

COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, SS

SUPERIOR COURT DEPARTMENT

BUSINESS LITIGATION SESSION

\_\_\_\_\_ )  
 TEKmira PHARMACEUTICALS )  
 CORPORATION and PROTIVA )  
 BIOTHERAPEUTICS, INC., )  
 )  
 Plaintiffs, )  
 )  
 v. )  
 )  
 ALNYLAM PHARMACEUTICALS, INC., )  
 )  
 Defendant. )  
 \_\_\_\_\_ )

Civil Action No.

**VERIFIED COMPLAINT**

Plaintiffs Tekmira Pharmaceuticals Corp. (“TPC”) and its wholly-owned subsidiary Protiva Biotherapeutics, Inc. (“Protiva”) (collectively, “Tekmira”) allege as follows against defendant Alnylam Pharmaceuticals, Inc. (“Alnylam”):

**NATURE OF ACTION**

1. This is an action for preliminary and permanent injunctive relief, an equitable accounting, a constructive trust, damages, and other relief arising out of Alnylam’s misappropriation of Tekmira’s confidential and proprietary information and trade secrets, unfair and deceptive trade practices, unjust enrichment, unfair competition, and false advertising, all in violation of Massachusetts law.

**PARTIES**

2. TPC is a corporation duly organized and existing under the laws of British Columbia, Canada, and has its principal place of business in Burnaby, British Columbia.

3. Protiva is a corporation duly organized and existing under the laws of British Columbia, Canada, and has its principal place of business in Burnaby, British Columbia.

4. Tekmira is informed and believes, and thereupon alleges, that Alnylam is a corporation organized and existing under the laws of the State of Delaware, and has its principal place of business in Cambridge, Massachusetts.

### **JURISDICTION AND VENUE**

5. The Court has subject matter jurisdiction pursuant to M.G.L. ch. 212, §3, because the amount in controversy exceeds \$25,000.

6. The Court has general and specific personal jurisdiction over Alnylam pursuant to M.G.L. ch. 223A, §3, due to its residence in Massachusetts.

7. Venue is proper in the Business Litigation Session, Suffolk County, because this case involves claims concerning unfair trade practices, confidential and proprietary information, trade secrets, and intellectual property.

### **BACKGROUND**

#### **siRNA Technology**

8. Ribonucleic acid (RNA) is one of the three major macromolecules (along with DNA and proteins) that are essential for life. Messenger RNA (or “mRNA”) is a type of RNA molecule that carries genetic information from DNA to produce proteins. mRNA is the intermediary for the production of proteins within the body, and each specific mRNA directs the production of a specific protein.

9. Another type of RNA molecule called small interfering RNA (“siRNA”) does not lead to the production of proteins, but instead interferes with the production of proteins. siRNA does so by binding itself to a particular mRNA molecule, which leads to

the destruction of the mRNA. Through this targeted destruction of particular mRNA molecules, the siRNA interferes with the production of the protein that would otherwise have been produced by the mRNA molecule.

10. The process of siRNA targeting mRNA molecules occurs naturally and plays an important role in regulating the production of proteins in the body, and in protecting against infectious diseases. For example, some viruses use RNA as their genetic material. siRNA molecules can bind themselves to RNA viruses and target them for destruction, and in so doing disrupt the course of viral infections.

11. Scientists have researched ways to use siRNA to combat diseases, such as by attempting to create specially-tailored siRNA drugs to “turn off” the production of proteins associated with diseases or viruses. This requires not only identifying, designing, and modifying siRNA sequences for use in the drug, but also developing a delivery system to deliver the siRNA molecule safely and efficiently through the blood stream to its intended destination in the body. Although scientists have had success developing siRNA molecules to use in these types of drugs, it has been far more difficult to figure out how to deliver siRNA molecules to their target site efficiently and safely through the blood stream.

12. Delivering siRNA through the blood stream poses several complex challenges. First, the siRNA has to survive transport to disease sites without degradation. Second, the siRNA must be sufficiently shielded from components of the immune system during transport to avoid unwanted immune effects. Third, the siRNA must actually reach its intended target within the body. Fourth, once the siRNA reaches its intended target, it must be efficiently released into the interior of the cells of the target tissue.

Adding to the challenge, all of the above must occur at an appropriate rate and level to achieve the best therapeutic outcome.

**Tekmira Pioneered the Development of siRNA Delivery Technology**

13. Tekmira has been a leader in overcoming these challenges and in developing siRNA delivery systems. Tekmira's delivery technology has proven effective in reducing the levels of bad cholesterol in the blood stream, combating the Ebola virus, inhibiting tumor growth, and treating hepatitis virus infection. Tekmira is informed and believes, and thereupon alleges, that to this day its delivery technology is the only technology that has been validated in multiple human clinical trials as being effective for delivery of siRNA through the blood stream.

14. Tekmira's delivery technology uses complex mixtures of novel lipids (or fat molecules), solvents, additives, and other components to transport siRNA through the blood stream. Tekmira has experimented with several hundred of these mixtures, also known as "formulations," to make them both safe and effective. Tekmira has spent more than 500 person-years of effort and over \$200 million developing proprietary and confidential novel lipids and formulations, as well as proprietary techniques for large-scale manufacturing of its formulations. The knowledge and information gained by Tekmira through its years of formulation and manufacturing work are all part of Tekmira's siRNA delivery technology.

15. Tekmira's delivery technology includes confidential and proprietary information and trade secrets that Tekmira owns and has continuously used in its business. Tekmira restricts access to such information and has taken reasonable efforts under the circumstances to maintain its secrecy, including but not limited to restricting access to the information and requiring employees and collaborators to sign non-

disclosure agreements. Tekmira's confidential and proprietary information and trade secrets derive value from not being generally known to the public or to others who can obtain value from their disclosure or use. Tekmira expended considerable sums of money and time developing its confidential and proprietary information and trade secrets.

**Alnylam Engaged in an Unlawful Scheme to Gain Access to, Exploit,  
And Claim Ownership Interests in Tekmira's Technology**

16. Alnylam was one of Tekmira's collaborators. Alnylam began collaborating with TPC and Protiva before they merged in March 2008, and continued collaborating with Tekmira after the merger. In the course of the collaboration relationships, Tekmira made a number of disclosures of its delivery technology to Alnylam. Tekmira did so under the protection of written agreements that restricted Alnylam's right to use Tekmira's confidential information and trade secrets and that strictly prohibited Alnylam from disclosing such information to third parties without first obtaining Tekmira's consent. Tekmira did not grant Alnylam ownership of its delivery technology; the delivery technology remained Tekmira's property before, during, and after Tekmira's collaboration with Alnylam.

17. In a carefully orchestrated series of wrongful acts, Alnylam took advantage of its confidential relationship as a collaborator to gain access to and exploit for its own benefit some of Tekmira's most valuable and highly confidential technology, for purposes and activities that were not authorized by Tekmira. Alnylam abused its confidential status again and again, improperly using Tekmira's technology to derive additional formulations for Alnylam's own benefit. Those purported Alnylam formulations actually contain, are based on, and/or are in whole or in part developed from Tekmira's technology.

18. Alnylam also improperly used Tekmira's proprietary delivery technology to apply for Alnylam patents, and disclosed Tekmira's trade secrets and confidential and proprietary information in public patent applications, claiming as its own the very technology that it stole. Tekmira is informed and believes, and thereupon alleges that, to this day, Alnylam is continuing to prosecute patent filings and is using technology that contains, is based on, or is in whole or in part derived from Tekmira's technology. Alnylam took these actions without Tekmira's authorization or consent.

19. Alnylam improperly disclosed Tekmira's proprietary technology to at least one third party without Tekmira's consent in connection with a business deal. Tekmira is informed and believes, and thereupon alleges, that in doing so, Alnylam either wrongfully claimed Tekmira's technology as its own, or falsely represented that it was authorized to disclose Tekmira's technology to the third party.

20. Tekmira is informed and believes, and thereupon alleges, that Alnylam is improperly using the technology that it stole from Tekmira to compete unfairly against it. Based on information it has received, Tekmira believes and alleges that Alnylam is claiming to the industry as a whole, and to specific current and potential pharmaceutical partners, including at least Novartis and Sanofi-Aventis, that Alnylam has developed novel siRNA delivery formulations and lipids that can be obtained from Alnylam instead of Tekmira. Tekmira is informed and believes, and thereupon alleges, that these purported Alnylam formulations and lipids are actually based on, and in whole or in part developed from Tekmira's technology, that they do not belong to Alnylam, and that Alnylam has no right to use them or to offer them to current or potential industry partners.

21. Alnylam also disseminated advertisements to the public containing untrue, deceptive, and/or misleading representations, claiming to own technology that actually belongs to Tekmira, and that contains, is based on, or is in whole or in part developed from Tekmira's technology. For example, on February 17, 2011, Alnylam issued a press release representing that it owns lipid formulations called "MC3." Tekmira is informed and believes, and thereupon alleges, that in fact, Alnylam stole MC3 from Tekmira. Alnylam disseminated this information even though it knew, or might on reasonable investigation have ascertained, that it did not own MC3.

22. Tekmira is informed and believes, and thereupon alleges, that Alnylam disseminated this information to create public demand for that delivery technology and to gain for itself the value the market places on effective delivery technology.

23. Tekmira is informed and believes, and thereupon alleges, that Alnylam's dissemination of this information and its other wrongful conduct injured and continues to injure Tekmira's position in the market for delivery technology.

24. Tekmira is informed and believes, and thereupon alleges, that Alnylam engaged and continues to engage in at least the following wrongful conduct without Tekmira's authorization or consent:

- Alnylam improperly used Tekmira's "Lead Formulation," which Alnylam used for its first VSP product, to develop derivative formulations for its own benefit.
- Alnylam applied for patents in which it wrongfully claimed to own and improperly disclosed Tekmira's Lead Formulation and the wrongfully-derived derivatives, including without limitation in provisional patent applications 61/242,783 and 61/148,366, and PCT patent applications US2009/036223 and US2009/061381.

- Alnylam improperly used and disclosed other Tekmira formulations to develop derivative formulations, including but not limited to Tekmira’s MC3 formulation.
- Alnylam applied for patents in which it wrongfully claimed to own and improperly disclosed Tekmira’s formulations and the wrongfully-derived derivatives such as MC3, including without limitation in provisional patent applications 61/154,350, 61/171,439, 61/185,438, and PCT patent applications US2009/063927, US2009/063931, and US2009/063933.
- Alnylam improperly disclosed portions of Tekmira’s secret step-by-step formulation manufacturing instructions to at least one of its third party collaborators.
- Alnylam improperly used and disclosed in patent filings certain highly confidential Tekmira information that Alnylam had obtained confidentially for use in its regulatory filings.
- Alnylam is falsely representing to current and potential industry partners that it invented, developed, and owns formulation technology that it stole from Tekmira.

### **COUNT ONE**

#### **Common Law Misappropriation of Confidential and Proprietary Information**

25. Tekmira realleges and incorporates by reference paragraphs 1 to 24 above.
26. Tekmira owns confidential and proprietary information in its delivery technology.
27. Alnylam knew or should have known that it gained access to and learned Tekmira’s confidential and proprietary information in confidence, and was under a duty not to use or disclose such information without Tekmira’s authorization and consent.

28. Alnylam misappropriated Tekmira's confidential and proprietary information by using and disclosing it, and by continuing to use and disclose it, without Tekmira's consent or authorization under the parties' collaboration agreements or otherwise.

29. By reason of its wrongful conduct, Alnylam misappropriated Tekmira's confidential and proprietary information in violation of the common law.

30. Alnylam's misappropriation was and is a substantial factor in directly and proximately causing damages and irreparable harm to Tekmira, and unjust enrichment of Alnylam.

31. Tekmira is informed and believes, and thereupon alleges, that Alnylam acted willfully and maliciously.

## **COUNT TWO**

### **Misappropriation of Trade Secrets in Violation of M.G.L. ch. 93, § 42**

32. Tekmira realleges and incorporates by reference paragraphs 1 to 31 above.

33. Tekmira's delivery technology includes information that constitutes a trade secret under Massachusetts law.

34. Alnylam knew or should have known that it gained access to and learned Tekmira's trade secrets in confidence, and was under a duty not to use or disclose Tekmira's trade secrets without Tekmira's authorization and consent.

35. Alnylam misappropriated Tekmira's trade secrets by improperly using and disclosing them, and by continuing improperly to use and disclose them, without Tekmira's consent or authorization under the parties' collaboration agreements or otherwise.

36. Tekmira is informed and believes, and thereupon alleges, that Alnylam intended and intends to convert Tekmira's trade secrets to its own use.

37. By reason of its wrongful conduct, Alnylam misappropriated Tekmira's trade secrets in violation of M.G.L. ch. 93, § 42.

38. Alnylam's misappropriation was and is a substantial factor in directly and proximately causing damages and irreparable harm to Tekmira, and unjust enrichment of Alnylam.

39. Tekmira is informed and believes, and thereupon alleges, that Alnylam acted willfully and maliciously.

### **COUNT THREE**

#### **Unjust Enrichment**

40. Tekmira realleges and incorporates by reference paragraphs 1 to 39 above.

41. Tekmira conferred a benefit on Alnylam by providing Tekmira's valuable technology to Alnylam in connection with the parties' collaboration relationships.

42. Alnylam accepted and retained Tekmira's valuable technology, and used the technology to its own advantage, at Tekmira's expense. Alnylam appreciates or knows what benefits it is deriving from Tekmira's technology.

43. Alnylam has been unjustly enriched as a direct and proximate result of its unlawful use and disclosure of Tekmira technology, and it would be inequitable for Alnylam to retain those benefits under the circumstances without payment for their value.

### **COUNT FOUR**

#### **Common Law Unfair Competition**

44. Tekmira realleges and incorporates by reference paragraphs 1 to 43 above.

45. Alnylam has represented and continues to represent to the public that it developed and owns technology that it improperly derived from Tekmira technology without Tekmira's authorization or consent.

46. In so doing, Alnylam is passing off Tekmira technology as Alnylam technology in violation of the common law.

47. Tekmira is informed and believes, and thereupon alleges, that Alnylam's wrongful passing off of Tekmira's technology as its own has caused and will cause consumer confusion, and has been a substantial factor in directly and proximately causing damages and irreparable harm to Tekmira.

#### **COUNT FIVE**

##### **False Advertising in Violation of M.G.L. ch. 266, § 91**

48. Tekmira realleges and incorporates by reference paragraphs 1 to 47 above.

49. By reason of its wrongful conduct, including but not limited to promoting and advertising Tekmira's technology as its own, Alnylam violated M.G.L. ch. 266, § 91.

50. Alnylam's wrongful conduct was a substantial factor in directly and proximately causing damages and irreparable harm to Tekmira, and Tekmira will continue to be harmed so long as Alnylam's wrongful conduct continues.

#### **COUNT SIX**

##### **Unfair and Deceptive Acts and Practices in Violation of M.G.L. ch. 93A**

51. Tekmira realleges and incorporates by reference paragraphs 1 to 50 above.

52. Alnylam engaged in trade or commerce with Tekmira through its collaboration relationships with TPC, Protiva, and the merged entity Tekmira.

53. Alnylam's wrongful acts as alleged herein constitute unfair and deceptive acts and practices in violation of M.G.L. ch. 93A.

54. Alnylam's unfair and deceptive acts occurred primarily and substantially in Massachusetts.

55. Alnylam's unfair and deceptive acts were a substantial factor in directly and proximately causing loss of money and/or property, and irreparable harm, to Tekmira.

56. Tekmira is informed and believes, and thereupon alleges, that Alnylam acted willfully and knowingly.

#### **PRAYER FOR RELIEF**

**WHEREFORE**, Tekmira prays that the Court grant the following relief:

- A. Judgment in Tekmira's favor on each count;
- B. Compensatory damages;
- C. Exemplary and enhanced damages;
- D. An award directing Alnylam to disgorge to Tekmira all monies and/or profits derived from the wrongful conduct alleged herein;
- E. An award to Tekmira of the amount by which Alnylam has been unjustly enriched;
- F. Reasonable royalties for Alnylam's improper use of Tekmira's technology;
- G. A preliminary and permanent injunction enjoining and restraining Alnylam, and its officers, directors, agents, servants, employees, attorneys, and all others acting under, by, or through them, directly or indirectly, from improperly possessing, obtaining, transferring, using, or disclosing any Tekmira confidential and proprietary

information or trade secrets, including any Alnylam material, products, or technology that wrongfully contain, are based on, and/or are derived in whole or in part from any of Tekmira's confidential and proprietary information or trade secrets;

H. A preliminary and permanent injunction enjoining and restraining Alnylam, and its officers, directors, agents, servants, employees, attorneys, and all others acting under, by or through them, directly or indirectly, from making, publishing, disseminating, circulating, or placing before the public statements in which Alnylam claims ownership of siRNA delivery technology that wrongfully contains, is based on, and/or is derived in whole or in part from any Tekmira confidential and proprietary information and/or trade secrets;

I. An accounting of any monetary or other benefits received by Alnylam as a result of its wrongful conduct;

J. A constructive trust over all information, patent applications, patents, technology, products, and other materials in the possession, custody, or control of Alnylam that wrongfully constitute, contain, were based on, and/or derived in whole or in part from the use of Tekmira's confidential and proprietary information and/or trade secrets, and an order that Alnylam immediately transfer to Tekmira all right, title, and interest in such information, patent applications, patents, materials, technology, and products;

K. Prejudgment interest according to proof;

L. Reasonable attorneys' fees and costs of suit; and

M. Such other relief that the Court deems just and proper.

**TEKMIRA DEMANDS A JURY TRIAL**

Dated: March 16, 2011

TEKMIRA PHARMACEUTICALS CORP. and  
PROTIVA BIOTHERAPEUTICS, INC.

By their attorneys,

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**VERIFICATION**

I, Mark J. Murray, Ph.D., have read the foregoing Verified Complaint and certify that the facts alleged therein are true and based on personal knowledge and my review of the books and records of Tekmira Pharmaceuticals Corporation, except as otherwise stated herein, and with respect to those statements, they are based upon information and belief, and I believe them to be true.

Signed under the pains and penalties of perjury this 16th day of March, 2011

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Mark J. Murray, Ph.D.  
President and Chief Executive Officer of  
Tekmira Pharmaceuticals Corp. and  
Protiva Biotherapeutics, Inc.