BIO-PATH HOLDINGS, INC.

COMPENSATION COMMITTEE CHARTER

Effective February 11, 2014

Composition

There shall be a committee of the Board of Directors (the "*Board*") of Bio-Path Holdings, Inc. (the "*Company*") to be known as the Compensation Committee (the "*Committee*"), which shall be comprised solely of directors appointed by the Board. The Committee's chairperson shall be designated by the Board or, if it does not do so, the Committee members shall elect a chairperson by vote of a majority of the full Committee.

The Committee must consist of at least two (2) qualified independent directors. Each member of the Committee shall (i) meet the independence requirements of the stock exchange to which the Company's stock is listed, the rules promulgated by the U.S. Securities and Exchange Commission (the "SEC") and any other applicable regulation, (ii) qualify as a "Non-employee Director" for the purpose of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and (iii) satisfy the requirements of an "outside director" for purposes of Section 162(m) (or any successor or replacement provisions) of the Internal Revenue Code of 1986, as amended (the "*Code*"). In affirmatively determining the independence of any director who will serve on the Committee, the Board will consider all factors specifically relevant to determining whether a director has a relationship to the Company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to (i) the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the Company to such director and whether the director receives compensation from any person or entity that would impair the director's ability to make independent judgments about the Company's executive compensation and (ii) whether such director is affiliated with the Company, a subsidiary of the Company or an affiliate of a subsidiary of the Company and whether such affiliate relationship places the director under the direct or indirect control of the Company or its senior management, or creates a direct relationship between the director and members of senior management, in each case of a nature that would impair the director's ability to make independent judgments about the Company's executive compensation. If any member of the Committee ceases to meet the requirements discussed above, such member will not be able to serve as a member of the Committee for such time as he or she fails to meet such requirements, and will resign or be suspended or removed from the Committee by the Board. Once appointed by the Board, members of the Committee shall, except for any period of suspension, hold office until their successors are duly elected and qualified or until their earlier resignation, removal or death.

Statement of Policy

Consistent with the duties set forth below, the Committee shall assist the Board by addressing all forms of compensation of the Company's executive officers, administering the Company's incentive compensation plan and other benefits plans, including a deferred compensation plan, if applicable, and producing any required report on executive compensation for use in the Company's proxy statement or other public disclosure.

Authority

In assisting the Board in discharging its oversight role, the Committee shall have the authority, in its sole discretion, to select, retain and obtain the advice of a compensation consultant as necessary to assist with the execution of its duties and responsibilities as set forth in The Committee shall set the compensation, and oversee the work, of the this charter. compensation consultant. The Committee shall have the authority, in its sole discretion, to retain and obtain the advice and assistance of outside legal counsel and such other advisors as it deems necessary to fulfill its duties and responsibilities under this charter. The Committee shall set the compensation, and oversee the work, of its outside legal counsel and other advisors. The Committee shall receive appropriate funding from the Company, as determined by the Committee in its capacity as a committee of the Board, for the payment of compensation to its compensation consultants, outside legal counsel and any other advisors. However, the Committee shall not be required to implement or act consistently with the advice or recommendations of its compensation consultant, legal counsel or other advisor to the Committee, and the authority granted in this charter shall not affect the ability or obligation of the Committee to exercise its own judgment in fulfillment of its duties under this charter.

In retaining or seeking advice from compensation consultants, outside counsel and other advisors (other than the Company's in-house counsel, if any), the Committee must take into consideration the following factors specified in Rule 10C-1(b)(4) of the Exchange Act regarding independence: (i) the provision of other services to the Company by the person that employs the compensation consultant, legal counsel or other adviser; (ii) the amount of fees received from the Company by the person that employs the compensation consultant, legal counsel or other adviser, as a percentage of the total revenue of the person that employs the compensation consultant, legal counsel or other adviser; (iii) the policies and procedures of the person that employs the compensation consultant, legal counsel or other adviser that are designed to prevent conflicts of interest; (iv) any business or personal relationship of the compensation consultant, legal counsel or other adviser with a member of the Committee; (v) any stock of the Company owned by the compensation consultant, legal counsel or other adviser; and (vi) any business or personal relationship of the compensation consultant, legal counsel, other adviser or the person employing the adviser with an executive officer of the Company. The Committee may retain, or receive advice from, any compensation advisor it prefers, including ones that are not independent, after considering the specified factors. 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 provide advance notice to the Board of its intention to engage any compensation consultant. The Committee may not form or delegate authority to subcommittees without the prior approval of the Board. Nothing in this charter is intended to limit the ability of

members of management, other members of the Board, advisory directors, consultants, outside counsel, accountants or other advisors to participate in portions of the Committee meetings so long as, in each instance, the Committee is afforded the opportunity to deliberate and vote in executive session. The Committee is not precluded from approving awards as may be required to comply with applicable tax laws, *i.e.*, Section 162(m) of the Code.

Meetings

The Committee shall meet at least once annually, and as many additional times as the Committee shall deem necessary or appropriate. The chairperson of the Committee will preside at each meeting of the Committee and, in consultation with the other members of the Committee, will set the frequency and length of each meeting and the agenda of items to be addressed at each meeting. As necessary or desirable, the chairperson of the Committee may request that members of management, members of the Board, advisory directors, consultants, outside counsel, accountants or other advisors be present at meetings of the Committee. The Chief Executive Officer (the "*CEO*") shall not be present during voting or deliberations on his or her compensation during any meetings of the Committee.

Minutes and Reporting

The Committee shall designate a secretary, who shall prepare or cause to be prepared the minutes of each meeting and cause such minutes, as approved by the Committee, to be filed with the corporate records of the Company. The secretary shall send, or cause to be sent, copies of such minutes to each of the members of the Committee and to each of the members of the Board who are not members of the Committee. Best efforts will be used to circulate the minutes to the Board prior to the Committee making its report to the Board. Reports to the Board shall be made by the Committee on the basis that is determined by the Committee.

Duties

In addition to specific assignments that the Board may direct the Committee to carry out from time to time, the Committee shall be charged with, and have the power and authority of the Board, to perform the following duties and to fulfill the following responsibilities:

- periodically assess compensation of executive officers in relation to companies of comparable size, industry and complexity, taking the performance of the Company and such other companies into consideration;
- review and approve corporate goals and objectives relevant to the compensation of the CEO, evaluate the CEO's performance in light of these goals and objectives, and, either as a committee or together with the other independent directors (as directed by the Board), determine and approve the CEO's compensation level based on this evaluation;
- make recommendations to the Board with respect to non-CEO executive officer compensation, and incentive-compensation and equity-based plans that are subject to Board approval;

- oversee the administration of the Company's incentive compensation plan, other benefits plans (including a deferred compensation plan, if applicable) and perquisites, including retirement and termination benefits;
- in consultation with the CEO, review director compensation levels and practices, and recommend, from time to time, changes in such compensation levels and practices to the Board;
- annually review and reassess the adequacy of this charter and recommend any proposed changes to the Board for approval;
- at least annually conduct a self-evaluation to assess the effectiveness of the Committee;
- subject to Board direction or approval, perform any other activities consistent with this charter, the Company's certificate of incorporation and bylaws, and governing laws as the Committee or the Board deem appropriate;
- report to the Board on Committee activities and decisions;
- review and approve the Compensation Disclosure and Analysis disclosure prepared for inclusion in the Company's filings with the SEC; and
- prepare a Compensation Committee Report as required by the rules of the SEC for inclusion in the Company's annual proxy statement or annual report on Form 10-K filed with the SEC.