

ORGANOVO HOLDINGS, INC.

CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

1. Members. The Board of Directors (the “Board”) of Organovo Holdings, Inc. (the “Company”) will appoint an Audit Committee (the “Committee”) of at least three members. The members of the Committee shall meet the independence and experience requirements of The NASDAQ Stock Market (“Nasdaq”), Section 10A(m)(3) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), the rules and regulations of the Securities and Exchange Commission (the “Commission”) and the Company’s Corporate Governance Guidelines.

Each member of the Committee must have a working familiarity with basic finance and accounting practices and must be able to read and understand fundamental financial statements, including a balance sheet, income statement and cash flow statement. In addition, at least one member of the Committee shall be an “audit committee financial expert” (as defined by the Commission).

The members of the Committee shall be appointed annually immediately following the Company’s annual meeting of stockholders by the Board on the recommendation of the Board’s Corporate Governance and Nominating Committee and each member shall serve until his or her successor is appointed by the Board or until such member’s earlier resignation or removal. Committee members may be replaced by the Board on the recommendation of the Company’s Corporate Governance and Nominating Committee. Vacancies on the Committee shall be filled by appointment by the Board. Unless a Chair of the Committee is designated by the Board, the members of the Committee may designate a Chair by majority vote of the full Committee membership. The Chair shall preside at all regular meetings of the Committee, and shall make the final decision regarding the agenda for each meeting.

Except as expressly approved by the Board, Committee members shall not simultaneously serve on the audit committees of more than two other public companies.

2. Purpose, Duties and Responsibilities. The purpose of the Committee is to assist the Board in fulfilling its oversight responsibilities by reviewing and reporting to the Board on the integrity of the financial statements of the Company, the independent auditor’s qualifications, independence and performance, and the performance, qualifications and independence of the Company’s internal audit function; oversee the Company’s policies and practices that are intended to ensure the Company’s activities, as they relate to accounting and financial reporting matters, internal accounting controls, auditing compliance and other related matters, are conducted in a legal and ethical manner; and provide assistance in the oversight of the Company’s compliance with applicable legal and regulatory requirements. Consistent with this purpose, the Committee should encourage continuous improvement of, and should foster adherence to, the Company’s policies, procedures and practices at all levels and should provide an open avenue of communication among the independent auditor, financial and executive management, financial and executive management, those responsible for the internal audit function (the “*internal auditor*”) and the Board. The duties and responsibilities of the Committee include the following:

(a) Financial Statement and Disclosure Matters

(i) Meet to review and discuss with management and the independent auditor the annual audited financial statements and any certification, report, opinion or review rendered by the independent auditor, including the disclosures to be made in the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of the Company’s Form 10-K, and recommend to the Board whether the audited financial statements should be included in the Company’s Form 10-K.

(ii) Meet to review and discuss with management and the independent auditor the Company’s quarterly financial statements prior to the filing of each Form 10-Q, including the results of the independent auditor’s review of the quarterly financial statements and the disclosures to be made in the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of the Forms 10-Q.

(iii) Review and discuss with management and the independent auditor significant financial reporting issues and judgments made in connection with the preparation of the Company’s financial statements, including any significant changes in the Company’s selection or application of accounting principles.

(iv) Review and discuss with management (including the internal auditor) and the independent auditor the adequacy and effectiveness of the Company’s internal controls, any special steps adopted in light of material control deficiencies and the adequacy of disclosures about changes in internal control over financial reporting. Review and discuss annually with management the adequacy and effectiveness of the Company’s disclosure controls and procedures. Consider with management and the independent auditor, as appropriate, whether any changes to the Company’s internal controls or disclosure controls and procedures are appropriate in light of their evaluations of the adequacy and effectiveness of such internal controls and such disclosure controls and procedures. Review any report on any remedial measures proposed by management in response to any identified (a) significant deficiencies or material weaknesses in the design or operation of internal controls or material weaknesses therein, (b) fraud, whether or not material, involving management or other employees who have a significant role in the Company’s internal controls, or (c) significant deficiency in the adequacy or effectiveness of the Company’s disclosure controls and procedures.

(v) Review and discuss with management (including the internal auditor) and the independent auditor management’s annual report on internal control over financial reporting and the independent auditor’s attestation report on the Company’s internal control over financial reporting prior to the filing of the Company’s Form 10-K.

(vi) Review and discuss with the independent auditors:

(A) all critical accounting policies and practices used by the Company;

(B) all alternative treatments of financial information within generally accepted accounting principles (“GAAP”) that have been discussed with

management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditor;

(C) any problems or difficulties encountered in the course of the audit work, including any restrictions on the scope of the independent auditor's activities or on access to requested information, and any significant disagreements with management;

(D) any significant accounting adjustments that were noted or proposed by the independent auditor but were "passed;"

(E) any "management" or "internal control" letter or schedule of unadjusted differences issued or proposed to be issued by the independent auditor to the Company;

(F) any special audit steps adopted in light of material control deficiencies;

(G) any material written communications between the independent auditor and the Company's management;

(H) any material issues on which the national office of the independent auditor was consulted with in connection with the audit of the Company's financial statements;

(I) any significant judgments made in management's preparation of the financial statements and the view of the independent auditor as to the appropriateness of such judgments; and

(J) any significant complex or unusual transactions.

(vii) Discuss with management the Company's earnings press releases, including any use by the Company of "*pro forma*" or "adjusted" non-GAAP financial information, as well as financial information and earnings guidance provided to analysts and rating agencies.

(viii) Discuss with management and the independent auditor the effect of new or revised regulatory and accounting policies as well as off-balance sheet transactions or structures on the Company's financial statements, as well as the disclosure regarding such transactions or structures in the Company's public filings as appropriate.

(ix) Discuss with management the Company's major financial risk exposures and the steps management has taken to monitor and control such exposures.

(x) Discuss with management the Company's guidelines and policies to govern the process by which risk assessment and management is undertaken and handled.

(xi) Review and discuss with the independent auditor the matters required to be discussed by Statement on Auditing Standards No. 114 (“The Auditor’s Communication With Those Charged With Governance”), as it may be modified, supplemented or amended by the Public Company Accounting Oversight Board (“PCAOB”).

(xii) Review disclosures made to the Committee by the Company’s chief executive officer and chief financial officer during their certification process for the Form 10-K and Form 10-Q about any significant deficiencies in the design or operation of internal controls or material weaknesses therein and any fraud, whether or not material, involving management or other employees who have a significant role in the Company’s internal controls.

(b) Oversight of the Company’s Relationship with the Independent Auditor

(i) Review and provide oversight of the independent auditor. The Committee shall have the sole authority to appoint or replace the independent auditor and shall be directly responsible for the compensation and oversight of the work of the independent auditor (including resolution of disagreements between management and the independent auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work. The independent auditor shall report directly to the Committee.

(ii) Review and pre-approve all auditing services, internal control-related services and permitted non-audit services (including the material terms thereof) to be performed for the Company by its independent auditor, subject to the de minimis exceptions for non-audit services described in Section 10A(i)(1)(B) of the Exchange Act that are approved by the Committee prior to the completion of the audit.

(iii) Review and discuss with the independent auditor the annual audit plan, including the scope of the audit plan and key risk areas, and approve any significant modifications to the annual audit plan.

(iv) Review and discuss with the independent auditor any documentation supplied by the independent auditor as to the nature and scope of any tax services to be approved, as well as the potential effects of the provision of such services on the auditor’s independence. Review and evaluate the lead partner of the independent auditor team, taking into account the opinions of management and the internal auditor of the Company.

(v) Review and discuss with the independent auditor all communications from the independent auditor to the Company required in accordance with PCAOB Auditing Standard No. 16 (“Communications with Audit Committees”).

(vi) At least annually, obtain and review a report from the independent auditor describing (a) the independent auditor’s internal quality-control procedures, (b) any material issues raised by the most recent internal quality-control review, or peer review, of the independent auditor, PCAOB inspection, 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 independent auditor, and (c) any steps taken to address any such issues.

(vii) Consistent with the PCAOB Rule No. 3526, obtain and review, at least annually, a report from the independent auditor describing all relationships between the independent auditor and the Company, including any relationships or services that may impact the independent auditor's objectivity and independence, and whether any of the Company's senior finance personnel were recently employed by the independent auditor. Discuss with the independent auditor any disclosed relationships or services that may affect the objectivity or independence of the auditor.

(viii) Annually evaluate the qualifications, performance and independence of the independent auditor, including considering whether the independent auditor's quality-controls are adequate and the provision of permitted non-audit services is compatible with maintaining the auditor's independence, taking into account the opinions of management and the internal auditor. As part of its evaluation of the independence of the independent auditor, the Committee shall actively engage in dialogue with the independent auditor with respect to any disclosed relationships or services that may impact the auditor's objectivity and independence. The Committee shall present its conclusions with respect to its evaluation of the independent auditor to the Board, together with any recommendations for additional action.

(ix) Ensure the rotation of the lead audit partner having primary responsibility for the audit and the audit partner responsible for reviewing the audit as required by law. Periodically consider whether, in order to ensure continuing auditor independence, it is appropriate to rotate the independent audit firm on a regular basis or to adopt a policy of rotating the independent auditing firm on a regular basis.

(x) Set policy for the Company's hiring of employees or former employees of the independent auditor.

(c) Oversight of the Company's Internal Audit Function

(i) Provide oversight of the work of and review the performance of the internal auditor. The Committee shall have the sole authority to appoint or replace the internal auditor, and shall be directly responsible for the compensation of any outside accounting firm or consulting firm providing internal audit services. (ii) Review the results of significant reports to management prepared by the internal auditor and management's responses.

(iii) Discuss with the independent auditor and management the responsibilities of the internal auditor, its budget and staffing and any recommended changes in the planned scope of work to be performed by the internal auditor.

(iv) Review the audit plan of the internal auditor no less than annually, and review significant updates to the audit plan on an on-going basis.

(v) If an outside accounting firm or consultant is providing internal audit services to the Company, evaluate all relationships between such entity and the Company, including any relationships or services that may impact the internal auditor's objectivity and independence, and whether any of the Company's senior finance personnel were recently employed by the internal auditor.

(d) Compliance Oversight Responsibilities

(i) Obtain from the independent auditor assurance that Section 10A(b) of the Exchange Act has not been implicated.

(ii) Review and recommend to the Board for adoption a Code of Business Conduct applicable to (1) the Company's principal executive officer, principal financial officer, principal accounting officer or controller (and persons performing similar functions) which meets the requirements of Item 406 of the Commission's Regulation S-K and (2) all employees and directors, which complies with the rules of Nasdaq. Review such Code of Business Conduct periodically and recommend such changes to the Code of Business Conduct as the Committee shall deem appropriate, and adopt procedures for monitoring and enforcing compliance with the Code of Business Conduct. Review and approve all waivers of the Code of Business Conduct for executive officers and directors. Provide for review and prompt disclosure to the public any change in, or waiver of, the Code of Business Conduct required to be disclosed under applicable law.

(iii) Advise the Board with respect to the Company's policies and procedures regarding compliance with applicable laws and regulations and with the Company's Code of Business Conduct as they relate to matters within the oversight responsibilities of the Committee. As requested by the Board, review and investigate conduct alleged by the Board to be in violation of the Company's Code of Business Conduct, and adopt, as necessary or appropriate, remedial, disciplinary, or other measures with respect to such conduct.

(iv) Obtain periodic reports from the Company's legal department on the state of the Company's ethics and compliance matters. Review the appointment of the senior executive in charge of the Company's compliance function. At least annually, the Committee shall meet separately with the senior executive in charge of the Company's compliance function to discuss any matter that the members of the Committee or the senior executive believe should be discussed privately. Review the Company's procedures for monitoring compliance with the Foreign Corrupt Practices Act, and other anti-corruption laws.

(v) Establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters, and the confidential, anonymous submission by employees of concerns regarding questionable accounting, ethical, and auditing matters, including the communication of such matters to the Committee. Adopt, as necessary, appropriate remedial measures or actions with respect to such complaints or concerns.

(vi) Discuss with management (as deemed appropriate by the Committee in its discretion) and the independent auditor any correspondence with regulators or governmental agencies and complaints, reports or concerns received from internal and external sources that raise material issues regarding the Company's financial statements and financial reporting obligations and any accounting, internal accounting controls or auditing matters.

(vii) Discuss with the Company's legal department significant legal matters and any matters that may have a material impact on the financial statements or the Company's compliance policies and internal controls, including corporate securities trading policies.

(viii) Review and consider the approval or ratification of related-party transactions in accordance with the Company's policies and procedures with respect to related party transactions.

(ix) Prepare the report required by the rules of the SEC to be included in the Company's annual proxy statement.

(x) Review and update this Charter periodically, at least annually, as necessary or appropriate.

(xi) Perform an annual self-assessment of the Committee's performance, including its processes and communications with management, the independent auditor and the Board.

(xii) Perform such other duties and responsibilities as are consistent with the purpose of the Committee and as the Board or the Committee deems appropriate.

3. Authority; Outside Advisors. The Committee has the authority to take any actions it considers appropriate to fulfill the above duties and responsibilities, including without limitation the authority to retain such outside counsel, experts, and other advisors as it determines appropriate to assist it in the full performance of its functions, including accounting experts or advisors, and to approve any fees related thereto. The Committee shall have full access to any relevant records of the Company and may request that any officer or other employee of the Company or the Company's outside counsel meet with any members of, or advisors to, the Committee. The Company shall provide appropriate funding, as determined by the Committee, for payment of compensation to the independent auditor and any advisors employed by the Committee, as well as funding for the payment of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

4. Subcommittees and Delegation. To the extent permitted by law or regulation, the Committee may form and delegate authority to subcommittees consisting of one or more members when appropriate, including the authority to grant preapprovals of audit and permitted non-audit services, provided that decisions of such subcommittee to grant preapprovals shall be presented to the full Committee at its next scheduled meeting.

5. Meetings; Reporting to Board. The majority of the members of the Committee constitutes a quorum. All determinations of the Committee shall be by a majority of the disinterested members present at a meeting duly called or held, provided that any decision or determination of the Committee reduced to writing and consented to (including, but not limited to, by means of electronic transmission) by all of the members of the Committee shall be fully as effective as if it had been made at a meeting duly called and held. For the purposes hereof, a member of the Committee shall be considered to be disinterested if he or she has no direct or indirect financial interest in the matters to be considered by the Committee. The Committee shall meet as often as it deems necessary to fulfill its responsibilities hereunder, but not less frequently than quarterly, and may meet with management or individual directors at such time or times as it deems appropriate to discuss any matters before the Committee. Meetings of the Committee will be held at such times and places as the Committee determines. Such meetings may be held through any communications equipment if all persons participating can hear each other. As part of its job to foster open communication, the Committee shall (a) meet in separate executive sessions, including (i) periodically with management, the internal auditor and the independent auditors and (ii) periodically with each of the chief financial officer and the legal department and (b) have such other direct and independent interaction with such persons from time to time as the members of the Committee deem appropriate. The Committee may request any officer or employee of the Company or the Company's outside counsel or independent auditor to attend a meeting of the Committee or to meet with any members of, or consultants to, the Committee.

The Committee shall report regularly to the full Board with respect to its meetings, and concerning significant developments in the course of performing the duties and responsibilities set forth above or as otherwise requested by the Board. The Committee shall maintain written minutes of its meetings, which minutes will be filed with the minutes of the meetings of the Board.

6. Limitation of Committee's Role. While the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to plan or conduct audits or to determine that the Company's financial statements and disclosures are complete and accurate and are in accordance with generally accepted accounting principles applicable rules and regulations. These are the responsibilities of management and the independent auditor.

Approved: April 18, 2012

Last reviewed and approved: August 17, 2016