Genocea Biosciences, Inc. Audit Committee Charter

STATUS

The Audit Committee (the "Committee") is a committee of the Board of Directors (the "Board") of Genocea Biosciences, Inc., a Delaware corporation (the "Company").

PURPOSE

The Committee is appointed by the Board for the primary purposes of:

- Assisting the Board in fulfilling its oversight responsibilities as they relate to the Company's
 accounting policies and internal controls, financial reporting practices and legal and regulatory
 compliance, including, among other things:
 - Monitoring the integrity of the Company's financial statements, corporate accounting and financial reporting processes and financial information that will be provided to stockholders and others;
 - ° reviewing the Company's compliance with certain legal and regulatory requirements;
 - ° evaluating the independent auditors' qualifications and independence; and
 - o monitoring the performance of the Company's internal audit function and the Company's independent auditors as well as any other public accounting firm engaged to perform other audit, review or attest services;
- Maintaining, through regularly scheduled meetings, a line of communication between the Board and the Company's financial management, internal auditors and independent auditors,
- Preparing the report to be included in the Company's annual proxy statement, as required by the Securities and Exchange Commission's ("SEC") rules, and
- Annually evaluating the performance of the Committee.

While the Committee has the duties and responsibilities set forth in this Charter, the role of the Committee is oversight. The Committee is not responsible for planning or conducting the audit or determining whether the Company's financial statements are complete and accurate and in accordance with applicable accounting rules. Such activities are the responsibility of management and the Company's independent auditors. The Committee and its members are not preparers, auditors, or certifiers of the Company's financial statements or guarantors of the Company's independent auditors' reports. It is not the duty or responsibility of the Committee to ensure that the Company complies with all laws and regulations. The Committee and each of its members shall be entitled to rely on (a) the integrity of those persons and organizations within and outside of the Company from which it receives information, (b) the accuracy of the financial and other information provided to the Committee by such persons or organizations absent actual knowledge to the contrary (which shall be promptly reported to the Board), and (c) representations made by management as to any audit and non-audit services provided by the independent auditors to the Company.

COMPOSITION AND QUALIFICATIONS

The Committee shall be appointed by the Board and shall be composed of three or more directors (as determined from time to time by the Board), each of whom shall, in the absence of an applicable exemption, meet the 'independence' requirements of the Sarbanes-Oxley Act of 2002 (the "Act"), NASDAQ Global Select Market ("NASDAQ"), and all other applicable laws and regulations. The Committee may avail itself of any phase-in compliance periods available to the Company that are afforded by applicable rules of NASDAQ or applicable law. Each member of the Committee shall be financially literate, as determined by the Board in their business judgment. At least one member of the Committee shall have accounting or

related financial management expertise, as determined by the Board in its business judgment. The Board shall determine whether the Committee has an "audit committee financial expert" as defined by SEC Rules and whether such expert is "independent" from management as defined in the applicable SEC Rules. If the Board elects not to designate at least one Committee member as an audit committee financial expert, its reasoning shall be disclosed in the annual proxy or information statement or Form 10-K or as otherwise required by the NASDAQ rules.

A Committee member invited to sit on another public company's audit committee must notify the Board. The Board must determine whether or not the Committee member's service on another company's audit committee impairs the director's ability to serve on the Company's Committee. Committee members should be on no more than three public company audit committees; however, the Board may waive this limit in accordance with the applicable rules of NASDAO.

MEETINGS

Frequency

The Committee shall meet as frequently as the Chairman of the Committee deems appropriate. The Committee may meet with the independent auditors and management separately, to the extent the Committee deems necessary and appropriate.

Agenda and Notice

The Chairman of the Committee shall establish the meeting dates and the meeting agenda. The Chairman of the Committee or the Company Secretary shall send proper notice of each Committee meeting and information concerning the business to be conducted at the meeting, to the extent practical, to each member prior to each meeting. The Chairman or a majority of the members of the Committee may call a special meeting of the Committee at any time.

Holding and Recording Meetings

Committee meetings may be held in person or telephonically. The Committee shall keep written minutes of its meetings and submit such minutes to the Board.

Ouorum

A majority of the members of the Committee shall constitute a quorum.

COMPENSATION

The compensation of Committee members shall be determined by the Board of Directors.

RESPONSIBILITIES

System of Financial Controls

The Committee shall oversee the process by which management shall design, implement, amend, maintain, and enforce a comprehensive system of financial controls (including the right internal and external people and resources, policies, processes and enforcement) aimed at ensuring the integrity and compliance of the Company's books and records with generally accepted accounting principles ("GAAP") and sound business practices, as well as protecting the value of the Company's assets and safeguarding the credibility of its brand, employees, management team, board of directors, and stockholders. Such system of financial controls will embody the adoption of best practices in financial controls and foster honesty, integrity, accuracy, and transparency in all aspects of the Company. Best practices include but are not limited to: setting the right tone at the top; active review of business unit performance by executive management, with regular reporting to and oversight by the Board of Directors; an accurate, stable and reliable general ledger; unambiguous compliance with GAAP; and full transparency and ongoing dialogue with the Board of Directors, Audit

Committee and external auditors. Such system shall also incorporate the principals contained within the Company's Code of Business Conduct and Ethics, as adopted by the Board.

Annual Audit Review

Review and discuss the annual audited financial statements including the independent auditors' audit and audit report thereon, and the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" with management and the independent auditors. In connection with such review, the Committee will:

- Review the scope of the audit, the audit plan and the audit procedures utilized;
- Discuss with the independent auditors the matters required to be discussed by Statement on Auditing Standards No. 61 (as may be modified or supplemented) and the matters in the written disclosures required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the audit committee concerning independence;
- Review significant changes in accounting or auditing practices, principles or policies;
- Review with the independent auditors any problems or difficulties encountered in the course of their
 audit, including any change in the scope of the planned audit work and any restrictions placed on the
 scope of such work or access to requested information, and any significant disagreements with
 management, and management's response to such problems or difficulties;
- Review with the independent auditors, management the adequacy of the Company's internal controls, including information systems controls and security and bookkeeping controls and any significant findings and recommendations with respect to such controls;
- Review reports required to be submitted by the independent auditor concerning: (a) all critical
 accounting policies and practices used; (b) all alternative treatments of financial information within
 GAAP that have been discussed with management, the ramifications of such alternatives, and the
 accounting treatment preferred by the independent auditors; and (c) any other material written
 communications with management, such as the management letter or schedule of unadjusted
 differences;
- Review (a) major issues regarding accounting principles and financial statement presentations, including any significant changes in the Company's selection or application of accounting principles, and major issues as to the adequacy of the Company's internal controls and any special audit steps adopted in light of material control deficiencies; and (b) analyses prepared by management and/or the independent auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analysis of the effects of alternative GAAP methods on the financial statements and the effects of regulatory and accounting initiatives, as well as off-balance sheet structures, on the financial statements of the Company.
- Inquire about and review with management and the independent auditors any significant risks or
 exposures faced by the Company and discuss with management the steps taken to minimize such
 risk or exposure. Such risks and exposures include, but are not limited to, threatened and pending
 litigation, claims against the Company, tax matters, regulatory compliance and correspondence from
 regulatory authorities, and environmental exposure; and
- Discuss policies and procedures concerning earnings press releases and review the type and presentation of information to be included in earnings press releases (paying particular attention to any use of "pro forma" or "adjusted" non-GAAP information), as well as financial information and earnings guidance provided to analysts and rating agencies.

Quarterly Reviews

Review and discuss the quarterly financial statements and the Company's disclosures provided in periodic quarterly reports including "Management's Discussion and Analysis of Financial Condition and Results of

Operations" with management and the independent auditor, together with the independent auditors' review thereof pursuant to professional standards and procedures for conducting such reviews, as established by generally accepted auditing standards. In connection with the quarterly reviews, the Committee shall inquire about and review with management and the independent auditors any significant risks or exposures faced by the Company and discuss with management the steps taken to minimize such risk or exposure.

Oversight of Independent Auditors

Oversee the performance and independence of independent auditors. The Company's independent auditors shall report directly to and are ultimately accountable to the Committee. In connection with its oversight of the performance and independence of the independent auditors, the Committee will:

- Have the sole authority and direct responsibility to appoint, retain, compensate, oversee and replace (subject to stockholder approval, if deemed advisable by the Board) the independent auditors;
- Have authority to approve the engagement letter and all audit, audit-related, tax and other
 permissible non-audit services proposed to be performed by the independent auditors and the related
 fees for such services;
- Obtain confirmation and assurance as to the independent auditors' independence, including ensuring
 that they submit on a periodic basis (not less than annually) to the Committee a formal written
 statement delineating all relationships between the independent auditors and the Company. The
 Committee shall actively engage in a dialogue with the independent auditors with respect to any
 disclosed relationships or services that may impact the objectivity and independence of the
 independent auditors and shall take appropriate action in response to the independent auditors' report
 to satisfy itself of their independence;
- At least annually, obtain and review a report by the independent auditors describing: the firm's
 internal quality-control procedures; any material issues raised by the most recent internal qualitycontrol review or peer review of the 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 firm, and any steps taken to deal with any such issues;
- Meet with the independent auditors prior to the annual audit to discuss planning and staffing of the audit;
- Review and evaluate the performance of the independent auditors, as the basis for a decision to reappoint or replace the independent auditors;
- Set clear hiring policies for employees or former employees of the independent auditors, including but not limited to, as required by all applicable laws and listing rules; and
- Assure regular rotation of the lead audit partner, as required by the Act, and consider whether rotation of the independent auditor is required to ensure independence.

Oversight of Internal Audit

Oversee the internal audit coverage and related matters, beginning when adoption of an internal audit function is required by the listing exchange and/or Securities Exchange Commission, or at such time as the Audit Committee deems it advisable to adopt such function. In connection with its oversight responsibilities, the Committee shall have authority over and direct responsibility for the internal audit function at the Company. In the Committee's discretion, the internal audit function may be outsourced to a third party vendor, provided that such vendor follows the standards and guidelines established by the Committee. The head of the internal audit function (or the third party vendor providing internal audit function support, if applicable) will report directly to the Audit Committee or its designee. The head of the internal audit function or the relationship manager of the vendor providing internal audit function support, as applicable, shall report at least annually to the Committee regarding the internal audit function's organizational structure and personnel. In overseeing internal audit, the Committee will:

- Review the appointment or replacement of the senior internal auditing executive or, if outsourced, the third party vendor providing internal audit services;
- Review, in consultation with management, the independent auditors and the senior internal auditing executive, the plan and scope of internal audit activities;
- Review internal audit activities, budget and staffing; and
- Review significant reports to management prepared by the internal auditing department and management's responses to such reports.

Review of Internal Controls

Review with management, the independent auditors and the senior internal auditing executive the adequacy of the Company's internal controls, and any significant findings and recommendations with respect to such controls.

Risk Assessment and Risk Management

The Committee shall discuss the Company's major business, operational, and financial risk exposures and the guidelines, policies and practices regarding risk assessment and risk management, including derivative policies, insurance programs and steps management has taken to monitor and control major business, operational and financial risks.

Resolve Differences

The Committee will resolve any differences in financial reporting between management and the independent auditors.

Code of Conduct

The Committee shall establish, maintain and oversee the Company's Code of Business Conduct and Ethics including dealing with issues that may arise under the Code of Business Conduct and Ethics related to executive officers and directors of the Company.

Conflicts of Interest

The Committee shall establish, maintain and oversee the Company's Related Party Transaction Policy, including overseeing the process for approval of all related-party transactions involving executive officers and directors.

Submission of Complaints

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

Access to Records and Personnel

The Committee shall have full access to any relevant records of the Company that it deems necessary to carry out its responsibilities. The Committee may request that any officer or other employee of the Company or any advisor to the Company meet with members of the Committee or its advisors, as it deems necessary to carry out its responsibilities.

Executive Sessions

The Committee will meet periodically (not less than annually) in separate executive session with each of the chief financial officer or any other executive officer, the senior internal auditing executive (or any other personnel responsible for the internal audit function), and the independent auditors.

Regulatory Compliance Matters

The Committee shall be responsible for recommending, based upon the Committee's review and discussions with management and the independent registered public accounting firm, whether the Company's audited financial statements shall be included in its Annual Report on Form 10-K and for preparing the audit committee report required by the rules of the SEC to be included in the Company's annual proxy statement;

Legal Compliance

Review periodically including in conjunction with the annual audit with the Company's General Counsel (a) other legal and regulatory matters which may have a material effect on the Company and/or its financial statements, and (b) corporate compliance policies or codes of conduct.

Regulatory Developments

The Committee shall monitor and provide reports to the Board with respect to developments in accounting rules and practices, income tax laws and regulations, and other regulatory requirements that affect matters within the scope of the Committee's authority and responsibilities.

Funding

The Company shall provide appropriate funding, as determined by the Committee, for payment of compensation to the independent auditors or any other registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company; to any other advisors engaged by the Committee; and of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

Independent Advisors

The Committee shall have authority to engage, determine funding and cause the Company to pay the compensation to obtain advice and assistance from outside legal, accounting or other advisors to carry out its responsibilities.

Reports to Board of Directors

The Committee shall report regularly to the Board with respect to Committee activities, and its conclusions with respect to the independent auditor, with recommendations to the Board as the Committee deems appropriate.

Audit Committee Report

The Committee shall prepare the report of the Committee required by the rules of the SEC to be included in the proxy statement for each annual meeting.

Review of This Charter

The Committee shall review and reassess annually the adequacy of this Committee Charter and recommend any proposed changes to the Board.

Evaluation of Committee

The Committee is responsible for developing and conducting an annual self-assessment of its performance. The Committee shall report to the full Board on the results of its assessment each year and shall make any appropriate recommendations to further enhance the Committee's performance.

Other Responsibilities

The Committee shall perform such other duties as may be required by law or requested by the Board or deemed appropriate by the Committee. The Committee shall discharge its responsibilities, and shall assess the information provided to the Committee, in accordance with its business judgment. The Committee shall have the authority to conduct or authorize investigations into any matters within the scope of its responsibilities as it shall deem appropriate.