

**Charter of the Audit Committee
of
Asterias Biotherapeutics, Inc.**

This Charter was adopted by the Board of Directors (the “Board”) of Asterias Biotherapeutics, Inc. (the “Company”) on March 10, 2013.

I. Purpose

The purpose of the Audit Committee (the “Committee”) is to assist the Board with its oversight responsibilities regarding: (a) the integrity of the Company’s financial statements; (b) the Company’s compliance with legal and regulatory requirements; (c) the qualifications and independence of the Company’s registered public accounting firm (the “external auditor”); (d) the cost and performance of the Company’s external auditor; (e) the establishment and maintenance of the internal controls systems; (f) the review, approval and ratification of “Related Person Transactions” in accordance with the Company’s Related Person Transaction Policy; (g) taking such measures, and make such recommendations, as it deems necessary or appropriate to assure that the Company’s external auditor remains accountable to the Audit Committee and the Board of Directors; and (h) reporting to the Board of Directors on the findings of the Audit Committee and to recommend such action as the Audit Committee shall deem necessary or appropriate. To the extent applicable, the Committee shall prepare the report required by the rules of the Securities and Exchange Commission (the “SEC”) to be included in the Company’s annual proxy statement.

In addition to the powers and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities delegated to it by the Board from time to time consistent with the Company’s bylaws. The powers and responsibilities delegated by the Board to the Committee in this Charter or otherwise shall be exercised and carried out by the Committee as it deems appropriate without requirement of Board approval, and any decision made by the Committee (including any decision to exercise or refrain from exercising any of the powers delegated to the Committee hereunder) shall be at the Committee’s sole discretion. While acting within the scope of the powers and responsibilities delegated to it, the Committee shall have and may exercise all the powers and authority of the Board. To the fullest extent permitted by law, and subject to any contrary determination by the Board, the Committee shall have the power to determine which matters are within the scope of the powers and responsibilities delegated to it.

Management of the Company is responsible for the preparation, presentation and integrity of the Company’s financial statements as well as the Company’s financial reporting process, accounting policies, internal accounting controls and disclosure controls and procedures. The external auditor is responsible for performing an audit of the Company’s annual financial statements, expressing an opinion as to the conformity of such annual financial statements with generally accepted accounting principles, expressing an opinion as to the adequacy of the Company’s internal controls over financial reporting, and reviewing the Company’s quarterly financial statements. Except as otherwise expressly set forth herein, the Committee’s responsibilities are limited to oversight. Without limiting the generality of the foregoing, it is not the responsibility of the Committee to plan or conduct audits or to determine that the Company’s financial statements and disclosure are complete and accurate and in accordance with generally accepted accounting principles and applicable laws, rules and regulations, or that its internal controls of financial reporting are adequate. Each member of the Committee shall be entitled to rely on the integrity of those persons within the Company and of the professionals and experts (including the Company’s external auditor (or others responsible for the internal audit

function, if applicable, including contracted non-employee or audit or accounting firms engaged to provide internal audit services)) from which the Committee receives information.

Further, auditing literature, particularly Statement of Accounting Standards No. 100, defines the term “review” to include a particular set of required procedures to be undertaken by external auditors. The members of the Committee are not external auditors, and the term “review” as used in this Charter is not intended to have that meaning and should not be interpreted to suggest that the Committee members can or should follow the procedures required of auditors performing reviews of financial statements.

II. Membership

The Committee shall consist of at least three members of the Board, each of whom is financially literate and satisfies the independence requirements of the rules of the NYSE MKT and Rule 10A-3(b)(1) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Each Committee member shall

(a) be affirmatively determined by the Board to not have a relationship with the Company that would interfere with the exercise of independent judgment;

(b) not have participated in the preparation of the financial statements of the Company or any current subsidiary of the Company at any time during the past three years; and

(c) shall be able to read and understand fundamental financial statements, including the Company's balance sheet, income statement, and cash flow statement.

Unless otherwise determined by the Board (in which case, to the extent applicable to the Company, disclosure of such determination shall be made in the Company's annual report filed with the SEC under the Exchange Act) at least one member of the Audit Committee shall be an “audit committee financial expert,” as determined by the Board based upon the criteria set forth in applicable SEC rules. If the Committee has no member that qualifies as an audit committee financial expert, at least one member must be “financially sophisticated,” in that he or she has past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including but not limited to being or having been a chief executive officer, chief financial officer, other senior officer with financial oversight responsibilities. Members of the Committee, including the chairperson (“Chair”) of the Committee, shall be appointed from time to time by the Board upon recommendation of the Nominating and Corporate Governance Committee. Members shall serve at the pleasure of the Board, or until their successors have been elected and have taken office.

The compensation of the Audit Committee members shall be determined by the Board. No member of the Audit Committee may receive, directly or indirectly, any consulting, advisory or other compensatory fee from the Company or any of its affiliates, other than fees paid in his or her capacity as a member of the Board or a committee of the Board.

III. Meetings and Procedures

The Committee shall meet at least once during each fiscal quarter and more frequently as the Committee deems desirable. The Committee shall meet separately, periodically, with management and with the external auditor. The Committee chairperson shall report on Committee activities to the full Board from time to time and shall cause the Committee minutes to be provided to the Board on an ongoing basis.

Special meetings of the Audit Committee may be called by any member of the Audit Committee, by the Board of Directors, by the Chief Executive Officer, or by the Chief Financial Officer.

The Chair (or in his or her absence, a member designated by the Chair or the remaining members of the Committee) shall preside at each meeting of the Committee and set, in consultation with the other members of the Committee, the agendas for Committee meetings. The Committee shall have the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any provisions of the Company's bylaws that are applicable to the Committee.

All non-management directors who are not members of the Committee may attend and observe meetings of the Committee, but shall not participate in any discussion or deliberation unless invited to do so by the Committee, and in any event shall not be entitled to vote. The Committee may, at its discretion, include in its meetings members of the Company's management, representatives of the external auditor, any other financial personnel employed or retained by the Company or any other persons whose presence the Committee believes to be necessary or appropriate. Notwithstanding the foregoing, the Committee may also exclude from its meetings any persons it deems appropriate, including, but not limited to, any non-management director that is not a member of the Committee. Management should not be present during times that are reserved for separate meetings with the external auditors.

IV. Powers and Responsibilities

Interaction with the External Auditor

a. *Appointment and Oversight.* The Committee shall be directly responsible and have sole authority for the appointment, compensation, retention, and oversight of the work of the external auditor (including resolution of any disagreements between Company management and the external auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work or performing other audit, review or attest services for the Company. The external auditor shall report directly to the Committee.

b. *Pre-Approval of Services.* Before the external auditor is engaged by the Company or its subsidiaries to render audit or non-audit services, the Committee shall pre-approve the engagement. Committee pre-approval of audit and non-audit services will not be required if such services fall within available exceptions established by the SEC. The Committee may delegate to one or more designated members of the Committee the authority to grant pre-approvals, provided such approvals are presented to the Committee at a subsequent meeting. If the Committee elects to establish pre-approval policies and procedures regarding non-audit services, the Committee must be informed of each non-audit service provided by the external auditor. Other than *de minimis* services incidental to audit services, non-audit services shall generally be limited to tax services such as advice and planning and financial due diligence services.

c. *Independence of External Auditor.* The Committee shall, at least annually, review the independence and quality control procedures of the external auditor and the experience and qualifications of the external auditor's senior personnel that are providing audit services to the Company. In conducting its review:

i. The Committee shall obtain and review a report prepared by the external auditor describing (1) the auditing firm's internal quality-control procedures and (2) any material issues raised by the most recent internal quality-control review, or peer review, of the auditing firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the auditing firm, and any steps taken to deal with any such issues.

ii. The Committee shall ensure that the external auditor prepare and deliver, at least annually and before the engagement of the external auditor, a written statement delineating all relationships between the external auditor and the Company, consistent with Public Company Accounting Oversight Board Ethics and Independence Rule 3526. The Committee shall discuss with the external auditor any disclosed relationships or services that, in the view of the Committee, may impact the objectivity and independence of the external auditor. If the Committee determines that further inquiry is advisable, the Committee shall take appropriate action in response to the external auditor's report to satisfy itself of the auditor's independence.

iii. Employees or former employees of the external auditors shall not be hired by the Company unless specifically approved by the Committee.

iv. The Committee shall confirm with the external auditor that the external auditor is in compliance with the partner rotation requirements established by the SEC.

v. The Committee shall consider whether the Company should adopt a rotation of the annual audit among independent auditing firms and shall review compliance with Section 203 of the Sarbanes-Oxley Act, to the extent applicable.

vi. The Committee shall review and evaluate the lead partner and other senior members of the external auditor.

vii. The Committee shall, if applicable, consider whether the external auditor's provision of any permitted information technology services or other non-audit services to the Company is compatible with maintaining the independence of the external auditor.

viii. The committee shall be directly responsible for setting the compensation of the external auditors. The Committee is empowered, without further action by the Board, to cause the Company to pay the external auditors.

Annual Financial Statements and Annual Audit

d. *Meetings with Management, the External Auditor.*

i. The Committee shall meet with management and the external auditor in connection with each annual audit to discuss the scope of the audit, the procedures to be followed and the staffing of the audit.

ii. The Committee shall review and discuss with management and the external auditor: (1) major issues regarding accounting principles and financial statement presentation, including any significant changes in the Company's selection or application of accounting principles, and any significant matters regarding internal control over financial reporting that have come to the external auditor's attention during the course of the audit work, and special audit procedures related to those matters; (2) any analyses prepared by management or the external auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements, including analyses of the effects of alternative GAAP methods on the Company's financial statements; and (3) the effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on the Company's financial statements.

iii. The Committee shall review and discuss the annual audited financial statements with management and the external auditor, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

e. *Separate Meetings with the External Auditor.*

i. The Committee shall review with the external auditor any problems or difficulties the external auditor may have encountered during the course of the audit work, including any restrictions on the

scope of activities or access to required information or any significant disagreements with management and management's responses to such matters. Among the items that the Committee should consider reviewing with the external auditor are: (1) any accounting adjustments that were noted or proposed by the auditor but were "passed" (as immaterial or otherwise); (2) any communications between the audit team and the external auditor's national office respecting auditing or accounting issues presented by the engagement; and (3) any "management" or "internal control" letter issued, or proposed to be issued, by the external auditor to the Company. The Committee shall obtain from the external auditor assurances that during the course of its audit it has not detected or otherwise become aware of information indicating that an illegal act has or may have occurred that would require the external auditor to inform the Committee under Section 10A(b) of the Exchange Act.

ii. The Committee shall discuss with the external auditor the report that such auditor is required to make to the Committee regarding: (1) all accounting policies and practices to be used that the external auditor identifies as critical; (2) all alternative treatments within GAAP for policies and practices related to material items that have been discussed among management and the external auditor, including the ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the external auditor; and (3) all other material written communications between the external auditor and management of the Company, such as any management letter, management representation letter, reports on observations and recommendations on internal controls, external auditor's engagement letter, external auditor's independence letter, schedule of unadjusted audit differences and a listing of adjustments and reclassifications not recorded, if any.

iii. The Committee shall discuss with the external auditor the matters required to be discussed by Statement on Auditing Standards No. 61, "Communication with Audit Committees," as then in effect.

f. *Recommendation to Include Financial Statements in Annual Report.* The Committee shall, based on the review and discussions in paragraphs d(iii) and e(iii) above, and based on the disclosures received from the external auditor regarding its independence and discussions with the auditor regarding such independence pursuant to subparagraph c(ii) above, determine whether to recommend to the Board that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year subject to the audit.

Quarterly Financial Statements and Other Financial Information

g. *Meetings with Management, and the External Auditor.* The Committee shall review and discuss the quarterly financial statements with management and the external auditor, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Other Powers and Responsibilities

h. The Committee shall review all proposed Related Person Transactions and off-balance sheet transactions on an ongoing basis, and all such transactions must be approved by the Committee.

i. The Committee shall discuss with management and the external auditor any of the following which are brought to the Committee's attention: correspondence from or with regulators or governmental agencies; any employee complaints; and any published reports that raise material issues regarding the Company's financial statements, financial reporting process or accounting policies.

j. The Committee shall discuss with management and outside counsel any legal matters brought to the Committee's attention that could reasonably be expected to have a material impact on the Company's financial statements.

k. The Committee shall request assurances from management that the Company's foreign subsidiaries and foreign affiliated entities, if any, are in conformity with applicable legal requirements, including disclosure of Related Person Transactions.

l. The Committee shall discuss with management the Company's policies with respect to risk assessment and risk management. The Committee shall discuss with management the Company's significant financial risk exposures and the actions management has taken to limit, monitor or control such exposures.

m. The Committee shall establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters. The Committee shall also establish procedures for the confidential and anonymous submission of concerns regarding questionable accounting or auditing matters by officers and employees of the Company.

n. The Committee shall provide the Company with the report of the Committee with respect to the audited financial statements required by Item 407(d)(3) of Reg. S-K, for inclusion in each of the Company's annual proxy statements.

o. The Committee, through its Chair, shall report regularly to, and review with, the Board any issues that arise with respect to the quality or integrity of the Company's financial statements, the Company's compliance with legal or regulatory requirements, the performance and independence of the Company's external auditor, or any other matter the Committee determines is necessary or advisable to report to the Board.

p. The Committee shall at least annually perform an evaluation of the performance of the Committee and its members, including a review of the Committee's compliance with this Charter.

q. The Committee shall at least annually review and reassess this Charter and submit any recommended changes to the Board for its consideration.

r. The Committee may retain any independent counsel, experts or advisors (accounting, financial or otherwise) that the Committee believes to be necessary or appropriate. The Committee may also utilize the services of the Company's regular legal counsel or other advisors to the Company. The Company shall provide for appropriate and reasonable funding, as determined by the Committee, for payment of (i) compensation to the external auditor for the purpose of rendering or issuing an audit report, (ii) compensation to any advisors or legal counsel employed by the Committee, and (iii) ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

s. The Committee may conduct investigations into any matters within the scope of its duties or authority.

V. Reports Regarding External Auditors

At least annually, the Audit Committee shall obtain and review a report by the outside auditors describing the external auditor's internal quality control procedures and any issues raised by the most recent internal quality-control review or peer review of the external auditors.

At least annually, the Committee shall also obtain and review a copy of the most recent report on the external auditor issued by the Public Company Accounting Oversight Board pursuant to Section 104 of the Sarbanes-Oxley Act.

VI. Oversight of Internal Controls and Procedures

The Committee shall coordinate the Board's oversight over the Company's internal control over financial reporting, the Company's disclosure controls and procedures, the Company's Code of Business Conduct and Ethics and risk management procedures.

VII. Reporting Obligations

The Committee shall at least annually inform the external auditor, the Chief Financial Officer, the Controller and the officer in charge of internal audit activities, that they should promptly contact the Audit Committee or its Chairman about any significant issue or disagreement concerning the Company's accounting practices or financial statements that is not resolved to their satisfaction.