of each meeting. Management should attempt to make this material concise, while still providing the necessary information. This permits more meeting time to be spent on discussion and questions from directors. If the subject is too sensitive to be distributed in writing, a presentation should be made at the meeting.

**BOARD DUTIES, PERFORMANCE AND COMPENSATION:**

10. **Fiduciary Duties and Conflicts of Interest**

All members of the Board have fiduciary duties and obligations to the Company and its stockholders. Directors have a duty of due care that requires them to dedicate the time and attention necessary to make careful, thoughtful decisions on behalf of the Company.

Directors also have a duty of loyalty that requires them to exercise their business judgment and act in a manner that they believe is in good faith and in the best interests of the Company and its stockholders. If a director’s personal interests potentially conflict with the interests of the Company, a director should bring this conflict to the Board’s attention, disclose the nature and effect of such potential conflict and recuse himself or herself from voting on or discussing the matter.

11. **Director Attendance**

Directors must devote the time and attention necessary to discharge their responsibilities. Directors are expected to attend all or substantially all Board meetings and meetings of the committees of the Board on which they serve and are expected to attend the annual meeting of stockholders. Directors are also expected to spend whatever additional time as may be necessary for them to discharge their responsibilities appropriately. Directors shall ensure that other existing or future commitments do not materially interfere with their ability to fulfill their responsibilities as Company directors.

12. **Service on Other Boards**

The Company’s executive officers, including the Chief Executive Officer, shall obtain the approval of the Board before accepting an invitation to serve on the board of another for-profit company. The Chief Executive Officer shall not serve on the boards of more than one for-profit company in addition to the Company’s Board.
It is the expectation of the Board that non-employee directors should not serve on the boards of more than four public companies (including the Company’s Board). It is the further expectation of the Board that if a non-employee director is a current CEO or executive officer of a public company, the director should not serve on the boards of more than two public companies (including the Company’s Board). It is expected that before accepting another board position a director will consider whether that service will compromise his or her ability to perform his or her present responsibilities to the Company. It is further expected that each non-employee director shall provide advance notice to the Chairperson of acceptance of an invitation to serve on the board of any other for-profit company.

13. Director Compensation

The Compensation and Talent Committee shall have responsibility for recommending to the Board the compensation and benefits for non-employee directors. The Compensation and Talent Committee may engage compensation consultants to provide advice and recommendations regarding non-employee director compensation. In discharging this duty, the Committee shall be guided by three goals: (1) the Company should fairly compensate directors for work required in a corporation with the size and scope of the Company; (2) compensation should align the directors’ interests with the long-term interests of stockholders; and (3) the structure of compensation should be easy for stockholders to understand.

14. Assessing Board and Committee Performance

The Nominating and Corporate Governance Committee will recommend criteria for assessment of the performance of the Board and each committee. Based on these criteria, the Board and each committee of the Board should conduct an annual self-assessment of its performance.

15. Oversight of Corporate Governance Policies and Procedures

The Board has adopted these guidelines and shall regularly reevaluate them. The Nominating and Corporate Governance Committee will annually review these guidelines and policies and recommend to the Board any proposed changes.

16. Orientation and Continuing Education for Directors

The Company has an orientation process for Board members that is designed to familiarize new directors with various aspects of the Company’s business, including the Company’s strategy, operations, finances, risk management processes, compliance program and governance practices. Each member of the Board is encouraged to participate in education programs to assist them in performing his or her responsibilities as a director and shall complete any and all continuing education requirements mandated by rules adopted by the Securities and Exchange Commission (“SEC”) and/or The Nasdaq Stock Market LLC (“Nasdaq”).
17. Director’s Ownership of Shares

The Board believes that an alignment of director interests with those of stockholders is important. All directors are expected to own stock in the Company in accordance with the policy established by the Compensation and Talent Committee and approved by the Board.

COMMITTEE MATTERS:

18. Standing Committees of the Board

The Board has the following standing committees: the Audit Committee, the Compensation and Talent Committee, the Nominating and Corporate Governance Committee and the Science Committee. Subject to requirements of Nasdaq and applicable law, the Board may at any time create a new committee, increase or decrease the number of members of a committee or terminate the existence of a committee as provided in the Company’s Bylaws.

Each standing committee shall have a written charter that shall be approved by the full Board upon the recommendation of the Nominating and Corporate Governance Committee. Each committee charter shall state the purpose of the committee and reflect the responsibilities that the committee has undertaken. Each committee shall review its charter annually and recommend amendments to it as appropriate to reflect changes in the committee’s responsibilities, applicable law or regulations and other relevant considerations.

19. Committee Meetings

Committee meetings are generally scheduled to coincide with regular Board meetings. The Audit Committee will, to the extent possible, meet prior to each of the Board’s regularly scheduled quarterly meetings. Other standing committees are generally scheduled to meet at least once a year. The chair of any committee may call additional meetings, as needed.

20. Committee Agendas

The appropriate officers and staff of the Company, in consultation with the chair of each committee, develop each committee’s agenda. Agendas are distributed to all committee members in advance of the meeting. Although the final agenda will be determined by the chair of the committee, other directors may suggest additional agenda items and may raise subjects that are not on the agenda at any meeting.
21. Assignment and Rotation of Lead Independent and Committee Members

The designation of the Lead Independent Director, committee members and committee chairs shall be reviewed by the Board annually on recommendation of the Nominating and Corporate Governance Committee. There are no fixed terms for the Lead Independent Director, committee chairs or committee membership. The Board does not feel that rotation of the Lead Independent Director or committee members should be predetermined since there may be reasons at any given time for the Lead Independent Director or a Board member to continue in the same role. However, the Board recognizes that rotation of the Lead Independent Director and committee members may be appropriate at periodic intervals.

The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee pursuant to the Company’s Bylaws.

ROLE OF INDEPENDENT DIRECTORS:

22. Board Guidelines on Independence for Independent Directors

An independent director is one who, in the opinion of the Board, is free of any relationship with the Company or its management that would interfere with the director’s ability to make independent judgments. The Board makes an affirmative determination regarding a director’s independence annually, based on the recommendation of the Nominating and Corporate Governance Committee and after reviewing pertinent facts and circumstances. This determination is made in conformity with applicable laws, regulations and listing requirements and any independence standards adopted by the Board. If a change in circumstances affects an independent director’s continuing independence, that director shall submit his or her resignation to the Chairperson. The Board shall determine whether to accept or reject such resignation.

All directors serving on the Audit Committee, Compensation and Talent Committee and Nominating and Corporate Governance Committee and at least one member of the Science Committee must be “independent directors” as defined pursuant to applicable law or regulations established the SEC and Nasdaq, and, in the case of the Compensation and Talent Committee, the director must also meet the definition of “non-employee director” as determined under Rule 16b-3 under the Securities Exchange Act of 1934 (the “Exchange Act”).

The following persons would not meet the definition of an “independent director” for the purposes of serving on the Board or the Audit, Compensation and Talent or Nominating and Corporate Governance Committees of the Board and for the purpose of serving as an “independent director” on the Science Committee:

- A director who is, or at any time during the past three years was employed by the Company, its parent or any of its subsidiaries;
• A director who accepted or who has a Family Member (i.e., spouse, parents, children, siblings, mothers and fathers-in-law, sons and daughters-in-law, brothers and sisters-in-law or anyone (other than domestic employees) residing in the director’s home) who accepted any payments, including political contributions, from the Company or any of its affiliates in excess of $120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, other than compensation for Board or Board committee service, payments arising solely from investments in the Company’s securities, compensation paid to a Family Member who is a non-executive employee of the Company or of its parent or a subsidiary of the Company, benefits under a tax-qualified retirement plan or non-discretionary compensation, provided, however that a member of the Company’s Audit or Compensation and Talent Committee may not receive any compensation except for Board or committee service other than fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the Company (provided that such compensation is not contingent in any way on continued service);

• A director who is a Family Member of an individual who is, or within the past three years was, employed by the Company, its parent or any of its subsidiaries as an executive officer;

• A director who is, or has a Family Member who is, a partner in, or a controlling stockholder or an executive officer of, any organization (for-profit or charitable) to which the Company made, or from which the Company received, payments for property or services in the current fiscal year or any of the past three fiscal years (other than those arising solely from investments in the Company’s securities or payments under non-discretionary charitable contribution matching programs) that exceed 5% of the recipient’s consolidated gross revenues for the year, or $200,000, whichever is more;

• A director who is, or has a Family Member who is, employed as an executive officer of another entity where at any time during the past three years any of the executive officers of the Company serve on the compensation committee of such other entity; or

• A director who is, or has a Family Member who is, a current partner of the Company’s outside auditor, or was a partner or employee of the Company’s outside auditor who worked on the Company’s audit at any time during any of the past three years.

The Board shall make an affirmative determination on a regular basis, as required, that no relationships exist that would interfere with the independent judgment of the independent directors or the Board.

23. Executive Sessions of Independent Directors

The independent directors shall meet regularly in executive session, not less than twice per year, and it is recommended that they do so each quarter. For at least a portion of each such session only independent directors shall be present.
BOARD RELATIONSHIP TO SENIOR MANAGEMENT:

24. Board Access to Senior Management and Advisers

Board members should have complete access to the Company’s management.

The Board has the authority to retain such outside counsel, experts and other advisers as it determines appropriate to assist it in the performance of its functions. Each of the Audit, Nominating and Corporate Governance, Compensation and Talent and Science Committees has similar authority to retain outside advisers as it determines appropriate to assist it in the performance of its functions.

25. Attendance of Non-Directors at Board Meetings

The Board, subject to the approval of the Chairperson, welcomes the attendance at Board meetings of non-Board members who are in senior management positions with the Company from time to time. The Board expects that management will use this process to provide additional insight into the items being discussed at meetings and give exposure to managers with senior management potential.

26. Board Communication with Stakeholders

The Board believes that management speaks for the Company. Because management appoints persons to interact with institutional investors, the press, and members of the public, individual directors ordinarily should not communicate directly with these constituencies about Company matters, unless requested to do so by the Board or management. If comments from the Board are appropriate, they should in most circumstances come from the Chairperson or the Lead Independent Director, as appropriate.

RISK OVERSIGHT:

27. Board and Committee Oversight of Risks

Management is responsible for assessing and managing risk, subject to the oversight of the Board. The Board exercises its oversight responsibility directly and through its committees. The Board considers specific risk topics directly, including, but not limited to, risks associated with the Company’s strategic plan and risks relating to pricing strategies of newly approved products. The Board is kept informed of the committees’ risk oversight activities through periodic reports to the Board. The Board and its committees meet regularly with management responsible for managing risk. The committees’ oversight of risks include the following:

- The Audit Committee has primary responsibility for overseeing risks associated with the Company’s financial and accounting systems, accounting policies and investment strategies, in addition to finance-related public reporting, regulatory compliance and certain other matters delegated to the committee, including risks associated with the Company’s information systems and technology (including cybersecurity).
• The Compensation and Talent Committee has primary responsibility for overseeing risks relating to the Company’s compensation practices to help ensure that these practices are not reasonably likely to have a material adverse effect on the Company or encourage employees to take unnecessary or excessive risks.

• The Nominating and Corporate Governance Committee has primary responsibility for overseeing risks relating to corporate governance matters and certain other non-financial and non-compensation-related risks, including, but not limited to, clinical trials, manufacturing, human resources and environmental, social and governance matters.

LEADERSHIP DEVELOPMENT:

28. Formal Evaluation and Approval of Compensation of the Chief Executive Officer

The Compensation and Talent Committee shall perform an annual evaluation of the Chief Executive Officer against the performance objectives of the prior year and approve compensation for the Chief Executive Officer for the following year, all of which shall be subject to ratification by the independent directors meeting in executive session. The objectives, evaluation and compensation as so ratified shall be communicated to the Chief Executive Officer by the Chairperson or the Lead Independent Director.

29. Formal Evaluation and Approval of Compensation of Other Executive Officers

The Compensation and Talent Committee shall review an annual evaluation of the other executive officers against the performance objectives of the prior year and approve compensation for the other executive officers for the following year.

30. Succession Planning

The Board is responsible for oversight of succession planning for certain senior management positions. At least annually, the Board shall consider and approve succession planning and talent management, as recommended by the Compensation and Talent Committee, including recommendations and evaluation of potential successors to fill the Chief Executive Officer and the other executive officers. The succession planning process includes consideration of both ordinary course succession, in the event of planned promotions and retirements, and planning for situations where the Chief Executive Officer or another executive officer unexpectedly become unable to perform the duties of their positions.
31. Term Limits

The Board does not believe it should establish term limits. While term limits could help make additional fresh ideas and viewpoints available to the Board, they have the disadvantage of removing directors who have been able to develop, over a period of time, significant insight into the Company and its operations. Consequently, term limits may sometimes force out directors who are able to greatly contribute to the Company by serving on its Board. The Nominating and Corporate Governance Committee, in consultation with the Chairperson, will evaluate the contributions of existing Board members and the need for new directors and, if appropriate, suggest the resignation and replacement of a Board member.

32. Retirement Age

The Board has not established a mandatory retirement age. As is the case with term limits, a mandatory retirement age may remove directors who have been able to develop, over a period of time, significant insight into the Company and its operations and who continue to make valuable contributions to the Company. The Nominating and Corporate Governance Committee, in consultation with the Chairperson, will evaluate the performance and contributions of existing Board members and, if appropriate, decline to nominate for re-election or suggest the resignation and replacement of a Board member.

33. Resignation or Retirement of Officers as Board Members

The Board expects that when the Chief Executive Officer retires as an executive officer, he or she will offer to resign from the Board at the same time. Similarly, the Board expects any director who is also an executive officer of the Company or any of its subsidiaries to offer to retire from the Board when he or she retires as an executive officer.

34. Directors who Change their Present Job Responsibilities

Directors who significantly change their principal business relationships or responsibilities should offer to resign from the Board. While such a resignation may not be accepted, the practice provides an opportunity for the Board to review the appropriateness of the director’s continued membership on the Board.

35. Public Communications with the Board

The Board shall provide a means by which persons, including stockholders and employees, may communicate directly with non-employee directors. The Board’s independent directors shall approve a process to be maintained by the Company’s management for collecting and distributing communications with the Board. The means of communications with the Board shall be disclosed in the Company’s annual proxy statement.
36. **Stockholder Nominations**

Stockholders may suggest director candidates for consideration by the Nominating and Corporate Governance Committee by writing to the Committee and providing the candidate’s name, biographic data, qualifications and any other information concerning the candidate required by Schedule 14A under the Exchange Act for nominees for director, as well as the candidate’s written consent to be considered as a nominee and to serve as a director if elected. Stockholders who wish to nominate director candidates for election by stockholders at the Company’s annual stockholders meeting may do so in the manner disclosed in the company’s annual proxy statement and in accordance with the provisions of the Company’s Bylaws.

37. **Majority Voting; Director Resignation Policy**

The Company has adopted majority voting in the uncontested election of directors and plurality voting in contested elections. In uncontested elections, directors are elected by a majority of the votes cast, which means that the number of shares voted “for” a director must exceed the number of shares voted “against” that director. If a nominee for director who is an incumbent director does not receive the vote of at least the majority of the votes cast at any meeting of stockholders for the election of directors at which a quorum is present and at which the number of candidates for election as directors does not exceed the number of directors to be elected, and no successor has been elected at such meeting, the director will promptly tender his or her resignation to the Board. The Nominating and Corporate Governance Committee will make a recommendation to the Board as to whether to accept or reject the tendered resignation, or whether any other action should be taken. The Board will act on the tendered resignation, taking into account the Nominating and Corporate Governance Committee’s recommendation, and publicly disclose (by a press release, a filing with the SEC or other broadly disseminated means of communication) its decision regarding the tendered resignation and the rationale behind the decision within 90 days from the date of the certification of the election results. The Nominating and Corporate Governance Committee in making its recommendation, and the Board in making its decision, may each consider any factors or other information that it considers appropriate and relevant. The director who tenders his or her resignation will not participate in the recommendation of the Nominating and Corporate Governance Committee or the decision of the Board with respect to his or her resignation. If such incumbent director’s resignation is not accepted by the Board, such director will continue to serve until the next annual meeting and until his or her successor is duly elected, or his or her earlier resignation or removal.

If a director’s resignation is accepted by the Board, or if a nominee for director is not elected and the nominee is not an incumbent director, then the Board, in its sole discretion, may fill any resulting vacancy pursuant to the provisions of Section 18 of the Company’s Bylaws or may decrease the size of the Board pursuant to the provisions of Section 15 of the Company’s Bylaws and Section VI(1)(a) of the Company’s Certificate of Incorporation.