

**CHARTER FOR THE COMPENSATION COMMITTEE
OF THE BOARD OF DIRECTORS
OF
PFENEX INC.**

(As amended November 6, 2018)

PURPOSE

The purpose of the Compensation Committee (the “Committee”) of Pfenex Inc. (the “Company”) shall be to:

- assist the Board of Directors of the Company (the “Board”) in providing oversight of the Company’s compensation policies, plans and benefits programs and overall compensation philosophy;
- assist the Board in discharging the Board’s responsibilities relating to oversight of the compensation of the Company’s Chief Executive Officer (“CEO”) and its executive officers (including officers reporting under Section 16 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”));
- review and approve, or make recommendations to the independent members of the Board with respect to, the Company’s CEO and executive officer compensation, plans, policies and programs; and
- administer the Company’s equity compensation plans, including the granting of equity awards pursuant to such plans or outside of such plans.

MEMBERSHIP REQUIREMENTS

The Committee members will be appointed by, and will serve at the discretion of, the Board. Committee members may be replaced by the Board. The Committee shall consist of at least two (2) members of the Board. Members of the Committee must meet the following independence criteria (subject to any transitional period from the criteria required by the NYSE American (“NYSE American”)):

- the independence requirements of the NYSE American;
- the non-employee director definition of Rule 16b-3 promulgated by the U.S. Securities and Exchange Commission (the “SEC”) under Section 16 of the Exchange Act; and
- any additional criteria required by applicable law, the rules, and regulations of the SEC or the securities exchange on which the Company’s securities are listed or such qualifications as are established by the Board from time to time.

The Board may designate one member of the Committee as its chair. In the absence of that designation, the Committee may designate a chairperson by majority vote of the members of the Committee.

AUTHORITY AND RESPONSIBILITIES

The Committee shall have the full delegated authority of the Board to carry out the following principal recurring responsibilities and duties, as well as such other functions as are consistent with the Committee's purpose and applicable law, rules, and regulations and as the Board may request:

- The Committee shall review and approve, or make recommendations for approval by the independent members of the Board regarding, corporate goals and objectives relevant to the compensation of the CEO, evaluate his or her performance in light thereof and communicate the results to the Board, and consider identified and other factors related to the performance of the Company when reviewing and approving, or making recommendations to the Board regarding, the compensation level of the CEO.
- The Committee shall annually review and approve, or make recommendations for approval by the independent members of the Board regarding, the CEO's (1) annual base salary, (2) annual incentive bonus, including the specific goals and amount, (3) equity compensation, (4) any employment agreement, severance arrangement and change in control agreement/provision, (5) any signing bonus or payment of relocation costs and (6) any other benefits, compensation or arrangements. In determining or making recommendations regarding the long-term incentive component of CEO compensation, the Committee will consider, among other things, the Company's performance and relative stockholder return, the value of similar incentive awards to CEOs at comparable companies and the awards given to the Company's CEO in past years.
- The Committee shall also review annually and approve, or make recommendations for approval by the independent members of the Board regarding, items (1) through (6) in the previous bullet for the other individuals who are "officers" of the Company under Rule 16a-1(f) promulgated under the Exchange Act (the "Executive Officers"). In evaluating and determining compensation for the CEO and other Executive Officers, the Committee shall consider the results of the most recent stockholder advisory vote on executive compensation required by Section 14A of the Exchange Act (a "Say-on-Pay Vote"), if such vote is required or if such vote is voluntarily sought by the Company.
- The Committee shall administer the Company's equity incentive plans. In its administration of the plans, the Committee may, pursuant to authority delegated by the Board, (i) grant equity-based or equity-linked awards to individuals eligible for such grants (including grants to officers and directors of the Company) in accordance with procedures and guidelines as may be established by the Board, and (ii) amend such equity-based or equity-linked awards; provided, that no such grant or award shall exceed the maximum number of shares that may be awarded to individuals and/or in the aggregate in any fiscal quarter or year as the Board shall direct from time to time. The Committee shall also approve, or make recommendations to the Board with respect to, adopting, amending or terminating such plans, including approving changes in the number of shares reserved for issuance thereunder, subject to obtaining any required stockholder approval. If the Board has authorized any other

committees of the Board or executive officers (in accordance with Section 157(c) of the Delaware General Corporation Law) to approve the grant of awards under the Company's equity incentive plans, the Committee shall receive and review periodic reports of the activities of such committees.

- The Committee shall assist the Board in providing oversight of the Company's overall compensation plans and benefits programs. The Committee shall also make recommendations to the Board with respect to improvements or changes to such plans or the adoption of new plans when appropriate.
- The Committee shall review any employment agreement, severance agreement or change-in-control agreement proposed to be entered into between the Company and any Executive Officer, and shall have authority to approve any such agreement.
- The Committee shall review at least annually the Company's compensation practices for employees to assess whether the risks arising from such policies are reasonably likely to have a material adverse effect on the Company.
- The Committee shall review and discuss with management the Company's disclosures contained under the caption "Compensation Discussion and Analysis" ("CD&A"), in its registration statement, annual report on Form 10-K, proxy statement or information statement filed with the SEC.
- The Committee shall prepare or cause to be prepared and review the Committee report to be included in the Company's annual proxy statement in accordance with applicable SEC rules and regulations, including whether the Committee reviewed and discussed the CD&A with management and based on that review and those discussions, whether the Committee recommended to the Board that the CD&A be approved for inclusion in the Company's annual report on Form 10-K, proxy statement or information statement.
- If applicable, the Committee shall review and recommend to the Board for approval the frequency with which the Company will conduct Say-on-Pay Votes, taking into account the results of the most recent stockholder-advisory vote on frequency of Say-on-Pay Votes required by Section 14A of the Exchange Act, and review and approve the proposals regarding the Say-on-Pay Vote and the frequency of the Say-on-Pay-Vote to be included in the annual proxy statement.
- The Committee shall review and recommend the Board compensation programs for outside directors.
- The Committee shall make regular reports to the Board.
- The Committee shall review and reassess the adequacy of this Charter periodically and recommend any proposed changes to the Board for approval.
- The Committee shall annually review at least annually its own performance.
- The Committee shall perform such other functions as assigned by law, the Company's certificate of incorporation or bylaws or the Board.

OPERATIONS

The Committee will set its own schedule of meetings, with the option of holding additional meetings at such times as it deems necessary. The Committee will maintain written minutes of its meetings, which minutes will be filed with the minutes of the meetings of the Board. A majority of the members of the Committee shall constitute a quorum for the transaction of business. The Committee may act only upon approval of a majority of its members. The action of the Committee at a meeting at which a quorum is present shall be the act of the Committee. The Committee may act in writing by the unanimous consent of its members.

The Committee may invite the Lead Director, if any, Chairman of the Board, if any, the Chief Executive Officer or others to attend all or a portion of its meetings. No employee of the Company may be present during portions of any meeting during which his or her performance and compensation are being deliberated and determined. The Committee shall have the opportunity at each regularly scheduled meeting to meet in executive session without the presence of management. Neither the CEO nor any executive officer may be present during the portions of any meeting when his or her performance or compensation is being deliberated or determined.

The Committee may, in its sole discretion, retain and terminate, as appropriate, any compensation consultant, outside legal or other advisors (each, an “Advisor”) to advise or assist the Committee in the performance of any of the responsibilities and duties set forth in this Charter, taking into account the independence factors set forth in the applicable rules of the SEC and NYSE American prior to selecting and receiving advice from such Advisors. The Committee will be directly responsible for the appointment, compensation and oversight of any Advisors retained by the Committee, including having sole authority to approve related fees and retention terms for such Advisors. The Company will provide the Committee with appropriate funding, as such Committee determines, for the payment of compensation to any Advisors as the Committee deems appropriate, and administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

The Committee may retain, or receive advice from, any compensation consultant, outside legal or other advisor it prefers, including advisors that are not independent, after considering the requisite independence factors. Notwithstanding the foregoing, the Committee is not required to assess the independence of any compensation consultant or other advisor that acts in a role limited to consulting on any broad-based plan that does not discriminate in scope, terms or operation in favor of Executive Officers or directors and that is generally available to all salaried employees or providing information that is not customized for a particular company or that is customized based on parameters that are not developed by the consultant or advisor, and about which the consultant or advisor does not provide advice. The Committee will evaluate whether any compensation consultant retained or to be retained by it has any conflict of interest in accordance with Item 407(e)(3)(iv) of Regulation S-K.

The Committee may form subcommittees for any purpose that the Committee deems appropriate and may delegate to such subcommittees such power and authority as the Committee deems appropriate. If designated, any subcommittee will establish its own schedule and maintain written minutes of its meetings, which minutes will be filed with the minutes of the meetings of the Committee. The Committee shall not delegate to a subcommittee any power or authority required by agreement, law, regulation or listing standard to be exercised by the Committee as a whole.