CHARTER OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS OF RXI PHARMACEUTICALS CORPORATION

Purpose

The purpose of the Compensation Committee (the "Committee") of the Board of Directors (the "Board") of RXi Pharmaceuticals Corporation (the "Company" or "RXi") is to oversee the compensation of the Company's executive officers and the Company's compensation policies and practices. The Committee shall provide the necessary information for the annual compensation committee report for inclusion in the Company's annual proxy statement.

Membership

The Committee shall consist of at least two directors of the Board. All members shall satisfy the independence requirements as defined by the NASDAQ Stock Market LLC ("NASDAQ") and of any applicable laws and regulations. Each member of the Committee shall qualify as an "outside director" as defined by Section 162(m) of the Internal Revenue Code and shall be a "non-employee director" within the meaning of Rule 16b-3 of the Securities Exchange Act of 1934. A subsequent determination that any member of the Committee does not qualify as a "non-employee director" or an "outside director" will not invalidate any previous actions by the Committee except to the extent required by law or determined appropriate to satisfy regulatory standards.

Committee members shall be appointed by the Board. Committee members serve at the discretion of the Board, for such terms as they determine, and may be removed at any time. One member of the Committee will be designated by the Board as Chairman and shall preside over meetings of the Committee and report regularly to the Board. The compensation of Compensation Committee members shall be determined by the Board.

Meetings

The Committee shall meet, either in person or telephonically, as often as it deems necessary in order to perform its responsibilities. Action may be taken by the Committee without a meeting if all of the members of the Committee indicate their approval in writing. The Committee shall have the authority to delegate to subcommittees of the Committee any of the responsibilities of the full Committee. The Committee shall report regularly to the Board.

Authority and Responsibilities

The Compensation Committee shall discharge its responsibilities and shall assess the information provided by the Company's management, in accordance with its business judgment.

The Committee shall assist the Board in fulfilling its oversight responsibilities by accomplishing the following:

1. The Committee shall oversee the Company's overall compensation philosophy, policies and programs, and assess whether the Company's compensation philosophy establishes appropriate incentives for management and employees.

- 2. The Committee shall assess the results of the Company's most recent advisory vote on executive compensation.
- 3. The Committee shall review and approve the compensation of the Company's Chief Executive Officer (the "CEO") and the Company's other executive officers, including salary, bonus and incentive compensation levels; equity compensation; severance arrangements; change-in-control benefits and any special supplemental compensation and/or benefits. The CEO may not be present during voting or deliberations on his or her compensation.
- 4. The Committee, at least annually, shall review and approve the corporate goals and objectives relevant to the CEO's and the executive officers' compensation, evaluate the performance of the CEO and executive officers in light of those goals and objectives and determine the compensation-related action of the CEO and the executive officers based on this evaluation.
- 5. The Committee shall periodically review and make recommendations to the Board regarding the Company's incentive compensation and equity-based plans that are subject to approval by the Board and administer the Company's incentive compensation plans and equity-based plans, including reviewing and approving stock option grants.
- 6. Approve, and amend or modify, the terms of other compensation and benefit plans as appropriate.
- 7. To the extent permitted by applicable law and the provisions of an equity-based plan, the Committee may delegate to one or more executive officers of the Company the power to grant options or other stock awards, pursuant to such equity-based plan, to employees of the Company or any subsidiary of the Company who are not directors or executive officers of the Company.
- 8. The Committee shall make recommendations to the Board regarding the compensation of members of the Board and Board committees.
- 9. The Committee shall review and discuss with management the Company's "Compensation Discussion and Analysis" ("CD&A") and related disclosures required to be included in some of the Company's filings with the Securities and Exchange Commission and, based on such review and discussion, whether it will recommend to the Board that the CD&A be included in the Company's annual report on Form 10-K or proxy statement.
- 10. The Committee shall prepare certain reports for inclusion in the Company's annual report and proxy statement as required by the rules of the SEC.
- 11. The Committee shall oversee the assessment of the risks related to the Company's compensation policies and programs applicable to officers and employees and report to the Board on the results of this assessment.
- 12. The Committee shall have authority to adopt, amend or terminate compensation plans applicable to any class of employees of the Company; provided that no adoption, amendment or termination of any compensation plan, under which stock may be issued or in which a member of the Board may be a participant, shall be effective unless the same shall be approved by the Board and, to the extent required by law or the Rules of NASDAQ, by the stockholders; provided, further, that no adoption, amendment or termination of any compensation plan may be made that violates this or any other committee charter of the Company.

Other Responsibilities

- 1. The Committee shall review, as appropriate, the adequacy of this Charter and recommend any proposed changes to the Board for approval.
- 2. The Committee shall perform an evaluation of the performance of the Committee and report the results of such evaluation to the Board on a periodic basis.
- 3. The Committee shall maintain minutes of meetings and report regularly to the Board.
- 4. The Committee is authorized, without further action by the Board, to engage such independent legal and other advisors as it deems necessary or appropriate to carry out its responsibilities. Such independent advisors may be the regular advisors to the Company. The Committee is empowered, without further action by the Board, to cause the Company to pay the compensation of such advisors as established by the Committee. The Committee will assess the independence of consultants, outside counsel and other advisors (whether retained by the Committee, the Board or management) that provide advice to the Committee, prior to selecting or receiving advice from them, in accordance with NASDAQ listing standards.
- 5. The Committee shall, at least annually, assess whether the work of compensation consultants involved in determining or recommending executive or director compensation has raised any conflict of interest that is required to be disclosed in the Company's annual report and proxy statement.
- 6. The Committee may perform any other activities consistent with the Company's Charter and By-laws and governing law as the Board of Directors or the Committee shall deem appropriate.

Adopted: November 7, 2012

Amended and Restated: February 1, 2017