

CORPORATE GOVERNANCE GUIDELINES

OF

ASTEX PHARMACEUTICALS, INC.

As Amended and Restated by the Board of Directors on June 16, 2011

I. Role of the Board of Directors

It is the paramount duty of the Board of Directors (the “**Board**”) to oversee the Chief Executive Officer and other senior management in the competent and ethical operation of Astex Pharmaceuticals, Inc. (the “**Company**”). To satisfy this duty the directors will take a proactive, focused approach to their position, and set standards to ensure that the Company is committed to business success through maintenance of the highest standards of responsibility and ethics.

Directors bring to the Company a wide range of experience, knowledge and judgment, and bring these skills to bear for the Company in their business decisions generally and in their approach to corporate governance. The governance structure in the Company is designed to be a working structure for principled actions, effective decision-making and appropriate monitoring of both compliance and performance.

The Board and its associated committees review, assess and oversee major risks facing the Company and assess the Company’s policies and procedures for their management and mitigation.

The Board will review and approve the Company’s long-term strategic plans, as well as its yearly goals and annual operating plan. On an ongoing basis, the Board will monitor the Company’s performance against its operating plan and against the performance of its peers.

The Board will stay abreast of economic, regulatory and political trends and developments that may affect the Company’s strategic direction.

The Board will approve and maintain a succession plan for the Chief Executive Officer and senior management of the Company, based upon recommendations from the Governance and Nominating Committee.

The Board, upon the recommendation of the Audit Committee, will take such actions as are necessary to ensure the integrity of the Company’s accounting and financial reporting systems and that appropriate controls are in place.

II. Director Independence

The Board shall have a majority of directors who meet the criteria for independence established by applicable law, including the Sarbanes-Oxley Act of 2002, the rules and regulations of the Securities and Exchange Commission, and the Nasdaq Stock Market.

III. Nomination of Directors

Directors will be nominated by the Governance and Nominating Committee of the Board, in accordance with the charter and principles of that committee. The Governance and Nominating Committee is responsible for reviewing with the Board, on an annual basis, the appropriate skills and characteristics required of Board members as well as the composition of the Board as a whole, as further discussed in Section IV below. The Board, together with the Chairman of the Governance and Nominating Committee and the Chairman of the Board, should extend the actual invitation to join the Board.

The Board does not have a policy on whether or not the roles of Chief Executive Officer and Chairman of the Board should be separate and, if they are to be separate, whether the Chairman of the Board should be selected from the non-employee directors or be an employee. The Board believes these issues should be considered from time to time as part of the Board's broader review of corporate governance principles.

IV. Board Membership Criteria

Members of the Board should have the highest professional and personal ethics and values. The consideration of a director will be based on the Governance and Nominating Committee's assessment of the individual's character, judgment, diversity, age, independence, expertise, background, skills and experience in such areas as the pharmaceutical industry, Food and Drug Administration regulation, clinical trials, operations, finance, marketing and the general needs of the Board, including the applicable independence requirements.

V. Size of the Board

The Board currently has six members. The Board reviews from time to time the appropriateness of its size. The size of the Board may vary, based in part on the size and needs of the Company's business. Board size should facilitate active interaction and participation by all Board members and may to some extent reflect the availability of particular candidates with expertise of value to the Company. The Board will consider expanding its size to accommodate outstanding candidates.

VI. Board Service and Tenure

The Board, through the Governance and Nominating Committee, will have the opportunity to review the appropriateness of the continued service of directors who change their position or responsibility that they held when they were elected to the Board. Each Board member must ensure that other existing and anticipated future commitments do not materially interfere with the member's service as director.

The Board believes that term limits are on balance not the best way to maximize the effectiveness of the Board. While terms limits could introduce fresh perspectives and make new viewpoints available to the Board, they may have the countervailing effect of causing the loss of the benefit gained from the contributions of directors who have developed, over time, increasing insight into the Company. As an alternative to term limits, the Governance and Nominating

Committee will review the appropriateness of each Board member's continued service on a regular basis.

VII. Preparation and Participation in Board Meetings

Board members are expected to rigorously prepare for, attend and participate in all Board and applicable committee meetings, and to spend the time needed and meet as often as necessary to properly discharge their obligations. It is expected that Board members will be available at the scheduled time and for the duration of the meeting, whether the meeting is telephonic or in person. Information and data that is important to the Board's understanding of the business to be conducted at a Board or committee meeting should generally be distributed in writing to the directors prior to the meeting, so that Board meeting time may be conserved and discussion time focused on questions that the Board has about the materials. Particularly sensitive subject matters may be discussed at the meeting without advance distribution of written materials. The Company encourages, but does not require, directors to attend the annual meeting of stockholders.

VIII. Meeting Agendas

The Chairman of the Board will establish the agenda for each Board meeting and the Secretary will distribute it in advance to the Board. At the beginning of each year the Chairman of the Board will, to the extent foreseeable and practicable, set a schedule of agenda items to be discussed during the year. Each Board member is free to suggest the inclusion of items on the agenda and to raise at any Board meeting subjects that are not on the agenda for that meeting. From time to time during one or more meetings of the Board, the Board will review (i) the Company's long-term strategic plans and the challenges faced by the Company in executing on these plans and (ii) the risks applicable to the Company and the related risk management policies and procedures.

IX. Lead Independent Director; Executive Sessions of Outside Directors

In order to facilitate communication between management and the outside directors, in the event that the Chairman of the Board is not an independent director, the Board should elect a "Lead Independent Director." The Lead Independent Director will be selected by the outside directors and will assume the responsibilities that the outside directors as a whole might designate from time to time, including to raise issues with management on behalf of the outside directors when appropriate. The identity of the Lead Independent Director will be disclosed in the annual proxy statement.

Executive sessions of outside directors may be held from time to time as requested by the non-executive Chairman, the Lead Independent Director or one or more outside directors.

X. Communication with Management

The Board has complete access to all of the Company's officers and employees. Any meetings or contacts that a director desires to initiate may be arranged directly by the director or through

the CEO or other executive officer. The directors should use their judgment to ensure that any such contact or communication is not disruptive to the business operations of the Company.

The Board welcomes the attendance of senior officers at each Board meeting. The Board also encourages management to schedule managers to present at Board meetings who: (a) can provide additional insight into the items being discussed because of personal involvement in these areas, or (b) have future potential that management believes should be given exposure to the Board.

XI. Interaction with Third Parties

The Board believes that management speaks for the Company. Individual Board members may occasionally meet or otherwise communicate with various constituencies that are involved with the Company, but it is expected that Board members would do this with the knowledge of management and, in most instances, absent unusual circumstances or as contemplated by the committee charters, at the request of management.

XII. Composition of Committees

A Governance and Nominating Committee, Audit Committee and Compensation Committee of the Board shall exist at all times. All of the members of these committees will meet the criteria for independence established by the Nasdaq Stock Market. The members of these committees will also meet the other membership criteria specified in the respective charters for these committees. Committee members will be appointed by the Board upon recommendation by the Governance and Nominating Committee of the Board, in accordance with the charter and principles of that committee.

The Chairman of each committee, as applicable, will, in consultation with the appropriate committee members and members of management, and in accordance with the committee's charter, determine the frequency and length of committee meetings and develop the committee's agenda.

XIII. Committee Charters

Each committee shall have its own charter. The charter will set forth the principles, policies, objectives and responsibilities of the committees in addition to the qualifications for committee membership, procedures for committee member nomination and removal, committee organization and functioning and how the committee will communicate with the Board.

XIV. Outside Consultation

The Board and each committee shall have the authority to obtain advice, reports or opinions from internal and external counsel and expert advisors and shall have the power to hire independent legal, financial and other advisors as they may deem necessary, without consulting with, or obtaining approval from, any officer of the Company in advance.

XV. New Committees

The Board may, from time to time, form new committees as it deems appropriate.

XVI. Director Compensation

The form and amount of director compensation will be determined by the Board after a recommendation by the Compensation Committee. It is appropriate for the staff of the Company to report from time to time to the Compensation Committee on the status of Board compensation in relation to other comparable U.S. companies. The Compensation Committee will conduct a periodic review of director compensation.

XVII. Board Evaluation

The Governance and Nominating Committee together with the entire Board will oversee the annual Board evaluation process in accordance with the charter and principles of that committee. As part of this process directors will periodically conduct a self-evaluation to review the progress and effectiveness of the Board and its committees, and will submit its comments to the Governance and Nominating Committee. The Governance and Nominating Committee will then report back to the Board, and the full Board will consider and discuss the committee's report.

XVIII. Director Orientation and Continuing Education

The Company will conduct an orientation for new directors. The orientation will include presentations that review the Company's business strategies, its financial and accounting systems and risk management controls, its code of business conduct and methods and compliance programs, and its internal and independent auditor. The orientation should include an introduction to the Company's senior management, visits to its corporate headquarters and, to the extent practicable, visits to its significant facilities. Incumbent directors will also be invited to attend the orientation program.

XIX. Periodic Review of Guidelines

The Governance and Nominating Committee and the Board should review these guidelines periodically.