

**Genocea Biosciences, Inc.**  
**Compensation Committee Charter**

**PURPOSE**

The Compensation Committee (the “*Committee*”) shall assist, and shall carry out the responsibilities delegated by, the Board of Directors (the “*Board*”) of Genocea Biosciences, Inc., a Delaware corporation (the “*Company*”), relating to the oversight, review and determination of the compensation of the Company's executive officers and other employees and the Company's cash- and equity-based compensation programs.

**ORGANIZATION**

***Membership***

The Committee shall at all times consist of at least two directors, including a Chairman, all appointed by the Board, with the Chairman and each member to serve until his or her successor is duly appointed, or until his or her earlier death, resignation or removal by the Board. Each member of the Committee shall be independent in accordance with the provisions of Rule 10C-1(b)(1) under the Securities Exchange Act of 1934, as amended (the “*Exchange Act*”), and the applicable rules of the NASDAQ Global Select Market (“*NASDAQ*”). In addition, each member of the Committee shall qualify as an “outside director” within the meaning of Section 162(m) of the Internal Revenue Code of 1986, as amended, and as a “non-employee director” within the meaning of Rule 16b-3 under the Exchange Act.

***Actions/Meetings***

- Action may be taken by the Committee upon the affirmative vote of a majority of the members;
- Any two members or the Chairman of the Committee may call a meeting of the Committee upon due notice to each other member in the manner specified in Section 2.4 of the Amended and Restated By-Laws of the Company;
- Action may be taken by the Committee without a meeting if all of the members of the Committee indicate their approval thereof in writing;
- The Committee may invite such members of management and advisors to its meetings as it deems appropriate, except that such members of management shall not be present at meetings when their compensation or performance is discussed or determined; Committee meetings may be held in person or telephonically; and
- The Committee shall keep written minutes of its meetings and submit such minutes to the Board.

## **AUTHORITY AND RESPONSIBILITIES**

### ***Overall Objective***

Through the various responsibilities discussed below the Committee shall be responsible for establishing and reviewing the Company's overall management compensation philosophy and policy, including base salary and cash- and equity-based incentive compensation, to assure that the Company provides appropriate rewards and incentives for the Company's management and employees.

### ***Chief Executive Officer Evaluation and Compensation***

The Committee shall annually review and recommend to the Board for the Board's approval the corporate goals and objectives applicable to the compensation for the Company's Chief Executive Officer ("CEO"). The Committee shall evaluate at least once a year the CEO's performance in light of these established goals and objectives. The Committee shall, independently as a Committee or together with the other independent directors (to the extent directed by the Board), annually review, determine and recommend to the Board for the Board's approval the compensation of the CEO based on the evaluation of his or her performance in light of such pre-established goals and objectives, including, but not limited to, his or her base salary, bonus and incentive compensation levels; deferred compensation; executive perquisites; equity-based compensation; severance arrangements; and change-in-control benefits. The CEO shall not be present during the Committee's deliberations on the compensation of the CEO.

### ***Compensation of Other Executive Officers***

The Committee shall annually review, determine and approve the compensation for the Company's executive officers other than the CEO, including specific approval of each such executive officer's base salary, bonus and incentive compensation levels; deferred compensation; executive perquisites; equity-based compensation; severance arrangements; and change-in-control benefits.

### ***Employment or Removal of Executive Officers***

The hiring or termination of employment of any executive officer of the Company is subject to review and approval by the Committee.

### ***Compensation Plans***

The Committee shall review and make recommendations to the Board regarding the adoption of new cash- and equity-based incentive compensation plans, and shall administer and make grants under the Company's existing cash- and equity-based incentive compensation plans. To the extent permitted by applicable law and stock exchange rules, and the provisions of the applicable plan, the Committee may delegate to one or more of the CEO, the Chief Financial Officer or the executives of the Company who are vice president-level or above and report directly to the CEO (collectively, the "Executives") the authority to grant cash- or equity-based awards and to amend the terms of outstanding awards, in each case, to employees of the Company other than the Executives. The scope of any such delegation shall be set forth in the applicable resolutions adopted by the Committee.

### ***Director Compensation***

The Committee shall [at least annually] review, evaluate and make recommendations to the Board with respect to appropriate forms and amounts of cash- and equity-based compensation for non-employee directors of the Company.

### ***Annual Evaluation of Risks of Compensation Policies and Practices***

At least annually, the Committee shall review the Company's compensation policies and practices with respect to the Company's employees, including its executive and non-executive officers, to determine whether they encourage excessive risk-taking; review and discuss the relationship between the Company's risk management policies and practices and its compensation policies and practices; and evaluate compensation policies and practices that could mitigate any such risk.

### ***Access to Records and Personnel***

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

### ***Retention of Advisors***

The Committee may, in its sole discretion, retain or obtain the advice of a compensation consultant, legal counsel or other advisor. Prior to selecting, or receiving advice from any such compensation consultant, legal counsel or other advisor, the Committee shall take into account, and consider the independence of such counsel or advisor based on, the factors described in NASDAQ Listing Rule 5605(d)(3); provided, however, that the Committee shall not be required to conduct such analysis with respect to an advisor that acts in a role limited to (a) consulting on any broad-based plan that does not discriminate in scope, terms or operation in favor of executive officers or members of the Board, and that is generally available to all salaried employees, and/or (b) providing information that either is not customized for the Company or that is customized based on parameters that are not developed by the advisor, and about which the advisor does not provide advice. The Committee shall be directly responsible for the appointment, compensation and oversight of the work of, and shall provide for appropriate funding for the payment of reasonable compensation to, any compensation consultant, legal counsel or other adviser retained by the Committee. The Committee shall have the right to terminate such consultant, legal counsel or other adviser, in its sole discretion.

### ***Reports to Board of Directors***

The Committee shall report periodically to the Board regarding Committee matters and/or the meetings of the Committee with such recommendations to the Board as the Committee deems appropriate.

### ***Annual Review of this Charter***

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

### ***Committee Performance Evaluation***

The Committee shall evaluate its performance on an annual basis and develop criteria for such evaluation. 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.

### ***Report on Executive Compensation and other Regulatory Compliance Matters***

The Committee shall be responsible for the production of compensation committee report on executive compensation as required by the Securities and Exchange Commission to be included in the Company's annual proxy statement and/or annual report on Form 10-K, and the production of the compensation committee report on executive compensation required to be included in the Company's annual proxy statement and/or annual report on Form 10-K.

### ***Delegation***

The Committee shall have the authority to delegate to subcommittees of the Committee any of the responsibilities of the full Committee and to officers of the Company such responsibilities of the full Committee as may be permitted by applicable laws, rules or regulations and in accordance with the listing standards set forth by NASDAQ.

### ***Other Responsibilities***

The Committee shall take such other action with respect to compensation matters as may be delegated from time to time by the Board. 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.