

ALNYLAM PHARMACEUTICALS, INC.

RESTATED CODE OF BUSINESS CONDUCT AND ETHICS

This Code of Business Conduct and Ethics (the “Code”) sets forth legal and ethical standards of conduct for employees, officers and directors of Alnylam Pharmaceuticals, Inc., a Delaware corporation (the “Company”). This Code is intended to deter wrongdoing and to promote the conduct of all Company business in accordance with high standards of integrity and in compliance with all applicable laws and regulations. This Code applies to the Company, all of its subsidiaries and all other business entities that it controls worldwide.

If you have any questions regarding this Code or its application to you in any situation, you should contact your supervisor or the Company’s General Counsel.

Compliance with Laws, Rules and Regulations

The Company requires that all employees, officers and directors comply with all laws, rules and regulations applicable to the Company wherever it does business. You are expected to use good judgment and common sense in seeking to comply with all applicable laws, rules and regulations and to ask for advice when you are uncertain about them.

If you become aware of the violation of any law, rule or regulation by the Company, whether by its officers, employees or directors, or any third party doing business on behalf of the Company, it is your responsibility to promptly report the matter to your supervisor or to the Company’s General Counsel. While it is the Company’s desire to address matters internally, nothing in this Code should discourage you from reporting any illegal activity, including any violation of the securities laws, antitrust laws, environmental laws or any other federal, state or foreign law, rule or regulation, to the appropriate regulatory authority. Employees, officers and directors shall not discharge, demote, suspend, threaten, harass or in any other manner discriminate or retaliate against an employee because he or she reports any such violation, unless it is determined that the report was made with knowledge that it was false. This Code should not be construed to prohibit you from testifying, participating or otherwise assisting in any state or federal administrative, judicial or legislative proceeding or investigation.

Conflicts of Interest

Employees, officers and directors must act in the best interests of the Company. You must refrain from engaging in any activity or having a personal interest that presents a “conflict of interest.” A conflict of interest occurs when your personal interest interferes, or appears to interfere, with the interests of the Company. A conflict of interest can arise whenever you, as an officer, director or employee, take action or have an interest that prevents you from performing your Company duties and responsibilities honestly, objectively and effectively.

For example:

- No employee, officer or director shall perform services as a consultant, employee, officer, director, advisor or in any other capacity for, or have a financial interest in, a

direct competitor of the Company, other than services performed at the request of the Company and other than a financial interest representing less than one percent (1%) of the outstanding shares of a publicly held company; and

- No employee, officer or director shall use his or her position with the Company to influence a transaction with a supplier or customer in which such person has any personal interest, other than a financial interest representing less than one percent (1%) of the outstanding shares of a publicly held company.

It is your responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest to the Company's General Counsel or, if you are an executive officer or director, to the Board of Directors of the Company (the "Board"), who shall be responsible for determining whether such transaction or relationship constitutes a conflict of interest.

Insider Trading

Employees, officers and directors who have material non-public information about the Company or other companies, including our suppliers and customers, as a result of their relationship with the Company are prohibited by law and Company policy from trading in securities of the Company or such other companies, as well as from communicating such information to others who might trade on the basis of that information. To help ensure that you do not engage in prohibited insider trading and avoid even the appearance of an improper transaction, the Company has adopted an Insider Trading Policy, a copy of which has been provided to you and which is available in the HR Community section of Nebula (the Company's intranet).

If you are uncertain about the constraints on your purchase, sale, pledge or donation of any Company securities or the securities of any other company that you are familiar with by virtue of your relationship with the Company, you should consult with the Company's General Counsel before making any such purchase, sale, pledge or donation.

Confidentiality

Employees, officers and directors must maintain the confidentiality of confidential information entrusted to them by the Company or other companies, including our suppliers and customers, except when disclosure is authorized by a supervisor or legally mandated. Unauthorized disclosure of any confidential information is prohibited. Additionally, employees should take appropriate precautions to ensure that confidential or sensitive business information, whether it is proprietary to the Company or another company, is not communicated within the Company except to employees who have a need to know such information to perform their responsibilities for the Company.

Third parties may ask you for information concerning the Company. Subject to the exceptions noted in the preceding paragraph, employees, officers and directors (other than the Company's authorized spokespersons) must not discuss internal Company matters with, or disseminate internal Company information to, anyone outside the Company, except as required

in the performance of their Company duties and, if appropriate, after a confidentiality agreement is in place. This prohibition applies particularly to inquiries concerning the Company from the media, market professionals (such as securities analysts, institutional investors, investment advisers, brokers and dealers) and security holders. All responses to inquiries on behalf of the Company must be made only by the Company's authorized spokespersons. If you receive any inquiries of this nature, you must decline to comment and refer the inquirer to one of the Company's authorized spokespersons. The Company's policies with respect to public disclosure of internal matters are described more fully in the Company's Disclosure Policy, which is available in the HR Community section of Nebula (the Company's intranet).

You also must abide by any lawful obligations that you have to your former employer. These obligations may include restrictions on the use and disclosure of confidential information, restrictions on the solicitation of former colleagues to work at the Company and non-competition obligations.

Honest and Ethical Conduct and Fair Dealing

Employees, officers and directors should endeavor to deal honestly, ethically and fairly with the Company's suppliers, customers, competitors and employees. Statements regarding the Company's products and services must not be untrue, misleading, deceptive or fraudulent. You must not take unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material facts or any other unfair-dealing practice.

Protection and Proper Use of Corporate Assets

Employees, officers and directors should seek to protect the Company's assets. Theft, carelessness and waste have a direct impact on the Company's financial performance. Employees, officers and directors must use the Company's assets and services solely for legitimate business purposes of the Company and not for any personal benefit or the personal benefit of anyone else.

Employees, officers and directors must advance the Company's legitimate interests when the opportunity to do so arises. You must not take for yourself personal opportunities that are discovered through your position with the Company or the use of property or information of the Company.

Gifts and Gratuities

The use of Company funds or assets for gifts, gratuities or other favors to employees or government officials is prohibited, except to the extent such gifts are in compliance with applicable law, insignificant in amount and not given in consideration or expectation of any action by the recipient.

Employees, officers and directors must not accept, or permit any member of his or her immediate family to accept, any gifts, gratuities or other favors from any customer, supplier or other person doing or seeking to do business with the Company, other than items of insignificant value. Any gifts that are not of insignificant value should be returned immediately and reported to your supervisor. If immediate return is not practical, they should be given to the Company for

charitable disposition or such other disposition as the Company, in its sole discretion, believes appropriate.

Common sense and moderation should prevail in business entertainment engaged in on behalf of the Company. Employees, officers and directors should provide, or accept, business entertainment to or from anyone doing business with the Company only if the entertainment is infrequent, modest and intended to serve legitimate business goals.

Bribes and kickbacks are criminal acts, strictly prohibited by law. You must not offer, give, solicit or receive any form of bribe or kickback anywhere in the world.

Accuracy of Books and Records and Public Reports

Employees, officers and directors must honestly and accurately report all business transactions. You are responsible for the accuracy of your records and reports. Accurate information is essential to the Company's ability to meet legal and regulatory obligations.

All Company books, records and accounts shall be maintained in accordance with all applicable regulations and standards and accurately reflect the true nature of the transactions they record. The financial statements of the Company shall conform to generally accepted accounting rules and the Company's accounting policies. No undisclosed or unrecorded account or fund shall be established for any purpose. No false or misleading entries shall be made in the Company's books or records for any reason, and no disbursement of corporate funds or other corporate property shall be made without adequate supporting documentation.

It is the policy of the Company to provide full, fair, accurate, timely and understandable disclosure in all public filings and communications.

Concerns Regarding Accounting or Auditing Matters

Employees with concerns regarding questionable accounting or auditing matters or complaints regarding accounting, internal accounting controls or auditing matters may confidentially, and anonymously if they wish, submit such concerns by using the toll-free telephone number that has been specifically established by the Company and is operated by a third party for this purpose (referred to as the "Employee Hotline"). The toll-free telephone number of the Employee Hotline is posted at the Company's corporate offices and in the HR Community section of Nebula (the Company's intranet), along with other announcements by the Company to its employees. Each such concern and complaint will be forwarded to the Chairman of the Audit Committee of the Board of Directors.

The Chairman of the Audit Committee of the Board of Directors will evaluate the merits of any concerns or complaints received and determine and authorize such follow-up actions, if any, as he or she deems necessary or appropriate to address the substance of the concern or complaint.

The Company will not discipline, discriminate against or retaliate against any employee who reports a complaint or concern, unless it is determined that the report was made with knowledge that it was false.

Dealings with Independent Auditors

No employee, officer or director shall, directly or indirectly, make or cause to be made a materially false or misleading statement to an accountant in connection with (or omit to state, or cause another person to omit to state, any material fact necessary in order to make statements made, in light of the circumstances under which such statements were made, not misleading to, an accountant in connection with) any audit, review or examination of the Company's financial statements or the preparation or filing of any document or report with the SEC. No employee, officer or director shall, directly or indirectly, take any action to coerce, manipulate, mislead or fraudulently influence any independent public or certified public accountant engaged in the performance of an audit or review of the Company's financial statements.

Waivers of this Code of Business Conduct and Ethics

While some of the policies contained in this Code must be strictly adhered to and no exceptions can be allowed, in other cases exceptions may be appropriate. Any employee or officer who believes that a waiver of any of these policies is appropriate in his or her case should first contact his or her immediate supervisor. If the supervisor agrees that a waiver is appropriate, the approval of the Company's General Counsel must be obtained. The Company's General Counsel shall be responsible for maintaining a record of all requests by employees or officers for waivers of any of these policies and the disposition of such requests.

Any executive officer or director who seeks a waiver of any of these policies should contact the Chief Executive Officer. Any waiver of this Code for executive officers or directors or any change to this Code that applies to executive officers or directors may be made only by the Board and will be disclosed as required by law or, if applicable, stock exchange regulation.

Reporting and Compliance Procedures

Every employee, officer and director has the responsibility to ask questions, seek guidance, report suspected violations and express concerns regarding compliance with this Code. Any employee, officer or director who knows or believes that any other employee or representative of the Company has engaged or is engaging in Company-related conduct that violates applicable law or this Code should report such information to his or her supervisor or to the Company's General Counsel, or contact the Employee Hotline, as described below. You may report such conduct openly or anonymously without fear of retaliation. The Company will not discipline, discriminate against or retaliate against any employee who reports such conduct, unless it is determined that the report was made with knowledge that it was false, or who cooperates in any investigation or inquiry regarding such conduct. Any supervisor who receives a report of a violation of this Code must immediately inform the Company's General Counsel.

You may report violations of this Code confidentially, and anonymously if you wish, by using the toll-free telephone number that has been specifically established by the Company and is operated by a third party for this purpose, referred to as the Employee Hotline. The toll-free telephone number for the Employee Hotline is posted at the Company's corporate offices and in the HR Community section of Nebula (the Company's intranet). You may also report violations of this Code, on a confidential or anonymous basis, by contacting the Company's General

Counsel by mail, fax or e-mail at: Alnylam Pharmaceuticals, Inc., 300 Third Street, Cambridge, Massachusetts 02142, telephone: (617) 551-8200, facsimile: (617) 575-7337. While we prefer that you identify yourself when reporting violations so that we may follow up with you, as necessary, for additional information, any violation reported anonymously will remain anonymous, regardless of the method you use to report it.

If the Company's General Counsel receives information regarding an alleged violation of this Code, he or she shall, as appropriate, (a) evaluate such information, (b) if the alleged violation involves an executive officer or a director, inform the Chief Executive Officer and Board of the alleged violation, (c) determine whether it is necessary to conduct an informal inquiry or a formal investigation and, if so, initiate such inquiry or investigation and (d) report the results of any such inquiry or investigation, together with a recommendation as to disposition of the matter, to the Chief Executive Officer for action, or if the alleged violation involves an executive officer or a director, report the results of any such inquiry or investigation to the Board or a committee thereof. Employees, officers and directors are expected to cooperate fully with any inquiry or investigation by the Company regarding an alleged violation of this Code. Failure to cooperate with any such inquiry or investigation may result in disciplinary action, up to and including discharge.

The Company shall determine whether violations of this Code have occurred and, if so, shall determine the disciplinary measures to be taken against any employee who has violated this Code. In the event that the alleged violation involves an executive officer or a director, the Chief Executive Officer and the Board, respectively, shall determine whether a violation of this Code has occurred and, if so, shall determine the disciplinary measures to be taken against such executive officer or director. A description of the resolution or other disposition of each concern or complaint received by the Employee Hotline will be submitted by the Company to the third party operating the Employee Hotline to enable an employee who has submitted a concern or complaint to learn of such resolution or disposition.

Failure to comply with the standards outlined in this Code will result in disciplinary action including, but not limited to, reprimands, warnings, probation or suspension without pay, demotions, reductions in salary, discharge and restitution. Certain violations of this Code may require the Company to refer the matter to the appropriate governmental or regulatory authorities for investigation or prosecution. Moreover, any supervisor who directs or approves of any conduct in violation of this Code, or who has knowledge of such conduct and does not immediately report it, also will be subject to disciplinary action, up to and including discharge.

Dissemination and Amendment

This Code shall be distributed to each new employee, officer and director of the Company upon commencement of his or her employment or other relationship with the Company and shall also be distributed annually to each employee, officer and director of the Company. Upon initial distribution, each employee, officer and director shall certify in writing that he or she has received, read and understood the Code and will comply with its terms.

The Company reserves the right to amend, alter or terminate this Code at any time for any reason. The most current version of this Code can be found in the HR Community section of Nebula (the Company's intranet).

This document is not an employment contract between the Company and any of its employees, officers or directors.

* * *

Adopted by the Board on April 1, 2011

Certification

I, _____ do hereby certify that:
(Print Name Above)

1. I have received and carefully read the Code of Business Conduct and Ethics of Alnylam Pharmaceuticals, Inc.
2. I understand the Code of Business Conduct and Ethics.
3. I will comply with the terms of the Code of Business Conduct and Ethics.

Date: _____
_____ (Signature)

EACH EMPLOYEE, OFFICER AND DIRECTOR IS REQUIRED TO SIGN, DATE AND RETURN THIS CERTIFICATION TO THE HUMAN RESOURCES DEPARTMENT WITHIN TEN (10) DAYS OF ISSUANCE. FAILURE TO DO SO MAY RESULT IN DISCIPLINARY ACTION.