

HARVARD BIOSCIENCE, INC.

SIXTH AMENDED AND RESTATED AUDIT COMMITTEE CHARTER

I. General Statement of Purpose

The purposes of the Audit Committee of the Board of Directors (the “Audit Committee”) of Harvard Bioscience, Inc. (the “Company”) are to:

- oversee the accounting and financial reporting processes of the Company and the audits of the Company’s financial statements;
- take, or recommend that the Board of Directors of the Company (the “Board”) take, appropriate action to oversee the qualifications, independence and performance of the Company’s independent auditors; and
- 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.

II. Composition

Except as otherwise permitted by the applicable rules of the NASDAQ Listing Rules, the Audit Committee shall consist of at least three (3) members of the Board, each of whom must (1) be “independent” as defined in Rule 5605(a)(2) of the NASDAQ Listing Rules; (2) meet the criteria for independence set forth in Rule 10A-3(b)(1) promulgated under Section 10A(m)(3) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), subject to the exemptions provided in Rule 10A-3(c) under the Exchange Act; and (3) not have participated in the preparation of the financial statements of the Company or a current subsidiary of the Company at any time during the past three years.

Notwithstanding the foregoing, one director who (1) is not “independent” as defined in Rule 5605(a)(2) of the NASDAQ Listing Rules; (2) satisfies the criteria for independence set forth in Section 10A(m)(3) of the Exchange Act and the rules thereunder; and (3) is not a current officer or employee or a Family Member of such officer or employee, may be appointed to the Audit Committee, if the Board, under exceptional and limited circumstances, determines that membership on the Audit Committee by the individual is required by the best interests of the Company and its stockholders, and the Board discloses, in the next annual proxy statement subsequent to such determination (or, if the Company does not file a proxy statement, in its Form 10-K or 20-F), the nature of the relationship and the reasons for that determination. A member appointed under this exception may not serve on the Audit Committee for more than two years and may not chair the Audit Committee.

Each member of the Audit Committee must be able to read and understand fundamental financial statements, including a company's balance sheet, income statement, and cash flow statement as required by Rule 5605(c)(2)(A)(iv) of the NASDAQ Listing Rules. At least one member of the Audit Committee shall have 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 being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities as required by Rule 5605(c)(2)(A) of the NASDAQ Listing Rules. One or more members of the Audit Committee may qualify as an "audit committee financial expert" under the rules promulgated by the SEC.

The Governance Committee shall recommend that the Board select nominees for appointment to the Audit Committee annually and as vacancies or newly created positions occur. The members of the Audit Committee shall be appointed annually by the Board and continue to be a member of the Audit Committee for as long as he or she remains a Director or until his or her earlier resignation from the Audit Committee or removal or replacement by the Board. The members of the Audit Committee may be replaced or removed by the Board with or without cause, at any time. Resignation or removal of a Director from the Board, for whatever reason, shall automatically and without any further action constitute resignation or removal, as applicable, from the Audit Committee. Any vacancy on the Audit Committee, occurring for whatever reason, may be filled only by the Board. The Board shall designate one member of the Audit Committee to be Chairman of the committee, who shall preside at meetings of the Audit Committee and shall have the authority to convene meetings, set agendas for meetings, and determine the Audit Committee's information needs, except as otherwise determined by action of the Audit Committee. In the absence of the Chairman at a duly convened meeting, the Audit Committee shall select a temporary substitute from among its members to serve as chairman of the meeting.

III. Compensation

A member of the Audit Committee may not, other than in his or her capacity as a member of the Audit Committee, the Board or any other committee established by the Board, receive directly or indirectly any consulting, advisory or other compensatory fee from the Company. A member of the Audit Committee may receive additional directors' fees to compensate such member for the significant time and effort expended by such member to fulfill his or her duties as an Audit Committee member.

IV. Meetings; Quorum; Action at a Meeting; Action by Written Consent

The Audit Committee shall meet as often as it determines is appropriate to carry out its responsibilities under this Charter, but not less frequently than quarterly. The Audit Committee is to meet in person or by telephone conference or other communications equipment by means of which all persons participating in the meeting can hear each other, as deemed necessary by the Audit Committee. A majority of the members of the Audit Committee shall constitute a quorum for purposes of holding a meeting and the Audit Committee may act by a vote of a majority of the members present at such meeting. In lieu of a meeting, the Audit Committee may act by unanimous written consent. The Chairman of the Audit Committee, in consultation with the other committee members, may determine the frequency and length of the committee meetings and may set meeting agendas consistent with this Charter.

V. Responsibilities and Authority

A. Review of Charter and Self-Evaluation

- The Audit Committee shall review and reassess the adequacy of this Charter annually and recommend to the Board any amendments or modifications to the Charter that the Audit Committee deems appropriate.
- The Audit Committee shall conduct an annual self-evaluation of its performance, including its effectiveness and compliance with this Charter.

B. Matters Relating to Selection, Performance and Independence of Independent Auditor

- The Audit Committee shall be directly responsible for the appointment, retention and termination, and for determining the compensation, of the Company's independent auditor engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company. The Audit Committee may consult with management in fulfilling these duties, but may not delegate these responsibilities to management.
- The Audit Committee shall be directly responsible for oversight of the work of the independent auditor (including resolution of disagreements between management and the independent auditor regarding financial reporting) engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company.
- The Audit Committee shall instruct the independent auditor that the independent auditor shall report directly to the Audit Committee.
- The Audit Committee shall pre-approve all auditing services and the terms thereof (which may include providing comfort letters in connection with securities underwritings) and non-audit services (other than non-audit services prohibited under

Section 10A(g) of the Exchange Act or the applicable rules of the SEC or the Public Company Accounting Oversight Board) to be provided to the Company by the independent auditor; provided, however, the pre-approval requirement is waived with respect to the provision of non-audit services for the Company if, pursuant to Section 10A(i)(1)(B) of the Exchange Act: (i) the aggregate amount of all such non-audit services provided to the Company constitutes not more than 5% of the total amount of revenues paid by the Company to its auditor during the fiscal year in which the non-audit services are provided; (ii) the services were not recognized by the Company at the time of the engagement to be non-audit services; and (iii) such services are promptly brought to the attention of the Audit Committee and approved by the Audit Committee prior to the completion of the audit or by one or more members of the Audit Committee who are members of the Board of Directors to whom authority to grant such approvals has been delegated by the Audit Committee. This authority to pre-approve non-audit services may be delegated to one or more members of the Audit Committee, who shall present all decisions to pre-approve an activity to the full Audit Committee at its first meeting following such decision.

- The Audit Committee may review and approve the scope and staffing of the independent auditors' annual audit plan(s).
- The Audit Committee shall (1) request that the independent auditor provide the Audit Committee with the written disclosures and the letter required by Public Company Accounting Oversight Board ("PCAOB") Rule 3526, as modified or supplemented, (2) require that the independent auditor submit to the Audit Committee at least annually a formal written statement delineating all relationships between the independent auditor and the Company, (3) discuss with the independent auditor any disclosed relationships or services that may impact the objectivity and independence of the independent auditor, (4) require that the independent registered public accounting firm provide to the Audit Committee written affirmation that the independent registered public accounting firm is, as of the date of the affirmation, independent in compliance with PCAOB Rule 3520 and (5) based on such disclosures, statement, discussion and affirmation, take or recommend that the Board take appropriate action in response to the independent auditor's report to satisfy itself of the independent auditor's independence. In addition, before approving the initial engagement of any independent registered public accounting firm, the Audit Committee shall receive, review and discuss with the firm all information required by, and otherwise take all actions necessary for compliance with the requirements of, PCAOB Rule 3526. References to rules of the PCAOB shall be deemed to refer to such rules and to any substantially equivalent rules adopted to replace such rules, in each case as subsequently amended, modified or supplemented.
- The Audit Committee may consider whether the provision of the services covered in Items 9(e)(2) and 9(e)(3) of Schedule 14A under the Exchange Act (or any successor provision) is compatible with maintaining the independent registered public accounting firm's independence.

- The Audit Committee shall evaluate the independent auditors' qualifications, performance and independence, and shall present its conclusions with respect to the independent auditors to the full Board. As part of such evaluation, at least annually, the Audit Committee shall:
 - obtain and review a report or reports from the independent auditor describing (1) the auditor's internal quality-control procedures, (2) any material issues raised by the most recent internal quality-control review or peer review of the auditors or by any inquiry or investigation by government or professional authorities, within the preceding five years, regarding one or more independent audits carried out by the auditors, and any steps taken to address any such issues, and (3) in order to assess the auditor's independence, all relationships between the independent auditor and the Company; and
 - review and evaluate the performance of the independent auditor and the lead partner (and the Audit Committee may review and evaluate the performance of other members of the independent auditor's audit staff).

In this regard, the Audit Committee may also (1) seek the opinion of management and the internal auditors of the independent auditors' performance and (2) consider whether, in order to assure continuing auditor independence, there should be regular rotation of the audit firm.

- The Audit Committee shall assure the regular rotation of the audit partners (including, without limitation, the lead and concurring partners) as required under the Exchange Act and Regulation S-X.
- The Audit Committee may recommend to the Board policies with respect to the potential hiring by the Company of current or former employees of the independent auditor.

C. Audited Financial Statements and Annual Audit

- The Audit Committee shall review the overall audit plan with the independent auditor and the members of management who are responsible for preparing the Company's financial statements, including the Company's Chief Financial Officer and/or principal accounting officer or principal financial officer (the Chief Financial Officer and such other officer or officers are referred to herein collectively as the "Senior Accounting Executive").
- The Audit Committee shall review and discuss with management (including the Company's Senior Accounting Executive) and with the independent auditor the Company's annual audited financial statements, including (a) all critical accounting policies and practices used or to be used by the Company, (b) the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and

Results of Operations” prior to the filing of the Company’s Annual Report on Form 10-K, and (c) any significant financial reporting issues that have arisen in connection with the preparation of such audited financial statements.

- The Audit Committee must review:
 - (i) any analyses prepared by management and/or the independent auditors setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effects of alternative GAAP methods on the financial statements. The Audit Committee may consider the ramifications of the use of such alternative disclosures and treatments on the financial statements, and the treatment preferred by the independent auditor. The Audit Committee may also consider other material written communications between the independent auditor and management, such as any management letter or schedule of unadjusted differences and any special audit steps adopted in light of material control deficiencies;
 - (ii) major issues as to the adequacy of the Company’s internal controls;
 - (iii) major issues regarding accounting principles and procedures and financial statement presentations, including any significant changes in the Company’s selection or application of accounting principles; and
 - (iv) the effects of regulatory and accounting initiatives, as well as off-balance sheet transactions and structures, on the financial statements of the Company.
- The Audit Committee shall review and discuss with the independent auditor (outside of the presence of management) how the independent auditor plans to handle its responsibilities under the Private Securities Litigation Reform Act of 1995, and request assurance from the auditor that Section 10A(b) of the Exchange Act has not been implicated.
- The Audit Committee shall review and discuss with the independent auditor any audit problems or difficulties and management’s response thereto. This review shall include (1) any difficulties encountered by the auditor in the course of performing its audit work, including any restrictions on the scope of its activities or its access to information, and (2) any significant disagreements with management.
- This review may also include:
 - (i) any accounting adjustments that were noted or proposed by the auditors but were “passed” (as immaterial or otherwise);
 - (ii) any communications between the audit team and the audit firm’s national office regarding auditing or accounting issues presented by the engagement; and

- (iii) any management or internal control letter issued, or proposed to be issued, by the auditors.
- The Audit Committee shall discuss with the independent auditors those matters brought to the attention of the Audit Committee by the auditors pursuant to Auditing Standard No. 16 adopted by the PCAOB (“AS 16”).
- The Audit Committee shall review and discuss management earnings press releases.
- The Audit Committee shall also review and discuss with the independent auditors the report required to be delivered by such auditors pursuant to Section 10A(k) of the Exchange Act.
- If brought to the attention of the Audit Committee, the Audit Committee shall discuss with the CEO and Senior Accounting Executive of the Company (1) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act, within the time periods specified in the SEC’s rules and forms, and (2) any fraud involving management or other employees who have a significant role in the Company’s internal control over financial reporting.
- Based on the Audit Committee’s review and discussions (1) with management of the audited financial statements, (2) with the independent auditor of the matters required to be discussed by AS 16, and (3) with the independent auditor concerning the independent auditor’s independence, the Audit Committee shall make a recommendation to the Board as to whether the Company’s audited financial statements should be included in the Company’s Annual Report on Form 10-K for the last fiscal year.
- The Audit Committee shall prepare the Audit Committee report required by Item 407(d) of Regulation S-K of the Exchange Act (or any successor provision) promulgated by the SEC to be included in the Company’s annual proxy statement.

D. Unaudited Quarterly Financial Statements

- The Audit Committee shall discuss with management and the independent auditor, prior to the filing of the Company's Quarterly Reports on Form 10-Q, (1) the Company's quarterly financial statements and the Company's related disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations," (2) such issues as may be brought to the Audit Committee's attention by the independent auditor pursuant to Statement on Auditing Standards No. 100, and (3) any significant financial reporting issues that have arisen in connection with the preparation of such financial statements.

E. Risk Assessment and Management

- The Audit Committee shall review and discuss with management and the independent auditor the guidelines and policies that govern the process by which the Company's exposure to risk is assessed and managed by management.
- In connection with the Audit Committee's discussion of the Company's risk assessment and management guidelines, the Audit Committee may discuss or consider the Company's major financial or non-financial risk exposures and assist the Board and management in fulfilling its oversight responsibilities regarding the Company's policies and processes with respect to risk assessment and management to monitor and control such exposures.
- The Audit Committee shall review the Company's annual disclosures concerning the role of the Board in the risk oversight of the Company, such as how the Board administers its oversight function.
- The Audit Committee shall review with senior management the Company's overall anti-fraud programs and controls.
- The Audit Committee shall discuss with management its process for performing its required quarterly certifications under Section 302 of the Sarbanes-Oxley Act, including the evaluation of the effectiveness of disclosure controls by the Chief Executive Officer and Senior Accounting Executive.

F. Procedures for Addressing Complaints and Concerns

- The Audit Committee shall establish procedures for (1) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters and (2) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

- The Audit Committee may review and reassess the adequacy of these procedures periodically and adopt any changes to such procedures that the Audit Committee deems necessary or appropriate.

G. Regular Reports to the Board

- The Audit Committee shall regularly report 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 independent auditors and any other matters that the Audit Committee deems appropriate or is requested to review for the benefit of the Board.

VI. Additional Authority

The Audit Committee is authorized, on behalf of the Board, to do any of the following as it deems necessary or appropriate:

A. Engagement of Advisors

- The Audit Committee may engage independent counsel and such other advisors it deems necessary or advisable to carry out its responsibilities and powers, and, if such counsel or other advisors are engaged, shall determine the compensation or fees payable to such counsel or other advisors.

B. Legal and Regulatory Compliance

- The Audit Committee may discuss with management and the independent auditor, and review with the Board, the legal and regulatory requirements applicable to the Company and its subsidiaries and the Company's compliance with such requirements. After these discussions, the Audit Committee may, if it determines it to be appropriate, make recommendations to the Board with respect to the Company's policies and procedures regarding compliance with applicable laws and regulations.
- The Audit Committee may discuss with management legal matters (including pending or threatened litigation) that may have a material effect on the Company's financial statements or its compliance policies and procedures.

C. Related Person Transaction Approval and Disclosure Policy

- The Audit Committee shall conduct an appropriate review of all related person transactions on an ongoing basis, and the approval of the Audit Committee shall be required for all such transactions. For purposes of this provision, the term "related person transaction" shall refer to transactions required to be disclosed by the Company pursuant to Item 404 of Regulation S-K (or any successor provision) promulgated by the SEC.

D. General

- The Audit Committee may form and delegate authority to subcommittees consisting of one or more of its members as the Audit Committee deems appropriate to carry out its responsibilities and exercise its powers.
- The Audit Committee may perform such other oversight functions outside of its stated purpose as may be requested by the Board from time to time.
- The Audit Committee shall maintain minutes or other records of Audit Committee meetings and activities.
- In performing its oversight function, the Audit Committee shall be entitled to rely upon advice and information that it receives in its discussions and communications with management, the independent auditor and such experts, advisors and professionals as may be consulted with by the Audit Committee.
- In discharging its role, the Audit Committee is empowered to inquire into any matter it considers appropriate to carry out its responsibilities, with access to all books, records, facilities and personnel of the Company. The Audit Committee is authorized to request that any officer or employee of the Company, the Company's outside legal counsel, the Company's independent auditor or any other professional retained by the Company to render advice to the Company attend a meeting of the Audit Committee or meet with any members of or advisors to the Audit Committee.
- The Audit Committee is authorized to incur such ordinary administrative expenses as are necessary or appropriate in carrying out its duties.

Notwithstanding the responsibilities and powers of the Audit Committee set forth in this Charter, the Audit Committee does not have the responsibility of planning or conducting audits of the Company's financial statements or determining whether the Company's financial statements are complete, accurate and in accordance with GAAP. Such responsibilities are the duty of management and, to the extent of the independent auditor's audit responsibilities, the independent auditor. In addition, it is not the duty of the Audit Committee to conduct investigations or to ensure compliance with laws and regulations or with the Company's Code of Business Conduct and Ethics.

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(Adopted by the Board of Directors on April 26, 2016; effective as of April 26, 2016)