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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2012

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

COMMISSION FILE NUMBER: 001-34949

TEKMIRA PHARMACEUTICALS CORPORATION
(Exact name of Registrant as specified in its charter)

British Columbia
(Jurisdiction of incorporation or organization)

100—8900 Glenlyon Parkway
Burnaby, British Columbia, Canada, V5J 5J8
(Address of principal executive offices)

Mark J. Murray
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Telephone: +1 604 419 3200
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(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to section 12(b) of the Act:

Title of each Class	Name of each exchange on which registered
Common Shares, without par value	**NASDAQ Capital Market**

Securities registered or to be registered pursuant to Section 12(g) of the Act:

N/A
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

N/A
(Title of Class)

The number of outstanding shares of each of the issuer's classes of capital or common stock as of December 31, 2012 was 14,305,356 common shares.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

If this report is an annual or a transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☒ International Financial Reporting Standards as issued by the International Accounting Standards Board ☐ Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the *Exchange Act*). Yes ☐ No ☒

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GENERAL INTRODUCTION AND USE OF CERTAIN TERMS

In this Annual Report, references to:

- "AlCana" means AlCana Technologies, Inc.;
- "Alnylam" means Alnylam Pharmaceuticals, Inc.;
- "Aradigm" means Aradigm Corporation;
- "Company" means Tekmira Pharmaceuticals Corporation, a British Columbia company;
- "DoD" or "U.S. DoD" means the United States Government's Department of Defense;
- "Halo-Bio" means Halo-Bio RNAi Therapeutics, Inc.;
- "Marina" means Marina Biotech, Inc.;
- "Protiva" means Protiva Biotherapeutics Inc., a British Columbia company and a wholly-owned subsidiary of Tekmira;
- "Roche" means , collectively, Hoffman-La Roche Ltd and Hoffman La-Roche Inc.;
- "Talon" means Talon Therapeutics, Inc. (formerly Hana Biosciences, Inc.);
- "TMT" means Transformational Medical Technologies Program of the U.S. Government; and,
- "We", "us", "our", and "Tekmira" means, unless the context requires otherwise, Tekmira together with Protiva.

We use the Canadian dollar as our reporting currency. All references in this document to "dollars" or "$" are to Canadian dollars unless otherwise indicated.

Except as noted, the information set forth in this Annual Report is as of December 31, 2012 and, except as noted, all information included in this document should only be considered correct as of such date.

FORWARD LOOKING STATEMENTS

This Annual Report contains "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws (collectively, "forward-looking statements"). Forward-looking statements are generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "budgets," "could," "estimates," "expects," "forecasts," "projects" and similar expressions, and the negative of such expressions. Forward-looking statements in this Annual Report include statements about Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi (ribonucleic acid interference) product development programs; the quantum and timing of Tekmira's expected payments related to the settlement agreement and new licensing agreement with Alnylam; statements about Tekmira's cash runway extending into 2015 and estimated cash and cash equivalents at the end of 2013; Tekmira's plans to advance multiple products into human clinical trials; expected timing of initiation of Phase 2 clinical trials for TKM-PLK1; the development of other product candidates in Tekmira's pipeline, including the expected timing for the nomination of Tekmira's next product candidate; anticipated royalty payments based on sales of Marqibo; the modification request to the existing TKM-Ebola contract with the DoD to integrate recent advancements in LNP formulation and manufacturing technology, including anticipated effects on the value of the contract; expected timing of the completion and submission of the LNP formulation work to the FDA and the initiation of a new Phase 1 clinical trial for TKM-Ebola; the quantum and timing of funding that may be provided to Tekmira pursuant to the TKM-Ebola contract with the DoD; the quantum and timing of future milestone royalty payments expected from the ALN-TTR02, ALN-VSP, ALN-PCS and other LNP-enabled product development programs of Alnylam; the timing of an ALN-TTR02 pivotal or Phase 3 clinical trial; the timing and initiation of ALN-VSP clinical trials in China; milestones and royalty payments from Alnylam's LNP-enabled products; Tekmira's expectations of entering into a separate cross license agreement with AlCana, which includes anticipated milestone and royalty payments and an expected agreement for AlCana not to compete in the RNAi field for five years; statements about Tekmira's Unlocked Nucleobase Analog (UNA) license with Marina, as well as milestone and royalty payments thereon; statements with respect to revenue and expense fluctuation and guidance; licenses for the discovery, development and commercialization of RNAi products directed to thirteen gene targets; expected royalty payments from commercial sales of Tekmira's product development partners; and Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi (ribonucleic acid interference) product development programs; estimates of the number of clinical development programs to be undertaken by Tekmira and its product development partners; selection of additional product candidates; timing of release of clinical data; the effects of Tekmira's products on the treatment of cancer, infectious disease, and other diseases; statements and details of the TKM-PLK1 and TKM-Ebola Phase 1 human clinical trials; the quantum and timing of potential funding; use of lipid nanoparticle technology by Tekmira's licensees; Tekmira's expectations with respect to existing and future agreements with third parties; and estimates of the length of time Tekmira's business will be funded by its anticipated financial resources.

With respect to the forward-looking statements contained in this Annual Report, Tekmira has made numerous assumptions regarding, among other things: LNP's status as a leading RNAi delivery technology; the effectiveness of

Tekmira's products as a treatment for cancer, infectious disease, or other diseases; the developmental milestones and approvals required to trigger funding for TKM-Ebola from the TMT program; results in preclinical models are indicative of the potential effect in humans; Tekmira's research and development capabilities and resources; FDA approval with respect to commencing clinical trials; the timing and obtaining of regulatory approvals for Tekmira's products; the timing and results of clinical data releases and use of LNP technology by Tekmira's development partners and licensees; the time required to complete research and product development activities; the timing and quantum of payments to be received under contracts with Tekmira's partners including Alnylam, Talon, the DoD, and others; Tekmira's financial position and its ability to execute on its business strategy; and Tekmira's ability to protect its intellectual property rights and not to infringe on the intellectual property rights of others. While Tekmira considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Additionally, there are known and unknown risk factors which could cause Tekmira's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, but are not limited to, the risks and uncertainties discussed below in Item 3D. *Risk Factors*. Additional risks and uncertainties not currently known to us or that we currently believe to be immaterial may also materially adversely affect our business, financial condition, and/or operating results.

Additional discussion of the risks and uncertainties facing Tekmira appear in Tekmira's public filings available at www.sedar.com or at www.sec.gov/edgar.shtml. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

PART I

ITEM 1 IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not applicable.

ITEM 2 OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3 KEY INFORMATION

3A. Selected Financial Data

The following table presents selected financial data derived from Tekmira's audited consolidated financial statements for the fiscal years ended December 31, 2012, 2011, 2010, 2009, and 2008. You should read this information in conjunction with our financial statements for the periods presented, as well as Item 4 "*Information on the Company*" and Item 5 "*Operating and Financial Review and Prospects*" included elsewhere in this Annual Report.

Summary Financial Information
Under U.S. GAAP [1] (in thousands of Canadian dollars, except per share amounts)

	Year Ended December 31,				
	2012	2011	2010	2009	2008
	$	$	$	$	$
Operating Data					
Revenue	14,107	16,647	21,355	14,428	11,732
Expenses	27,032	27,187	33,870	22,905	40,716
(Loss) from operations	(12,925)	(10,540)	(12,515)	(8,477)	(28,984)
Net and comprehensive income (loss)	29,793	(9,937)	(12,415)	(8,749)	(29,920)
Weighted average number of common shares—basic[2]	13,728	11,319	10,333	10,325	8,116
Weighted average number of common shares—diluted[2]	14,374	11,319	10,333	10,325	8,116
Income (Loss) per common share—basic	2.17	(0.88)	(1.20)	(0.85)	(3.69)
Income (Loss) per common share—diluted	2.08	(0.88)	(1.20)	(0.85)	(3.69)
Balance Sheet Data					
Total current assets	50,983	11,794	17,909	25,958	33,261
Total assets	52,328	13,991	21,022	29,279	35,871
Total liabilities	11,617	8,676	10,290	6,816	4,933
Share capital	238,245	233,501	229,492	229,427	229,412
Total stockholders' equity	40,711	5,315	10,733	22,463	30,938
Number of shares outstanding[2]	14,305	12,149	10,339	10,329	10,325

Notes:

(1) The balance sheet data at December 31, 2012, 2011, 2010 and 2009 is derived from financial statements prepared under U.S. GAAP. The balance sheet data at December 31, 2008 is derived from financial statements prepared under Canadian GAAP and then reconciled to U.S. GAAP. The financial information presented in this 20-F has been prepared in accordance with generally accepted accounting principles of the United States of America, or U.S. GAAP. Historically we prepared our consolidated financial statements in conformity with Canadian generally accepted accounting principles. The Canadian Securities Administrators' National Instrument 52-107, Acceptable Accounting Principles, Auditing Standards and Reporting Currency, permits Canadian public companies who are also U.S. Securities and Exchange Commission (SEC) registrants the option of preparing their financial statements under U.S. GAAP. Based on a number of our peers and collaborators reporting under U.S. GAAP, we concluded that U.S. GAAP is more relevant to the users of our financial statements. Therefore, effective December 31, 2010, we adopted U.S. GAAP as the reporting standard for our consolidated financial statements. All comparative financial information contained in our December 31, 2012 consolidated financial statements and in this Annual Report has been presented as if we had historically reported in accordance with U.S. GAAP.

(2) On November 4, 2010, Tekmira completed a consolidation of its common shares whereby five old common shares of Tekmira were exchanged for one new common share of Tekmira. Except as otherwise indicated, all references to common shares, common shares outstanding, average number of common shares outstanding, per share amounts and options in this document have been restated to reflect the common shares consolidation on a retroactive basis.

We have never declared or paid any cash dividends.

Exchange Rate

The closing exchange rate between the Canadian dollar and the U.S. dollar was CDN$1.0164 per US$1.00 (or US$0.9839 per CDN$1.00) using the Bank of Canada exchange rate on March 26, 2013.

The average exchange rates for the financial periods of Tekmira listed above (based on the average exchange rate for each period using the average of the closing exchange rates on the last day of each month during the period in accordance with the exchange rates provided by the Bank of Canada) are as follows:

	Year Ended December 31,				
	2012	2011	2010	2009	2008
Period end	$0.9949	$1.0170	$0.9946	$1.0466	$1.2246
Average	$0.9990	$0.9891	$1.0304	$1.1374	$1.0716
High	$1.0443	$1.0549	$1.0745	$1.3000	$1.2970
Low	$0.9719	$0.9428	$0.9360	$1.0292	$0.9719

The high and low exchange rates between the Canadian dollar and the U.S. dollar for the past six months (provided by the Bank of Canada) are as follows:

	Exchange rate CDN$ per US$1.00	
Month	High	Low
March 1, 2013 through March 26, 2012	$1.0343	$1.0162
February 2013	$1.0314	$0.9952
January 2013	$1.0101	$0.9815
December 2012	$0.9972	$0.9825
November 2012	$1.0057	$0.9906
October 2012	$1.0014	$0.9735
September 2012	$0.9919	$0.9642

3B. Capitalization and Indebtedness

Not applicable.

3C. Reasons for the Offer and Use of Proceeds

Not applicable.

3D. Risk Factors

Risks Related to Our Business

An investment in our common shares is highly speculative and involves a high degree of risk. We may face a variety of risks that may affect our operations or financial results, and many of those risks are driven by factors that we cannot control or predict. Before investing in our common shares, investors should carefully consider the following risks. If any of the following risks actually occurs, our business, prospects, financial condition and results of operations could be materially adversely affected. In that case, investors may lose all or a part of their investment. You should not consider an investment in our common shares unless you are capable of sustaining an economic loss of the entire investment.

Risks Related to Being an Early Stage Company

We are in the early stages of our development and because we have a short development history with ribonucleic acid interference (RNAi), there is a limited amount of information about us upon which you can evaluate our RNAi business and prospects.

We have not begun to market or generate revenues from the commercialization of any RNAi products. We have only a limited history upon which one can evaluate our RNAi business and prospects as our RNAi therapeutic products are still at an early stage of development and thus we have limited experience and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical area. For example, to execute our business plan, we will need to successfully:

- execute product development activities using an unproven technology;
- build, maintain and protect a strong intellectual property portfolio;
- gain acceptance for the development and commercialization of any product we develop;
- develop and maintain successful strategic relationships; and
- manage our spending and cash requirements as our expenses are expected to increase due to research and preclinical work, clinical trials, regulatory approvals, and commercialization and maintaining our intellectual property portfolio.

If we are unsuccessful in accomplishing these objectives, we may not be able to develop products, raise capital, expand our business or continue our operations.

The approach we are taking to discover and develop novel drug products is unproven and may never lead to marketable drug products.

We intend to concentrate our internal research and development efforts in the future on RNAi technology, and our future success depends in part on the successful development of RNAi technology and products based on RNAi technology. While RNAi technology is based on a naturally occurring process that takes place inside cells, which can suppress the production of specific proteins, and has the potential to generate therapeutic drugs that take advantage of that process, neither we nor any other company has received regulatory approval to market a therapeutic product based on RNAi technology. The scientific discoveries that form the basis for our efforts to discover and develop new products are relatively new. While there are a number of RNAi therapeutics in development, very few product candidates based on these discoveries have ever been tested in humans and there can be no assurance that any RNAi therapeutic product will be approved for commercial use.

Further, our focus solely on RNAi technology for developing products, as opposed to multiple, more proven technologies for product development, increases our risks. If we are not successful in developing a product candidate using RNAi technology, we may be required to change the scope and direction of our product development activities. In that case, we may not be able to identify and implement successfully an alternative product development strategy.

Risks Related to Our Financial Results and Need for Financing

We will require substantial additional capital to fund our operations. If additional capital is not available, we may need to delay, limit or eliminate our research, development and commercialization processes and may need to undertake a restructuring.

At December 31, 2012 we had $46.8 million in cash and cash equivalents. We believe that our current funds on hand, plus funds expected to be received from current pharmaceutical partners and the U.S. Government will be sufficient to continue our product development into 2015. Within the next several years, substantial additional funds will be required to continue with the active development of our pipeline products and technologies. In particular, our funding needs may vary depending on a number of factors including:

- revenues earned from our partners, including Alnylam and Talon;
- revenues earned from our U.S. Government contract to develop TKM-Ebola;
- the extent to which we continue the development of our product candidates or form collaborative relationships to advance our products;
- our decisions to in-license or acquire additional products or technology for development, in particular for our RNAi therapeutics programs;
- our ability to attract and retain corporate partners, and their effectiveness in carrying out the development and ultimate commercialization of our product candidates;
- whether batches of drugs that we manufacture fail to meet specifications resulting in delays and investigational and remanufacturing costs;
- the decisions, and the timing of decisions, made by health regulatory agencies regarding our technology and products;
- competing technological and market developments; and
- prosecuting and enforcing our patent claims and other intellectual property rights.

We will seek to obtain funding to maintain and advance our business from a variety of sources including public or private equity or debt financing, collaborative arrangements with pharmaceutical and biotechnology companies and government grants and contracts. There can be no assurance that funding will be available at all or on acceptable terms to permit further development of our products especially in light of the current difficult climate for investment in early stage biotechnology companies.

If adequate funding is not available, we may be required to delay, reduce or eliminate one or more of our research or development programs or reduce expenses associated with non-core activities. We may need to obtain funds through arrangements with collaborators or others that may require us to relinquish most or all of our rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise seek if we were better funded. Insufficient financing may also mean failing to prosecute our patents or relinquishing rights to some of our technologies that we would otherwise develop or commercialize.

We have incurred losses in nearly every year since our inception and we anticipate that we will not achieve sustained profits for the foreseeable future. To date, we have had no product revenues.

With the exception of the year ended December 31, 2006 and December 31, 2012, we have incurred losses each fiscal year since inception until December 31, 2012 and have not received any revenues other than from research and development

collaborations, license fees and milestone payments. From inception to December 31, 2012, we have an accumulated net deficit of $229.1 million. As we continue our research and development and clinical trials and seek regulatory approval for the sale of our product candidates, we do not expect to attain sustained profitability for the foreseeable future. We do not expect to achieve sustained profits until such time as strategic alliance payments, product sales and royalty payments, if any, generate sufficient revenues to fund our continuing operations. We cannot predict if we will ever achieve profitability and, if we do, we may not be able to remain consistently profitable or increase our profitability.

Risks Related to Our Dependence on Third Parties

We expect to depend on our existing and new collaborators for a significant portion of our revenues and to develop, conduct clinical trials with, obtain regulatory approvals for, and manufacture, market and sell some of our product candidates. If these collaborations are unsuccessful, our business could be adversely affected.

We expect that we will depend in part on Alnylam, Talon and the DoD to provide revenue to fund our operations, especially in the near term. Alnylam, Talon and the DoD represented 7%, 7% and 82%, respectively, of our operating revenue for the year ended December 31, 2012. Furthermore, our strategy is to enter into various additional arrangements with corporate and academic collaborators, licensors, licensees and others for the research, development, clinical testing, manufacturing, marketing and commercialization of our products. We may be unable to continue to establish such collaborations, and any collaborative arrangements we do establish may be unsuccessful.

Should any collaborative partner fail to develop or ultimately successfully commercialize any of the products to which it has obtained rights, our business may be adversely affected. In addition, once initiated, there can be no assurance that any of these collaborations will be continued or result in successfully commercialized products. Failure of a collaborative partner to continue funding any particular program could delay or halt the development or commercialization of any products arising out of such program. In addition, there can be no assurance that the collaborative partners will not pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by our programs.

We expect the DoD to fund our TKM-Ebola program through to completion of a Phase 1 human safety clinical trial and possibly beyond that to FDA drug approval. The quantum and timing of funding may not be what we have projected and the DoD could cancel this funding at any time.

The contract we signed with the DoD on July 14, 2010 is for funding of up to US$34.7 million for our TKM-Ebola program through to the completion of a Phase 1 human safety clinical trial and certain manufacturing objectives. The DoD may later extend the contract to cover the entire TKM-Ebola program through to FDA drug approval. Tekmira has submitted a modification request to the existing contract to the DoD in order to integrate recent advancements in LNP formulation and manufacturing technology in the TKM-Ebola development program. There is a risk that we may not complete the work necessary for the submission of the new LNP formulation for TKM-Ebola to the FDA in the anticipate timeframe, or at all or the FDA may require additional work to be completed in order to implement a new LNP formulation in the TKM-Ebola program.

This is our first DoD contract of any notable size. Our lack of experience in dealing with the DoD brings uncertainty into our cash flow projections and uncertainty into our ability to execute the contract within DoD requirements. Furthermore, there is inherent risk in projecting cash flows years ahead for such a complex program. The quantum and timing of funding for the TKM-Ebola program may not be what we have projected and under the terms of the contract or the proposed modification to the contract and the DoD could cancel or suspend this funding, which is paid through monthly reimbursements, at any time.

We rely on third parties to conduct our clinical trials, and if they fail to fulfill their obligations, our development plans may be adversely affected.

We rely on independent clinical investigators, contract research organizations and other third-party service providers to assist us in managing, monitoring and otherwise carrying out our clinical trials. We have contracted with, and we plan to continue to contract with, certain third parties to provide certain services, including site selection, enrolment, monitoring and data management services. Although we depend heavily on these parties, we do not control them and therefore, we cannot be assured that these third parties will adequately perform all of their contractual obligations to us. If our third-party service providers cannot adequately fulfill their obligations to us on a timely and satisfactory basis or if the quality or accuracy of our clinical trial data is compromised due to failure to adhere to our protocols or regulatory requirements, or if such third parties otherwise fail to meet deadlines, our development plans may be delayed or terminated.

We have no sales, marketing or distribution experience and would have to invest significant financial and management resources to establish these capabilities.

We have no sales, marketing or distribution experience. We currently expect to rely heavily on third parties to launch and market certain of our products, if approved. However, if we elect to develop internal sales, distribution and marketing capabilities, we will need to invest significant financial and management resources. For products where we decide to perform sales, marketing and distribution functions ourselves, we could face a number of additional risks, including:

- we may not be able to attract and build a significant marketing or sales force;

- the cost of establishing a marketing or sales force may not be justifiable in light of the revenues generated by any particular product; and
- our direct sales and marketing efforts may not be successful.

If we are unable to develop our own sales, marketing and distribution capabilities, we will not be able to successfully commercialize our products, if approved, without reliance on third parties.

We will rely on third-party manufacturers to manufacture our products (if approved) in commercial quantities, which could delay, prevent or increase the costs associated with the future commercialization of our products.

Our product candidates have not yet been manufactured for commercial use. If any of our product candidates become approved for commercial sale, in order to supply our or our collaborators' commercial requirements for such an approved product, we will need to establish third-party manufacturing capacity. Any third-party manufacturing partner may be required to fund capital improvements to support the scale-up of manufacturing and related activities. The third-party manufacturer may not be able to establish scaled manufacturing capacity for an approved product in a timely or economic manner, if at all. If a manufacturer is unable to provide commercial quantities of such an approved product, we will have to successfully transfer manufacturing technology to a new manufacturer. Engaging a new manufacturer for such an approved product could require us to conduct comparative studies or utilize other means to determine bioequivalence of the new and prior manufacturers' products, which could delay or prevent our ability to commercialize such an approved product. If any of these manufacturers is unable or unwilling to increase its manufacturing capacity or if we are unable to establish alternative arrangements on a timely basis or on acceptable terms, the development and commercialization of such an approved product may be delayed or there may be a shortage in supply. Any inability to manufacture our products in sufficient quantities when needed would seriously harm our business.

Manufacturers of our approved products, if any, must comply with current good manufacturing practices (cGMP) requirements enforced by the FDA and Health Canada through facilities inspection programs. These requirements include quality control, quality assurance, and the maintenance of records and documentation. Manufacturers of our approved products, if any, may be unable to comply with these cGMP requirements and with other FDA, Health Canada, state, and foreign regulatory requirements. We have little control over our manufacturers' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any quantities supplied is compromised due to our manufacturer's failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products, which would seriously harm our business.

Risks Related to Managing Our Operations

We are dependent on certain members of our management and scientific staff. The loss of services of one or more of these staff members could adversely affect us.

We depend upon our senior executive officers as well as key scientific, management and other personnel. The competition for qualified personnel in the biotechnology field is intense. We rely heavily on our ability to attract and retain qualified managerial, scientific and technical personnel. While we currently have employment contracts with our key personnel and are not aware that any are planning to leave or retire, we may not be able to successfully attract and retain skilled and experienced personnel in the future. In particular, we rely on our President and Chief Executive Officer, Mark J. Murray, Ph.D., and our Executive Vice President and Chief Scientific Officer, Ian MacLachlan, Ph.D. Dr. Murray has over 20 years of experience in both the R&D and business development and management facets of the biotechnology industry and Dr. MacLachlan has been active in molecular therapeutics for more than a decade. If we were to lose either of their services, our ability to develop our technology, add to our pipeline, advance our product candidates and manage our operations and relationships with third parties would be adversely affected.

We may have difficulty managing our growth and expanding our operations successfully as we seek to evolve from a company primarily involved in discovery and preclinical testing into one that develops products through clinical development and commercialization.

As product candidates we develop enter and advance through clinical trials, we will need to expand our development, regulatory, manufacturing, clinical and medical capabilities or contract with other organizations to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various collaborators, suppliers and other organizations. Our ability to manage our operations and growth will require us to continue to improve our operational, financial and management controls, reporting systems and procedures. We may not be able to implement improvements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems or controls.

We could face liability from our controlled use of hazardous and radioactive materials in our research and development processes.

We use certain radioactive materials, biological materials and chemicals, including organic solvents, acids and gases stored under pressure, in our research and development activities. Our use of radioactive materials is regulated by the

Canadian Nuclear Safety Commission for the possession, transfer, import, export, use, storage, handling and disposal of radioactive materials. Our use of biological materials and chemicals, including the use, manufacture, storage, handling and disposal of such materials and certain waste products is regulated by a number of federal, provincial and local laws and regulations. Although we believe that our safety procedures for handling such materials comply with the standards prescribed by such laws and regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our resources. We are not specifically insured with respect to this liability.

Our business and operations could suffer in the event of information technology system failures.

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures. Such events could cause interruption of our operations. For example, the loss of pre-clinical trial data or data from completed or ongoing clinical trials for our product candidates could result in delays in our regulatory filings and development efforts and significantly increase our costs. To the extent that any disruption or security breach were to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could be delayed.

Our independent auditors have not assessed our internal control over financial reporting. If our internal control over financial reporting is not effective, it could have a material adverse effect on our stock price and our ability to raise capital.

As disclosed in Item 15 of this annual report, our management has evaluated, and provided a report with respect to, the effectiveness of our internal control over financial reporting as of December 31, 2012. However, because we are a “non-accelerated filer” within the meaning of Rule 12b-2 under the Securities Exchange Act of 1934, our independent auditors are not required to assess our internal control over financial reporting or to provide a report thereon. Although our management has determined that our internal control over financial reporting was effective as of the evaluation date, there can be no assurance that our independent auditors would agree with our management’s conclusion. Furthermore, if our market capitalization, excluding affiliated stockholders, at June 30 of any fiscal year is greater than US$75 million, then we will be required to obtain independent auditor certification on the adequacy of our internal control over financial reporting for that fiscal year. If our internal control over financial reporting is determined in the future to not be effective, whether by our management or by our independent auditors, there could be an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements, which could materially adversely affect our stock price and our ability to raise capital necessary to operate our business. In addition, we may be required to incur costs in improving our internal control system and hiring additional personnel.

Risks Related to Development, Clinical Testing and Regulatory Approval of Our Product Candidates

The manufacture and sale of human therapeutic products are governed by a variety of statutes and regulations. There can be no assurance that our product candidates will obtain regulatory approval.

To obtain marketing approval, U.S. and Canadian laws require:

- controlled research and human clinical testing;
- establishment of the safety and efficacy of the product for each use sought;
- government review and approval of a submission containing manufacturing, pre-clinical and clinical data;
- adherence to Good Manufacturing Practice Regulations during production and storage; and
- control of marketing activities, including advertising and labelling.

The product candidates we currently have under development will require significant development, pre-clinical and clinical testing and investment of significant funds before their commercialization. Some of our product candidates, if approved, will require the completion of post-market studies. There can be no assurance that such products will be developed. The process of completing clinical testing and obtaining required approvals is likely to take a number of years and require the use of substantial resources. If we fail to obtain regulatory approvals, our operations will be adversely affected. Further, there can be no assurance that product candidates employing a new technology will be shown to be safe and effective in clinical trials or receive applicable regulatory approvals.

Other markets have regulations and restrictions similar to those in the U.S. and Canada. Investors should be aware of the risks, problems, delays, expenses and difficulties which we may encounter in view of the extensive regulatory environment which affects our business in any jurisdiction where we develop product candidates.

If testing of a particular product candidate does not yield successful results, then we will be unable to commercialize that product candidate.

We must demonstrate our product candidates’ safety and efficacy in humans through extensive clinical testing. Our research and development programs are at an early stage of development. We may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of any products, including the following:

- the results of pre-clinical studies may be inconclusive, or they may not be indicative of results that will be obtained in human clinical trials;
- safety and efficacy results attained in early human clinical trials may not be indicative of results that are obtained in later clinical trials;
- after reviewing test results, we or our collaborators may abandon projects that we might previously have believed to be promising;
- we, our collaborators or regulators, may suspend or terminate clinical trials because the participating subjects or patients are being exposed to unacceptable health risks; and
- our product candidates may not have the desired effects or may include undesirable side effects or other characteristics that preclude regulatory approval or limit their commercial use if approved.

Clinical testing is very expensive, can take many years, and the outcome is uncertain. The data collected from our clinical trials may not be sufficient to support approval of our product candidates by the regulatory authorities. The clinical trials of our product candidates may not be completed on schedule, and the regulatory authorities may not ultimately approve any of our product candidates for commercial sale. If we fail to adequately demonstrate the safety and efficacy of a product candidate, this would delay or prevent regulatory approval of the product candidate, which could prevent us from achieving profitability.

It may take us longer than we are currently projecting to complete our clinical trials, and we may not be able to complete them at all.

Although for planning purposes we project the commencement, continuation and completion of our clinical trials, a number of factors, including scheduling conflicts with participating clinicians and clinical institutions, and difficulties in identifying or enrolling patients who meet trial eligibility criteria, may cause significant delays. We may not commence or complete clinical trials involving any of our product candidates as projected or may not conduct them successfully.

We rely on academic institutions, hospitals, medical clinics and/or clinical research organizations to conduct, supervise or monitor some or all aspects of clinical trials involving our product candidates. We will have less control over the timing and other aspects of these clinical trials than if we conducted them entirely on our own. If we fail to commence or complete, or if we experience delays in, any of our planned clinical trials, our ability to conduct business as currently planned could be harmed.

Even if we achieve regulatory approval, future regulatory reviews or inspections may result in the suspension or withdrawal of one or more of our products, closure of a facility or enforcement of substantial fines.

If regulatory approval to sell any of our product candidates is received, regulatory agencies may, nevertheless, limit the categories of patients who can use them. In addition, regulatory agencies subject a marketed product, its manufacture and the manufacturers' facilities to continual review and periodic inspection. If previously unknown problems with a product or manufacturing and laboratory facility are discovered or we fail to comply with applicable regulatory approval requirements, a regulatory agency may impose restrictions on that product or on us. The agency may require the withdrawal of the product from the market, closure of the facility or enforcement of substantial fines.

Our ability to successfully commercialize human therapeutic products may depend in part on reimbursement for the cost of such products and related treatments from government health administration authorities, private health coverage insurers and other organizations.

Third-party payers are increasingly challenging the price of medical products and services. Significant uncertainty exists as to the reimbursement status of newly approved healthcare products, and adequate third-party coverage may not be available to establish price levels sufficient for us to realize an appropriate return on our investment in product development. When we partner our product candidates we will typically be relying on that partner to obtain cost reimbursement from third parties for the product candidate.

Product candidates we develop, if approved for marketing, may be slow to achieve market acceptance or gain market acceptance at all.

The product candidates that we are trying to develop will compete with a number of drugs and therapies currently on the market, as well as products currently under development. The rate and degree of market acceptance of our products will depend on a number of factors, including the establishment and demonstration in the medical community of the clinical efficacy and safety of our products and their potential advantage over alternative treatments. There is no assurance that physicians, patients or the medical community in general will accept and utilize any products that we may develop.

We face potential product liability exposure, and if successful claims are brought against us, we may incur substantial liability for a product candidate and may have to limit its commercialization.

The use of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval expose us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health-care providers, pharmaceutical companies, or others selling our products. If we cannot successfully defend ourselves against these claims, we will incur substantial liabilities. Regardless of merit or eventual outcome, product liability claims may result in:

- decreased demand for our product candidates;
- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs of related litigation;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- the inability to commercialize our product candidates.

Although we currently have product liability insurance coverage for our clinical trials for expenses or losses, our insurance coverage is limited to US$10 million per occurrence, and US$10 million in the aggregate, and may not reimburse us or may not be sufficient to reimburse us for any or all expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for our product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. On occasion, large judgments have been awarded in class action lawsuits based on products that had unanticipated side effects. A successful product liability claim or series of claims brought against us could cause our stock price to fall and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

The Animal Rule is a new and seldom-used approach to seeking approval of a new drug, and our TKM-Ebola program may not meet the requirements for this path to regulatory approval.

We plan to develop the TKM-Ebola therapeutic product candidate to treat Ebola virus using the “Animal Rule” regulatory mechanism. Pursuant to the Animal Rule, we must demonstrate efficacy in animal models and safety in humans. There is no guarantee that the FDA will agree to this approach for the development of TKM-Ebola, considering that no validated animal model has been established as predicting human outcomes in the prevention or treatment of the Ebola virus. The FDA may decide that our data are insufficient for approval and require additional pre-clinical, clinical, or other studies, or refuse to approve our products, or place restrictions on our ability to commercialize those products. Animal models represent, at best, a rough approximation of efficacy in humans, and, as such, countermeasures developed using animal models will be untested until their use in humans during an emergency.

Risks Related to Patents, Licenses and Trade Secrets

Other companies or organizations may assert patent rights that prevent us from developing or commercializing our products.

RNA interference is a relatively new scientific field that has generated many different patent applications from organizations and individuals seeking to obtain patents in the field. These applications claim many different methods, compositions and processes relating to the discovery, development and commercialization of RNAi therapeutic products. Because the field is so new, very few of these patent applications have been fully processed by government patent offices around the world, and there is a great deal of uncertainty about which patents will be issued, when, to whom, and with what claims. It is likely that there could be litigation and other proceedings, such as interference and opposition proceedings in various patent offices, relating to patent rights in the RNAi field.

In addition, there are many issued and pending patents that claim aspects of siRNA chemistry technology that we may need to apply to our product candidates. There are also many issued patents that claim genes or portions of genes that may be relevant for siRNA drug products we wish to develop. Thus, it is possible that one or more organizations will hold patent rights to which we will need a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we will not be able to market products or perform research and development or other activities covered by these patents.

Our patents and patent applications may be challenged and may be found to be invalid, which could adversely affect our business.

Certain Canadian, U.S. and international patents and patent applications we own involve complex legal and factual questions for which important legal principles are largely unresolved. For example, no consistent policy has emerged for the breadth of biotechnology patent claims that are granted by the U.S. Patent and Trademark Office or enforced by the U.S. federal courts. In addition, the coverage claimed in a patent application can be significantly reduced before a patent is issued. Also, we face the following intellectual property risks:

- some or all patent applications may not result in the issuance of a patent;
- patents issued may not provide the holder with any competitive advantages;
- patents could be challenged by third parties;

- the patents of others, including Alnylam, could impede our ability to do business;
- competitors may find ways to design around our patents; and
- competitors could independently develop products which duplicate our products.

A number of industry competitors and institutions have developed technologies, filed patent applications or received patents on various technologies that may be related to or affect our business. Some of these technologies, applications or patents may conflict with our technologies or patent applications. Such conflict could limit the scope of the patents, if any, that we may be able to obtain or result in the denial of our patent applications. In addition, if patents that cover our activities are issued to other companies, there can be no assurance that we would be able to obtain licenses to these patents at a reasonable cost or be able to develop or obtain alternative technology. If we do not obtain such licenses, we could encounter delays in the introduction of products, or could find that the development, manufacture or sale of products requiring such licenses is prohibited. In addition, we could incur substantial costs in defending patent infringement suits brought against us or in filing suits against others to have such patents declared invalid. As publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain we or any licensor was the first creator of inventions covered by pending patent applications or that we or such licensor was the first to file patent applications for such inventions. Any future proceedings could result in substantial costs, even if the eventual outcomes are favorable. There can be no assurance that our patents, if issued, will be held valid or enforceable by a court or that a competitor's technology or product would be found to infringe such patents.

Our business depends on our ability to use RNAi technology that we have licensed or will in the future license from third parties, including Alnylam, and, if these licenses were terminated or if we were unable to license additional technology we may need in the future, our business will be adversely affected.

We currently hold licenses for certain technologies that are or may be applicable to our current and subsequent product candidates. These include a license to core siRNA patents held or applied for by Alnylam; a license to MV-RNA technology from Halo-Bio, and a license to UNA technology from Marina. The licenses are subject to termination in the event of a breach by us of the license, if we fail to cure the breach following notice and the passage of a cure period. The UBC license, which is sublicensed to Alnylam, is subject to termination with respect to one or more particular patents if we and Alnylam were to cease patent prosecution or maintenance activities with respect to such patent(s), or in the event of a breach by us of the license, if we fail to cure the breach following notice and the passage of a cure period. There can be no assurance that these licenses will not be terminated. We may need to acquire additional licenses in the future to technologies developed by others, including Alnylam. For example, Alnylam has granted us a worldwide license for the discovery, development and commercialization of RNAi products directed to thirteen gene targets (three exclusive and ten non-exclusive licenses). Licenses for the five non-exclusive targets and one exclusive target have already been granted. We have rights to select the gene targets for up to two more exclusive licenses and five more non-exclusive licenses from Alnylam, which would only be made available to us only if they have not been previously selected by Alnylam or one of its other partners. This will limit the targets available for selection by us, and we may never be able to select gene targets or may be required to make our selection from gene targets that have minimal commercial potential. Furthermore, future license agreements may require us to make substantial milestone payments. We will also be obligated to make royalty payments on the sales, if any, of products resulting from licensed RNAi technology. For some of our licensed RNAi technology, we are responsible for the costs of filing and prosecuting patent applications. The termination of a license or the inability to license future technologies on acceptable terms may adversely affect our ability to develop or sell our products.

We expect to enter into a cross-license agreement with AlCana based on a binding term sheet signed November 12, 2012. The binding term sheet provides us certain access to AlCana's technology in the RNAi field and AlCana has agreed that it will not compete in the RNAi field for a period of 5 years. Although we intend on moving forward with AlCana, there is a risk that we may not enter into a cross-license agreement with AlCana on a timely basis.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights which could have a material adverse effect on our business, financial condition and results of operations and could cause the market value of our Common Shares to decline.

There has been significant litigation in the biotechnology industry over contractual obligations, patents and other proprietary rights, and we may become involved in various types of litigation that arise from time to time. Involvement in litigation could consume a substantial portion of our resources, regardless of the outcome of the litigation. Counterparties in litigation may be better able to sustain the costs of litigation because they have substantially greater resources. If claims against us are successful, in addition to any potential liability for damages, we could be required to obtain a license, grant cross-licenses, and pay substantial milestones or royalties in order to continue to develop, manufacture or market the affected products. Involvement and continuation of involvement in litigation may result in significant and unsustainable expense, and divert management's attention from ongoing business concerns and interfere with our normal operations. Litigation is also inherently uncertain with respect to the time and expenses associated therewith, and involves risks and uncertainties in the litigation process itself, such as discovery of new evidence or acceptance of unanticipated or novel legal theories, changes in interpretation of the law due to decisions in other cases, the inherent difficulty in predicting the decisions of judges and juries and the possibility of appeals. Ultimately we could be prevented from commercializing a product or be forced to cease some aspect of our business operations as a result of claims of patent infringement or violation of other intellectual property rights and the costs associated with litigation, which could have a material adverse effect on our business, financial condition, and operating results and could cause the market value of our Common Shares to decline.

Confidentiality agreements with employees and others, including collaborators, may not adequately prevent disclosure of trade secrets and other proprietary information.

Much of our know-how and RNAi technology may constitute trade secrets. There can be no assurance, however, that we will be able to meaningfully protect our trade secrets. In order to protect our proprietary RNAi technology and processes, we rely in part on confidentiality agreements with our collaborators, employees, vendors, consultants, outside scientific collaborators and sponsored researchers, and other advisors. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover trade secrets and proprietary information, and in such cases we could not assert any trade secret rights against such party. Costly and time-consuming litigation could continue to be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Risks Related to Competition

The pharmaceutical market is intensely competitive. If we are unable to compete effectively with existing drugs, new treatment methods and new technologies, we may be unable to successfully commercialize any product candidates that we develop.

The pharmaceutical market is intensely competitive and rapidly changing. Many large pharmaceutical and biotechnology companies, academic institutions, governmental agencies and other public and private research organizations are pursuing the development of novel drugs for the same diseases that we are targeting or expect to target. Many of our competitors have:

- much greater financial, technical and human resources than we have at every stage of the discovery, development, manufacture and commercialization process;
- more extensive experience in pre-clinical testing, conducting clinical trials, obtaining regulatory approvals, and in manufacturing, marketing and selling pharmaceutical products;
- product candidates that are based on previously tested or accepted technologies;
- products that have been approved or are in late stages of development; and
- collaborative arrangements in our target markets with leading companies and research institutions.

We will face intense competition from products that have already been approved and accepted by the medical community for the treatment of the conditions for which we are currently developing products. We also expect to face competition from new products that enter the market. We believe a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may try to develop products. These products, or other of our competitors' products, may be more effective, safer, less expensive or marketed and sold more effectively, than any products we develop.

There are a large number of companies that are developing new agents for use in cancer therapy including RNAi therapeutics, and there are other companies developing small molecule drugs designed to inhibit the PLK1 target, including Boehringer Ingelheim, Onconova Therapeutics and Millennium/Takeda. These agents may be competitive with our product candidate TKM-PLK1. In addition, there are organizations working on treatments for hemorrhagic fever viruses, such as Sarepta Therapeutics, Inc. We will also face competition for other product candidates that we expect to develop in the future.

If we successfully develop product candidates, and obtain approval for them, we will face competition based on many different factors, including:

- the safety and effectiveness of our products;
- the ease with which our products can be administered and the extent to which patients and physicians accept new routes of administration;
- the timing and scope of regulatory approvals for these products;
- the availability and cost of manufacturing, marketing and sales capabilities;
- price;
- reimbursement coverage; and
- patent position.

Our competitors may develop or commercialize products with significant advantages over any products we develop based on any of the factors listed above or on other factors. Our competitors may therefore be more successful in commercializing their products than we are, which could adversely affect our competitive position and business. Competitive products may make any products we develop obsolete or uncompetitive before we can recover the expenses of developing and commercializing our product candidates. Such competitors could also recruit our employees, which could negatively

impact our level of expertise and the ability to execute on our business plan. Furthermore, we also face competition from existing and new treatment methods that reduce or eliminate the need for drugs, such as the use of advanced medical devices. The development of new medical devices or other treatment methods for the diseases we are targeting and may target could make our product candidates noncompetitive, obsolete or uneconomical.

We face competition from other companies that are working to develop novel products using technology similar to ours. If these companies develop products more rapidly than we do or their technologies, including delivery technologies, are more effective than ours, then our ability to successfully commercialize products will be adversely affected.

In addition to the competition we face from competing products in general, we also face competition from other companies working to develop novel products using technology that competes more directly with our own. There are multiple companies working in the field of RNAi, including major pharmaceutical companies such as Novartis International AG, Takeda Pharmaceutical Company Limited, and Merck, and biotechnology companies such as Alnylam, Quark Pharmaceuticals, Inc., Silence Therapeutics plc, Arrowhead Research Corporation and its subsidiary, Calando, Marina, RXi Pharmaceuticals Corporation, Dicerna Pharmaceuticals, Inc., Sylentis S.A., Santaris Pharma A/S, and Benitec Ltd., among others. Any of these companies may develop its RNAi technology more rapidly and more effectively than we do or may develop products against the same target or disease indication that we are pursuing.

We also compete with companies working to develop antisense-based drugs, such as Isis Pharmaceuticals, Inc. and Sarepta. Like RNAi therapeutic products, antisense drugs target messenger RNAs, or mRNAs, in order to suppress the activity of specific genes. Isis is the developer of a currently approved antisense drug and has several antisense product candidates in clinical trials. Isis has also licensed its antisense technology to a number of other companies that are developing antisense-based drugs. The development of antisense drugs is more advanced than that of RNAi therapeutic products, and antisense technology may become the preferred technology for products that target mRNAs to silence specific genes.

In addition to competition with respect to RNAi and with respect to specific products, we face substantial competition to discover and develop safe and effective means to deliver siRNAs to the relevant cell and tissue types. Our competitors may develop safer and more effective means to deliver siRNAs to the relevant cell and tissue types than our existing lipid nanoparticle delivery technology, and our ability to successfully commercialize our products would be adversely affected. In addition, substantial resources are being expended by third parties in the effort to discover and develop alternative means of delivering siRNAs into the relevant cell and tissue types, both in academic laboratories and in the corporate sector. Some of our competitors have substantially greater resources than we do, and if our competitors are able to negotiate exclusive access to those delivery solutions developed by third parties, we may be unable to successfully commercialize our product candidates.

Risks Related to the Ownership of our Stock

If our stock price fluctuates, our investors could incur substantial losses.

The market price of our common shares may fluctuate significantly in response to factors that are beyond our control. The stock market in general has recently experienced extreme price and volume fluctuations. The market prices of securities of pharmaceutical and biotechnology companies have been extremely volatile, and have experienced fluctuations that often have been unrelated or disproportionate to the operating performance of these companies. These broad market fluctuations could result in extreme fluctuations in the price of our common shares, which could cause our investors to incur substantial losses.

There is no assurance that an active trading market in our common shares will be sustained.

Our common shares are listed for trading on the NASDAQ and the TSX exchanges. However, there can be no assurances that an active trading market in our common shares on these stock exchanges will be sustained.

We are incorporated in Canada and all of our assets, the majority of our officers and a significant number of our directors reside outside the United States, with the result that it may be difficult for investors to enforce any judgments obtained against us or some of our directors or officers.

We and our wholly-owned subsidiary, Protiva, are each incorporated under the laws of the Province of British Columbia and all of our assets are located outside the United States. In addition, the majority of our officers and a significant number of our directors are nationals or residents of countries other than the United States, and all or a substantial portion of such persons' assets are located outside the United States. While we have appointed National Registered Agents, Inc. as our agent for service of process to effect service of process within the United States upon us, it may not be possible for you to enforce against us or those persons in the United States, judgments obtained in U.S. courts based upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States. In addition, there is doubt as to whether original action could be brought in Canada against us or our directors or officers based solely upon U.S. federal or state securities laws and as to the enforceability in Canadian courts of judgments of U.S. courts obtained in actions based upon the civil liability provisions of U.S. federal or state securities laws.

As a foreign private issuer, we are subject to different United States securities laws and rules than a domestic United States issuer, which may limit the information publicly available to our shareholders.

We are a “foreign private issuer” as defined under U.S. securities laws. As a result, even though we are subject to the informational requirements of the Exchange Act, as a foreign private issuer, we are exempt from certain informational requirements of the Exchange Act which domestic U.S. issuers are subject to, including, the annual report on Form 10-K, quarterly report on Form 10-Q, current reports on Form 8-K upon the occurrence of certain material events and the proxy rules under Section 14 of the Exchange Act. In addition, as a foreign private issuer we are exempt from the proxy solicitation rules under the Exchange Act. Furthermore, the insider reporting and short-profit provisions under Section 16 of the Exchange Act are not be applicable to us, therefore, our shareholders may not know on as timely a basis when our officers, directors and principal shareholders purchase or sell our common shares, as the reporting periods under the corresponding Canadian insider reporting requirements are longer. We intend to fulfill all informational requirements that do apply to us as a foreign private issuer under the Exchange Act by filing the more limited version of the annual report for foreign private issuers on Form 20-F and current reports on Form 6-K with the SEC, which contains information disclosed in response to the informational requirements of the securities commissions in all provinces of Canada.

We may lose our foreign private issuer status in the future, which could result in significant additional costs and expenses to us.

In order to maintain our current status as a foreign private issuer, a majority of our common shares must be either directly or indirectly owned by non-residents of the United States, unless we satisfy all of the additional requirements necessary to preserve this status. We may in the future lose our foreign private issuer status if a majority of our common shares are held in the United States and we fail to meet the additional requirements necessary to avoid loss of foreign private issuer status. If we are not a foreign private issuer, we would not be eligible to use certain foreign issuer forms and would be required to file periodic and current reports and registration statements on United States domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. In addition, we may lose the ability to rely upon exemptions from NASDAQ corporate governance requirements that are available to foreign private issuers. Further, if we engage in capital raising activities after losing our foreign private issuer status, there is a higher likelihood that investors may require us to file resale registration statements with the SEC as a condition to any such financing.

We believe we were classified as a passive foreign investment company for United States tax purposes for the fiscal year ended December 31, 2008 and for certain prior years. This may have adverse tax consequences for U.S. holders of our shares.

For the fiscal year ended December 31, 2008 and certain prior years we believe we were classified for United States income tax purposes as a passive foreign investment company (PFIC). We do not believe we are classified as a PFIC for the fiscal years ended December 31, 2009, 2010, 2011 and 2012, although we have not requested or received an opinion from a U.S. tax advisor. We could be classified as a PFIC in certain fiscal years. If you are a U.S. holder of our shares and you purchased your shares in 2008 or certain prior years then any dividends we pay you may be taxed as ordinary income and not at preferential qualifying dividend tax rates, and upon any sale of our common shares, any capital gain may be taxed as ordinary income and not at preferential capital gains rates. The U.S. federal income tax consequences to a U.S. holder on the acquisition, ownership and disposition of common shares will also depend on whether such U.S. holder makes an election to treat us as a qualified electing fund, or QEF, under Section 1295 of the U.S. internal revenue code or a mark-to-market election under Section 1296 of the U.S. internal revenue code.

Our articles and certain Canadian laws could delay or deter a change of control.

Our preferred shares are available for issuance from time to time at the discretion of our board of directors, without shareholder approval. Our articles allow our board, without shareholder approval, to determine the special rights to be attached to our preferred shares, and such rights may be superior to those of our common shares.

In addition, limitations on the ability to acquire and hold our common shares may be imposed by the Competition Act in Canada. This legislation permits the Commissioner of Competition of Canada to review any acquisition of a significant interest in us. This legislation grants the Commissioner jurisdiction to challenge such an acquisition before the Canadian Competition Tribunal if the Commissioner believes that it would, or would be likely to, result in a substantial lessening or prevention of competition in any market in Canada. The Investment Canada Act subjects an acquisition of control of a company by a non-Canadian to government review if the value of our assets, as calculated pursuant to the legislation, exceeds a threshold amount. A reviewable acquisition may not proceed unless the relevant minister is satisfied that the investment is likely to result in a net benefit to Canada. Any of the foregoing could prevent or delay a change of control and may deprive or limit strategic opportunities for our shareholders to sell their shares.

The exercise of all or any number of outstanding stock options, the award of any additional options, bonus shares or other stock-based awards or any issuance of shares to raise funds or acquire a business may dilute your common shares.

We have in the past and may in the future grant to some or all of our directors, officers and employees options to purchase our common shares and other stock-based awards as non-cash incentives to those persons. The issuance of any equity securities could, and the issuance of any additional shares will, cause our existing shareholders to experience dilution of their ownership interests.

Any additional issuance of shares or a decision to acquire other businesses through the sale of equity securities, may dilute our investors’ interests, and investors may suffer dilution in their net book value per share depending on the price at which such securities are sold. Such issuance may cause a reduction in the proportionate ownership and voting power of all other shareholders. The dilution may result in a decline in the price of our common shares or a change in control.

We do not expect to pay dividends for the foreseeable future.

We have not paid any cash dividends to date and we do not intend to declare dividends for the foreseeable future, as we anticipate that we will reinvest future earnings, if any, in the development and growth of our business. Therefore, investors will not receive any funds unless they sell their common shares, and shareholders may be unable to sell their shares on favourable terms or at all. We cannot assure you of a positive return on investment or that you will not lose the entire amount of your investment in our common shares. Prospective investors seeking or needing dividend income or liquidity should not purchase our common shares.

The value of our securities, including our common shares, might be affected by matters not related to our operating performance and could subject us to securities litigation.

The value of our Common Shares may be reduced for a number of reasons, many of which are outside our control, including:

- general economic and political conditions in Canada, the United States and globally;
- governmental regulation of the health care and pharmaceutical industries;
- failure to achieve desired drug discovery outcomes by us or our collaborators;
- failure to obtain industry partner and other third party consents and approvals, when required;
- stock market volatility and market valuations;
- competition for, among other things, capital, drug targets and skilled personnel;
- the need to obtain required approvals from regulatory authorities;
- revenue and operating results failing to meet expectations in any particular period;
- investor perception of the health care and pharmaceutical industries;
- limited trading volume of our Common Shares;
- announcements relating to our business or the businesses of our competitors; and
- our ability or inability to raise additional funds.

ITEM 4 INFORMATION ON THE COMPANY

We are a biopharmaceutical business focused on developing novel RNA interference (RNAi) therapeutics and providing our lipid nanoparticle delivery technology to pharmaceutical partners. We presently do not have any products approved for sale.

4A. History and Development of the Company

Name

Our legal and commercial name is Tekmira Pharmaceuticals Corporation.

Principal and Registered Offices

Our head office and principal place of business is located at 100—8900 Glenlyon Parkway, Burnaby, British Columbia, Canada, V5J 5J8 (telephone: (604) 419-3200). Our registered and records office is located at 700 West Georgia St, 25th Floor, Vancouver, British Columbia, Canada, V7Y 1B3.

Corporate History

Tekmira was incorporated pursuant to the British Columbia Business Corporations Act, or BCBCA, on October 6, 2005 and commenced active business on April 30, 2007 when Tekmira and its parent company, Inex Pharmaceuticals Corporation, or Inex, were reorganized under a statutory plan of arrangement (the Reorganization) completed under the provisions of the BCBCA. The Reorganization saw Inex's entire business transferred to and continued by Tekmira. In this discussion of corporate history the terms "we", "us" and "our" refer to the business of Inex for the time prior to the Reorganization and the business of Tekmira for the time after the Reorganization.

Since our formation in 1992, we have focused on developing lipid delivery technologies for different classes of therapeutic agents, including chemotherapy drugs and nucleic acid drugs. Our technology was applied to the development of Marqibo, a liposomal formulation of the chemotherapy drug vincristine. Marqibo, along with two other liposomal chemotherapy products, Alocrest (liposomal formulation of the chemotherapy drug vinorelbine) and Brakiva (liposomal formulation of the chemotherapy drug topotecan), were licensed to Talon Therapeutics, Inc. (Talon, formerly Hana Biosciences, Inc.) in 2006. Talon is now responsible for all future development of these products and we are entitled to receive milestone and royalty payments based on the successful development and commercialization of these three product candidates.

Since 2005, we have focused on developing lipid nanoparticle delivery technology for a class of nucleic acid drugs called small interfering RNA, or siRNA, molecules that mediate RNA interference, or RNAi. In 2006, we initiated a research collaboration with Alnylam Pharmaceuticals, Inc. to combine their expertise in RNAi technology with our RNAi delivery technology. In January 2007, we entered into a License and Collaboration Agreement with Alnylam where we obtained, among other things, a worldwide license to certain Alnylam intellectual property for the research, development, manufacturing and commercialization of RNAi products for the treatment of human diseases, and Alnylam obtained exclusive access to Tekmira's delivery technology for siRNA and microRNA.

On May 30, 2008, we combined our business with that of Protiva Biotherapeutics, Inc., or Protiva. At the time of acquisition, Protiva was a private, venture-backed company incorporated under the laws of Canada and since 2003 had focused its business on developing lipid nanoparticle, or LNP, delivery technology for siRNA, a business similar to ours. Since commencing work on the delivery of siRNA, Protiva has filed several patent applications covering different LNP formulations, manufacturing processes and siRNA design to remove any immune stimulatory properties. At the time of acquisition, Protiva had licensed its LNP technology on a non-exclusive basis to Alnylam and Merck and had access to Alnylam's intellectual property for the research, development and commercialization of RNAi products.

The business combination was completed through our acquisition, under a share purchase agreement, of all the then outstanding shares of Protiva in consideration for common shares of Tekmira. Protiva is now our wholly-owned subsidiary. Concurrent with the completion of the business combination with Protiva, we entered into initial research agreements with F. Hoffman-La Roche Ltd and Hoffman La-Roche Inc., which we refer to together as Roche, and completed private placement investments of US$5.0 million (CDN$5.0 million) with Alnylam and CDN$5.0 million with an affiliate of Roche.

Since the completion of the business combination, we have focused on advancing our own collective RNAi therapeutic products and providing our lipid nanoparticle delivery technology to pharmaceutical partners and collaborators. See Item 4B. *Business Overview*.

Reporting Issuer Status under Canadian Securities Laws

We are a reporting issuer in Canada under the securities laws of each of the Provinces of Canada. Our common shares trade on Toronto Stock Exchange under the symbol "TKM" and, since November 15, 2010, on the NASDAQ Capital Market under the symbol "TKMR."

Capital Expenditures and Divestitures

In 2010, 2011 and 2012 we invested $0.8 million, $0.1 million and $0.01 million in property and equipment. Our 2010 capital investment relates largely to facility improvements and manufacturing equipment. In 2010 we completed upgrades to our in-house clean room facility. The ability to manufacture in-house gives us more flexibility and more control over our manufacturing process and timelines. Any equipment we acquire under our TKM-Ebola contract is owned by the U.S. Government so is not recorded as a Company investment. We did not make any significant capital divestures in the last three fiscal years.

We are not currently planning any corporate investments, mergers, acquisitions or divestures.

Our current and planned investment in property, plant and equipment is described below.

Takeover Offers

We are not aware of any indication of any public takeover offers by third parties in respect of our common shares during our last and current financial years.

4B. Business Overview

Business Strategy

Tekmira's business strategy is to develop our proprietary RNAi therapeutic product candidates and to support our pharmaceutical partners as they advance their own RNAi product candidates using our lipid nanoparticle (LNP) delivery technology.

Technology, product development and licensing agreements

Our therapeutic product pipeline consists of products being developed internally with our research and development resources. We also support the development of our partners' products and are developing an Ebola antiviral product, called TKM-Ebola, under a Transformational Medical Technologies (TMT) contract with the U.S. Government. Our focus is on advancing products that utilize our proprietary LNP technology for the delivery of small interfering RNA (siRNA), multivalent RNA (MV-RNA), or Unlocked Nucleobase Analogs (UNA). These products are intended to treat diseases through a process known as RNA interference, which prevents the production of disease associated proteins. We have rights under the RNAi intellectual property of Alnylam Pharmaceuticals, Inc. to develop thirteen RNAi therapeutic products. In addition, we have exclusive access to use MV-RNA technology from Halo-Bio RNAi Therapeutics, Inc. and non-exclusive access to use UNAs from Marina Biotech, Inc. for the development of RNAi therapeutic products.

In the field of RNAi therapeutics, we have licensed our LNP delivery technology to Alnylam and Merck & Co., Inc., and Alnylam has provided certain access to our LNP delivery technology to some of its partners. In addition, we have ongoing research relationships with Bristol-Myers Squibb Company, the United States National Cancer Institute, the U.S. Government, through their TMT program, and other undisclosed pharmaceutical and biotechnology companies. Outside the field of RNAi, we have legacy licensing agreements with Talon Therapeutics, Inc. and Aradigm Corporation.

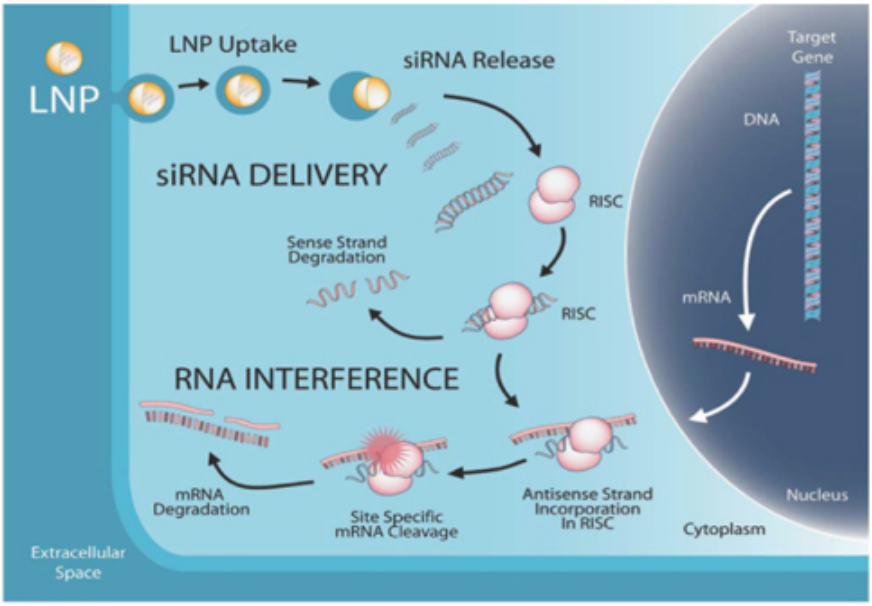
RNA Interference Therapeutics

RNAi is considered to be one of the most important discoveries in the field of biology in the last decade. The scientists who discovered the mechanism were awarded the 2006 Nobel Prize in Medicine. Intense research activity has subsequently uncovered the complex molecular mechanisms responsible for RNAi that are transforming the way that drug targets are discovered and validated. RNAi is a naturally occurring process that takes place inside cells, and includes processes whereby siRNA molecules profoundly suppress the production of specific proteins. Synthetic siRNA molecules are being developed as drugs that specifically suppress the production of disease-related proteins through RNAi.

In the cell, DNA carries the genetic information required to make each specific protein. Genes are first copied or transcribed into messenger RNA (mRNA), which, in turn, is translated into protein. Nearly all diseases are caused by either the absence of or over-production of a specific protein. If too much of a particular protein is the cause of disease then the therapeutic approach is to try to reduce its activity or amount. For example, a tumor can be caused by the over-production of a protein that stimulates cell growth.

Sequencing of the human genome has unlocked the information needed to design siRNA molecules directed against a wide range of disease-causing proteins. Using the mRNA sequence coding for the target protein, effective siRNA molecules can be designed much more rapidly than the time needed to synthesize and screen conventional drugs. siRNA-based drugs are short segments of synthetic double stranded RNA made up of a sense strand and an antisense strand. The sequence of the siRNA is designed so that the antisense strand will bind specifically to a complementary sequence on the mRNA coding for the target protein. When siRNA are introduced into the cell they are rapidly incorporated into an RNA-induced silencing complex (RISC). As illustrated in the diagram below, during this process the sense strand is unwound and discarded while the antisense strand remains in the RISC serving to guide the RISC complex to interact specifically with mRNA coding for the target protein. mRNA are cleaved in a sequence specific manner and then destroyed, preventing production of the target protein. Importantly, this process is catalytic and RISC associated siRNA can remain stable inside the cell for weeks, destroying many more copies of the target mRNA and maintaining target protein suppression for long periods of time.

Lipid Nanoparticle (LNP)-Enabled Delivery of siRNA and Mechanism of RNA Interference in Cells



RNAi has the potential to generate a broad new class of therapeutics that take advantage of the body's own natural processes to silence genes—or more specifically to eliminate specific gene-products, from the cell. While there are no RNAi therapeutics currently approved for commercial use, there are a number of RNAi products in development and several in human clinical trials. RNAi products are broadly applicable as they can silence, or eliminate the production of disease causing proteins from cells, thus creating opportunities for therapeutic intervention that have not been achievable with conventional drugs. Development of RNAi therapeutic products is currently limited by the instability of the siRNA molecules in the bloodstream and the inability of these molecules to access target cells or tissues following intravenous, or systemic, administration, and their inability to gain entry to the inside of target cells, where they carry out their action. Delivery technology is necessary to protect these drugs in the blood stream following administration, allow efficient delivery to the

target cells and facilitate cellular uptake and release into the cytoplasm of the cell. Tekmira's LNP technology has been shown in pre-clinical studies to enable RNAi therapeutic products by overcoming these limitations, allowing efficient and selective 'silencing' or reduction of certain target proteins. We believe that Tekmira is strongly positioned to take advantage of the need for delivery technology that can efficiently encapsulate siRNA molecules and deliver them to sites of disease. We and our partners are advancing RNAi therapeutic product candidates using our LNP technology as the delivery vehicle to access target tissues and cells.

Tekmira's LNP Technology

Our LNP delivery technology allows siRNA to be encapsulated in a particle made of lipids (fats or oils) that can be administered intravenously and travel through the blood stream to target tissues or sites of disease. The nanoparticles are designed to stay in the circulation for periods of time that allow the particle to efficiently accumulate at sites of disease such as the liver or cancerous tumors. As illustrated in the diagram above, once the nanoparticles have accumulated at the target site, the cells take up the particle by a process called endocytosis in which the cell's membrane surrounds the particle. This envelope or endosome pinches off from the cell's membrane and migrates to the inside of the cell. The lipid nanoparticles undergo an interaction with the endosomal membrane and in the process the siRNA are released inside the cell. The released siRNA molecules engage the RISC complex, mediating RNAi.

Internal Product Development

TKM-PLK1

Our lead oncology product candidate, TKM-PLK1, has been shown in preclinical animal studies to selectively kill cancer cells, while sparing normal cells in adjacent healthy tissue. TKM-PLK1 targets PLK1 (polo-like kinase 1), a protein involved in tumor cell proliferation and a validated oncology target. Inhibition of PLK1 expression prevents the tumor cell from completing cell division, resulting in cell cycle arrest and death of the cancer cell.

Our preclinical studies have demonstrated that a single, systemic intravenous administration of TKM-PLK1 blocked PLK1 expression in liver tumors causing extensive tumor cell death. After repeat dosing, this result translated into significant inhibition of tumor growth and prolonged survival without evidence of the toxicities often associated with oncology drugs. The TKM-PLK1 anti-tumor efficacy results were confirmed to be the result of silencing PLK1 via RNA interference. Furthermore, certain LNP formulations provided anti-tumor efficacy in preclinical models of tumors outside the liver.

On December 22, 2010, we announced the initiation of patient treatment in a Phase 1 human clinical trial of TKM-PLK1. The Phase 1 clinical trial, conducted at medical centers in the United States, is an open label, multi-dose, dose escalation study designed to evaluate the safety, tolerability and pharmacokinetics of TKM-PLK1 as well as determining the maximum tolerated dose. The trial is enrolling patients with advanced solid tumors. Secondary objectives of the trial are to measure tumor response and the pharmacodynamic effects of TKM-PLK1 in patients providing biopsies.

On August 14, 2012, we released interim results from our TKM-PLK1 Phase 1 clinical trial showing that TKM-PLK1 was generally well tolerated and highlighting evidence of drug activity, including one patient with a partial response and another patient who attained stable disease. Based on these interim data, patient enrollment is continuing at 0.75 mg/kg. Once complete, results from the Phase 1 clinical trial, including additional measures of drug activity, will be presented at forthcoming scientific meetings. Tekmira anticipates initiating a TKM-PLK1 Phase 2 clinical trial in 2013.

TKM-Ebola

For many years, the Zaire species of Ebola virus (ZEBOV) has been associated with periodic outbreaks of hemorrhagic fever in human populations with mortality rates reaching 90%. There are no approved treatments for Ebola or other hemorrhagic fever viruses.

On May 28, 2010 we announced the publication of a series of studies demonstrating the ability of an RNAi therapeutic utilizing our LNP technology to protect non-human primates from Ebola virus, a highly contagious and lethal human infectious disease. We conducted the studies in collaboration with infectious disease researchers from Boston University and the United States Army Medical Research Institute for Infectious Diseases (USAMRIID) and were funded in part by the U.S. Government's Transformational Medical Technologies (TMT) program. These preclinical studies were published in the medical journal The Lancet and demonstrated that when siRNA targeting the Ebola virus and delivered by Tekmira's LNP technology were used to treat previously infected non-human primates, the result was 100 percent protection from an otherwise lethal dose of Zaire Ebola virus (Geisbert et al., The Lancet, Vol 375, May 29, 2010).

On July 14, 2010, we signed a contract with the United States Department of Defense (DoD), under their TMT program, to advance an RNAi therapeutic utilizing our LNP technology to treat Ebola virus infection. In the initial phase of the contract, we are eligible to receive up to US$34.7 million. This initial funding is for the development of TKM-Ebola, including completion of preclinical development, filing an IND application with the FDA and the completion of a Phase 1 human safety clinical trial.

The United States DoD has the option of extending the contract beyond the initial funding period to support the advancement of TKM-Ebola through to the completion of clinical development and FDA approval. Based on the budget for the extended contract this would provide the Company with a total of up to US$140.0 million in funding for the entire program. Under the contract we invoice the United States DoD for direct labor, third party costs and an apportionment of overheads plus an incentive fee. The funding is paid through monthly reimbursements, and the United States DoD has the ability to cancel at any time.

On August 6, 2012, we announced that we had received a temporary stop-work order from the United States DoD with respect to our TKM-Ebola program. On October 2, 2012, we disclosed that the temporary stop-work order was lifted by the United States DoD and work is now continuing on the development of the TKM-Ebola product.

In November 2012, we disclosed that we have submitted a modification request to the existing contract to the DoD in order to integrate recent advancements in LNP formulation and manufacturing technology in the TKM-Ebola development program. Tekmira has initiated pre-clinical and chemistry, manufacturing and control studies that support the use of these improvements in the program. This development strategy will be accommodated by modifications to the existing contract, allowing both Tekmira and TMT to benefit from the significant advancements in LNP formulation technology made by Tekmira since the commencement of the TMT-funded program in July 2010. The contract modification request is currently being negotiated while work is continuing on the contract. It is expected that the LNP formulation work will be completed and submitted to the FDA in the second half of 2013 in order to initiate a new Phase 1 clinical trial.

TKM-Ebola is being developed under specific FDA regulatory guidelines called the “Animal Rule.” The Animal Rule provides that under certain circumstances, where it is unethical or not feasible to conduct human efficacy studies, the FDA may grant marketing approval based on adequate and well-controlled animal studies when the results of those studies establish that the drug is reasonably likely to produce clinical benefit in humans. Demonstration of the product’s safety in humans is still required.

Additional Product Candidates

We have a number of other preclinical candidates in our pipeline addressing a wide range of therapeutic needs such as alcohol dependence and additional oncology targets. We will continue to generate data to support the advancement of the most promising of these targets, and we expect to be in a position to nominate our next product candidate for development in 2013.

Partnerships and Collaborations

Alnylam collaborations and licenses

On November 12, 2012, we entered into an agreement to settle all litigation between Tekmira and Alnylam and AlCana Technologies, Inc., and we also entered into a new licensing agreement with Alnylam that replaces all earlier licensing, cross-licensing, collaboration, and manufacturing agreements. Tekmira expects to enter into a separate cross license agreement with AlCana which will include milestone and royalty payments and AlCana has agreed not to compete in the RNAi field for five years. In conjunction with the Settlement, we paid AlCana US$300,000 and accrued a further US$1,500,000, which we expect to pay upon the execution of a cross license agreement with AlCana.

As a result of the new Alnylam license agreement, Tekmira received a total of US$65 million in cash payments in November 2012. This includes US$30 million associated with the termination of the manufacturing agreement and US$35 million associated with the termination of the previous license agreements, as well as a reduction of the milestone and royalty schedules associated with Alnylam’s ALN-VSP, ALN-PCS, and ALN-TTR programs. Of the US$65 million received from Alnylam, US$18.7 million was subsequently paid by us to our lead legal counsel representing us in the lawsuit against Alnylam and AlCana, in satisfaction of the contingent obligation owed to that counsel. We are also eligible to receive an additional US$10 million in near-term milestones, comprised of a US$5 million payment upon ALN-TTR entering a Phase 3 or pivotal clinical trial and a US$5 million payment related to enabling drug production for the initiation of clinical trials for ALN-VSP in China. Both near-term milestones are expected to occur in 2013. In addition, Alnylam has transferred all agreed upon patents and patent applications related to LNP technology for the systemic delivery of RNAi therapeutic products, including the MC3 lipid family, to Tekmira, and we will own and control prosecution of this intellectual property portfolio. Tekmira is the only company able to sublicense LNP intellectual property in future platform-type relationships. Alnylam has a license to use Tekmira’s intellectual property to develop and commercialize products and may only grant access to Tekmira’s LNP technology to its partners if it is part of a product sublicense. Alnylam will pay Tekmira milestones and royalties as Alnylam’s LNP-enabled products are developed and commercialized.

The new licensing agreement with Alnylam also grants us intellectual property rights to develop our own proprietary RNAi therapeutics. Alnylam has granted us a worldwide license for the discovery, development and commercialization of RNAi products directed to thirteen gene targets – three exclusive and ten non-exclusive licenses – provided that they have not been committed by Alnylam to a third party or are not otherwise unavailable as a result of the exercise of a right of first refusal held by a third party or are part of an ongoing or planned development program of Alnylam. Licenses for five of the ten non-exclusive targets – ApoB, PLK1, Ebola, WEE1, and CSN5 – have already been granted, along with an additional

license for ALDH2, which has been granted on an exclusive basis. In consideration for this license, we have agreed to pay single-digit royalties to Alnylam on product sales and have milestone obligations of up to US$8.5 million on the non-exclusive licenses (with the exception of TKM-Ebola, which has no milestone obligations). Alnylam no longer has "opt-in" rights to Tekmira's lead oncology product, TKM-PLK1, so we now hold all development and commercialization rights related TKM-PLK1. We will have no milestone obligations on the three exclusive licenses.

Alnylam currently has three LNP-enabled products in human clinical trials: ALN-TTR, ALN-VSP, and ALN-PCS.

Alnylam's ALN-TTR01 and ALN-TTR02 are RNAi therapeutics targeting transthyretin (TTR) for the treatment of TTR-mediated amyloidosis (ATTR), a systemic disease caused by mutations in the TTR gene. ALN-TTR01 and ALN-TTR02 utilize our LNP technology. In July 2010, Alnylam announced the initiation of a Phase 1 human clinical trial for ALN-TTR01, which triggered a US$0.5 million milestone payment to us. Alnylam also initiated a Phase 1 trial with ALN-TTR02 aimed at evaluating safety, tolerability, and clinical activity of ALN-TTR02. New data were presented on July 16, 2012 at Boston University School of Medicine. Alnylam reported results that showed that administration of ALN-TTR02 resulted in statistically significant reductions in serum TTR protein levels of up to 94%. Suppression of TTR, the disease-causing protein in ATTR, was found to be rapid, dose dependent, durable, and specific after just a single dose. Alnylam has initiated a Phase 2 study of ALN-TTR02 in patients with ATTR and has guided that its goal is to start a Phase 3 clinical trial by the end of 2013. The initiation of the Phase 2 study of ALN-TTR02 triggered a US$1.0 million milestone payment to Tekmira. Tekmira is entitled to receive a US$5 million milestone payment when ALN-TTR02 enters a Phase 3 or pivotal clinical trial, which is expected to occur in 2013. Tekmira will also receive low single digit royalty payments based on commercial sales of ALN-TTR02.

In April 2009, Alnylam announced that they had initiated a Phase 1 human clinical trial for ALN-VSP. ALN-VSP is being developed as a treatment for advanced solid tumors with liver involvement. ALN-VSP comprises siRNA molecules delivered systemically using our LNP technology. The initiation of the ALN-VSP Phase 1 clinical trial triggered a milestone payment of $0.6 million (US$0.5 million) which we received in May 2009. In June 2011, Alnylam presented Phase 1 human clinical trial data at American Society of Clinical Oncology (ASCO) meeting and disclosed that ALN-VSP was generally well tolerated, demonstrated evidence for anti-tumor activity, and was found to mediate RNAi activity in both hepatic and extra-hepatic tumors. The most recent ALN-VSP data were presented at the American Society of Clinical Oncology (ASCO) meeting in June 2012. Alnylam disclosed that, overall, the results demonstrated disease control lasting more than six months in the majority of patients treated on the extension study, including a complete response (CR) in an endometrial cancer patient who had multiple liver metastases. In this study, chronic dosing of up to 23 months with ALN-VSP was found to be generally safe and well tolerated. In July 2012, Alnylam disclosed that it has formed a strategic alliance with Ascletis Pharmaceuticals (Hangzhou) Co., Ltd., a privately held US-China joint venture pharmaceutical company, to develop and commercialize ALN-VSP in China, including Hong Kong, Macau, and Taiwan. Tekmira is entitled to receive a US$5 million milestone payment for enabling ALN-VSP to enter clinical trials in China, which is expected to occur in 2013. Tekmira will also receive low single digit royalty payments based on commercial sales of ALN-VSP.

Alnylam is also developing ALN-PCS, an RNAi therapeutic, which is enabled by our LNP delivery technology, to treat hypercholesterolemia, or high levels of cholesterol in the blood. On September 26, 2011, Alnylam announced the initiation of a Phase 1 human clinical trial for ALN-PCS which triggered a US$0.5 million milestone payment to us. On April 20, 2012, Alnylam presented ALN-PCS data at the American Heart Association's Arteriosclerosis, Thrombosis, and Vascular Biology (ATVB) 2012 Scientific Sessions held in Chicago, IL. Alnylam reported results that showed that administration of a single dose of ALN-PCS, in the absence of concomitant lipid-lowering agents such as statins, resulted in statistically significant and durable reductions of PCSK9 plasma levels of up to 84% and lowering of low-density lipoprotein cholesterol (LDL-C), or "bad cholesterol," of up to 50%. ALN-PCS was shown to be safe and well tolerated in this study. In February 2013, Alnylam disclosed an exclusive global alliance with The Medicines Company to advance the ALN-PCS program. Tekmira will receive low single digit royalty payments based on commercial sales of ALN-PCS.

License and collaboration agreement with Halo-Bio RNAi Therapeutics, Inc. (Halo-Bio)

On August 24, 2011, we entered into a license and collaboration agreement with Halo-Bio. Under the agreement, Halo-Bio granted to us an exclusive license to its multivalent ribonucleic acid MV-RNA technology. The Agreement allows us to work together with Halo-Bio to design and develop MV-RNA molecules directed at gene targets of interest to us and to combine MV-RNA molecules with our LNP technology to develop therapeutic products. MV-RNA technology comprises single macromolecules capable of mediating RNAi at multiple unique target sites. MV-RNA can target three sites on a single gene or up to three separate genes simultaneously. We have already successfully demonstrated multi-gene knockdown using MV-RNA enabled by our proprietary LNP formulations.

The agreement was amended on August 8, 2012 to adjust the future license fees and other contingent payments. We have recorded $0.5 million in fees under our license from Halo-Bio to the end of 2012. Under the amended agreement, the maximum future license fees and other contingent payments are US$1.3 million and we will pay up to US$12.7 million in milestones on each product developed plus royalties.

License agreement with Marina Biotech, Inc.

On November 29, 2012, we disclosed that we had obtained a worldwide, non-exclusive license to a novel RNAi payload technology called Unlocked Nucleobase Analog (UNA) from Marina for the development of RNAi therapeutics. UNA technology can be used in the development of RNAi therapeutics, which treat disease by silencing specific disease causing genes. UNAs can be incorporated into RNAi drugs and have the potential to improve them by increasing their stability and reducing off-target effects. Marina will receive an upfront payment plus milestone and royalty payments on products developed by Tekmira that use UNA technology. In December 2012, we paid Marina an up-front license fee of $0.3 million. We expect to pay Marina a further license fee of US$0.2 million in Q2 2013 and there are milestones of up to US$3.2 million plus royalties for each product that we develop using UNA technology licensed from Marina.

Roche product development and research agreements

On May 30, 2008, we signed an initial research agreement with Roche. This initial research agreement expired at the end of 2008 and was replaced by a research agreement (Roche Research Agreement) dated February 11, 2009. Work under the Roche Research Agreement was completed in the first half of 2009.

On May 11, 2009 we announced a product development agreement with Roche (Roche Product Development Agreement) that provides for product development up to the filing of an IND by Roche. The product development activities under this agreement expand the activities that were formerly covered by the Roche Research Agreement. Under the Roche Product Development Agreement Roche paid for the provision of our staff and for external costs incurred up to US$8.8 million, for us to support the advancement of a Roche RNAi product candidate using our LNP technology through to the filing of an IND application.

On November 17, 2010, Roche announced that, as part of a corporate restructuring, they intend to discontinue research and development in the field of RNAi. Following the announcement, Roche confirmed that, except for completing some product stability studies, they would be discontinuing product development with Tekmira. The stability studies were completed in 2011 so we now have no further obligation to Roche. In October 2011, Arrowhead Research Corporation announced that it had acquired all RNA therapeutics assets and intellectual property from Roche.

Merck license agreement

Protiva, our wholly owned subsidiary, is party to a non-exclusive royalty-bearing world-wide license agreement with Merck. Under the license, Merck will pay up to US$17.0 million in milestones for each product they develop covered by Protiva's intellectual property, except for the first product, for which Merck will pay up to US$15.0 million in milestones, and will pay single-digit royalties on product sales. Merck has also granted a license to us for some of its patents. The license agreement with Merck was entered into as part of the settlement of litigation between Protiva and a Merck subsidiary.

Bristol-Myers Squibb research agreement

On May 10, 2010 we announced the expansion of our research collaboration with Bristol-Myers Squibb. Under the new agreement, Bristol-Myers Squibb will use siRNA molecules formulated by us in lipid nanoparticles to silence target genes of interest. Bristol-Myers Squibb will conduct the pre-clinical work to validate the function of certain genes and share the data with us. We can use the pre-clinical data to develop RNAi therapeutic products against the therapeutic targets of interest. Bristol-Myers Squibb paid us US$3.0 million concurrent with the signing of the agreement. We are required to provide a pre-determined number of lipid nanoparticle batches over the four-year agreement. Bristol-Myers Squibb will have a first right to negotiate a licensing agreement on certain RNAi products developed by us that evolve from Bristol-Myers Squibb validated gene targets. On May 17, 2011 we announced a further expansion of the collaboration to include broader applications of our LNP technology and additional target validation work.

USAMRIID research agreement

In 2005 we signed a five-year research agreement with the United States Army Medical Research Institute for Infectious Diseases (USAMRIID) to collaborate on the development of siRNA-based therapy against filovirus infections, including Ebola, using LNPs. In 2010 we received the final payment under this grant. Further development of our TKM-Ebola product is being funded by the U.S. Department of Defense under the Transformational Medical Technologies (TMT) program as discussed in "*TKM-Ebola*" section above.

U.S. National Institutes of Health (NIH) grant

On October 13, 2010 we announced that together with collaborators at The University of Texas Medical Branch (UTMB), we were awarded a new NIH grant to support research to develop RNAi therapeutics to treat Ebola and Marburg hemorrhagic fever viral infections using our LNP delivery technology. The grant, worth US$2.4 million, is supporting work at Tekmira and the UTMB.

Legacy Agreements

Talon Therapeutics, Inc. (Talon, formerly Hana Biosciences, Inc.) license agreement

Talon is developing targeted chemotherapy products under a legacy license agreement entered into in May 2006. Marqibo (Optisomal Vincristine), Alocrest (Optisomal Vinorelbine) and Brakiva (Optisomal Topotecan), products originally developed by us, have been exclusively licensed to Talon. Talon has agreed to pay us milestones and single-digit royalties and is responsible for all future development and future expenses. In May 2009, the license agreement with Talon was amended to decrease the size of near-term milestone payments and increase the size of long-term milestone payments. On September 20, 2010, the license agreement with Talon was amended a second time such that Talon paid $5.9 million (US$5.75 million) in consideration for reducing certain future payments associated with the product candidates. The payment of $5.9 million (US$5.75 million) from Talon has been paid to our contingent creditors in full settlement of a contingent obligation. We are now eligible to receive milestone payments from Talon of up to US$18.0 million upon achievement of further development and regulatory milestones and, we will also receive single-digit royalties based on product sales. If Talon sublicenses any of the product candidates, Tekmira is eligible to receive a percentage of any upfront fees or milestone payments received by Talon. Depending on the royalty rates Talon receives from its sublicensees, our royalty rate may be lower on product sales by the sublicensees. The royalty rate will be reduced to low single digits if there is generic competition.

Marqibo is a proprietary sphingosomal formulation of the widely used, off-patent cancer chemotherapeutic vincristine. The FDA has granted Talon orphan drug and fast track designations for the use of Marqibo in adult acute lymphoblastic leukemia (ALL). In August 2007, Talon initiated a Phase 2 Marqibo registration-enabling clinical trial in relapsed ALL. On July 18, 2011, Talon announced that its New Drug Application (NDA) for Marqibo had been submitted to the FDA seeking approval for the treatment of adult Philadelphia chromosome-negative ALL in second or greater relapse or that has progressed following two or more lines of anti-leukemia therapy. On August 9, 2012, Talon announced that Marqibo® (vinCRIStine sulfate LIPOSOME injection) had received accelerated approval from the U.S. Food and Drug Administration (FDA) for the treatment of adult patients with Philadelphia chromosome negative (Ph-) acute lymphoblastic leukemia (ALL) in second or greater relapse or whose disease has progressed following two or more anti-leukemia therapies. Talon is responsible for all future development of Marqibo. In 2012, we received a US$1.0 million milestone payment based on the FDA approval of Marqibo and will receive mid-single digit royalty payments based on Marqibo's commercial sales.

Aradigm Corporation license agreement

In December 2004, we entered into a licensing agreement with Aradigm under which Aradigm exclusively licensed certain of our liposomal intellectual property for the pulmonary delivery of Ciprofloxacin. As amended, this agreement calls for milestone payments totalling US$4.5 and US$4.75 million, respectively, for the first two disease indications pursued by Aradigm using our technology, and for low- to mid-single-digit royalties on sales revenue from products using our technology. Aradigm has asserted that it is not using our technology in its current products.

University of British Columbia

Certain early work on lipid nanoparticle delivery systems and related inventions was undertaken at the University of British Columbia (UBC). These inventions are licensed to us by UBC under a license agreement, initially entered in 1998 and thereafter restated and amended. This agreement calls for revenue sharing on payments received from sublicenses that range from 10% for intellectual property related to certain technology used for the delivery of oligonucleotides and up to approximately 20% for intellectual property covering certain legacy product candidates being advanced by Talon and Aradigm. The agreement calls for single-digit royalties on product sales made by us under the licensed patents. The patents licensed to us by UBC under this license agreement have been expanded over the years to include patents, if any, on additional inventions discovered by UBC and us in our prior collaborations with UBC or otherwise in the course of our prior collaboration with Alnylam. These collaborations with UBC and with Alnylam ended at the end of 2008. We have granted sublicenses under the UBC license to Alnylam as well as to Talon and Aradigm. While Alnylam's sublicense is exclusive in the RNAi field, Alnylam has in turn sublicensed us under the licensed UBC patents for discovery, development and commercialization of RNAi products.

In mid-2009, we and our subsidiary Protiva entered into a supplemental agreement with UBC, Alnylam and AlCana Technologies, Inc., in relation to a separate research collaboration to be conducted among UBC, Alnylam and AlCana. We are licensed under the supplemental agreement to inventions discovered from this collaboration.

Patents and Proprietary Rights

In addition to the expertise we have developed and maintain in confidence, we own a portfolio of patents and patent applications directed to LNP inventions, the formulation and manufacture of LNP-based pharmaceuticals, chemical modification of RNAi molecules, and RNAi drugs and processes directed at particular disease indications.

We have filed many patent applications with the European Patent Office that have been granted. In Europe, upon grant, a period of nine months is allowed for notification of opposition to such granted patents. If our patents are subjected to interference or opposition proceedings, we would incur significant costs to defend them. Further, our failure to prevail in any such proceedings could limit the patent protection available to our RNAi platform, including our product candidates.

Tekmira has a portfolio of approximately 95 patent families, in the U.S. and abroad, that are directed to various aspects of LNPs and LNP formulations. The portfolio includes approximately 72 issued U.S. patents, approximately 71 issued non-U.S. patents, and approximately 229 pending patent applications, including the following patents and applications in the United States and Europe(1):

Invention Category	Title	Priority Filing Date*	Status**	Expiration Date***
LNP	Lipid Encapsulated Interfering RNA	07/16/2003	U.S. Pat. No.7,982,027; application pending in Europe	07/16/2024
LNP	Lipid Encapsulated Interfering RNA	06/07/2004	U.S. Pat. No. 7,799,565; European Pat. No.1766035	06/07/2025
LNP	Novel Lipid Formulations for Nucleic Acid Delivery	04/15/2008	U.S. Pat. No. 8,058,069; application pending in Europe	04/15/2029
LNP	Novel Lipid Formulations for Delivery of Therapeutic Agents to Solid Tumors	07/01/2009	U.S. Pat. No.8,283,333 Applications pending in U.S. and Europe	06/30/2030
LNP Manufacturing	Liposomal Apparatus and Manufacturing Methods	06/28/2002	U.S. Pat. No. 7,901,708; European Pat. No. 1519714	06/28/2023
LNP Manufacturing	Systems and Methods for Manufacturing Liposomes	07/27/2005	Application pending in U.S. and Europe	07/27/2026
Novel Lipids	Cationic Lipids and Methods of Use	06/07/2004	U.S. Pat. No. 7,745,651; European Pat. No. 1781593	06/07/2025
Novel Lipids	Polyethyleneglycol-Modified Lipid Compounds and Uses Thereof	09/15/2003	U.S. Pat. No. 7,803,397; European Pat. No. 1664316	09/15/2024
Novel Lipids	Improved Cationic Lipids and Methods for the Delivery of Therapeutic Agents	07/01/2009	Application pending in the U.S.	06/30/2030
Chemical Modifications	Modified siRNA Molecules and Uses Thereof	11/02/2005	U.S. Pat. Nos. 8,101,741 and 8,188,263 ; applications pending in Europe and U.S.	11/02/2026
Chemical Modifications	Modified siRNA Molecules and Uses Thereof	06/09/2006	U.S. Pat. No. 7,915,399	06/08/2027
Therapeutic Target	siRNA Silencing of Apolipoprotein B	11/17/2004	Applications pending in U.S. and Europe	11/17/2025
Therapeutic Target	Compositions and Methods for Silencing Apolipoprotein B	07/01/2009	U.S. Pat. No. 8,236,943 Application pending in Europe	06/30/2030
Therapeutic Target	siRNA Silencing of Filovirus Gene Expression	10/20/2005	U.S. Pat. No. 7,838,658	10/20/2026
Therapeutic Target	Compositions and Methods for Silencing Ebola Virus Gene Expression	07/20/2009	Application pending in U.S.	07/20/2030
Therapeutic Target	Silencing of Polo-Like Kinase Expression using Interfering RNA	12/27/2007	Applications pending in U.S. and Europe	12/27/2028

(1) Patent information current as of December 31, 2012.

* Priority filing dates are based on the filing dates of provisional patent applications. Provisional applications expire unless they are converted to non-provisional applications within one year.

** An “allowed” patent application is an active case that has been found by the patent office to contain patentable subject matter, subject to the payment of issue/grant fees by the applicant.

*** Once issued, the term of a US patent first filed after mid-1995 generally extends until the 20th anniversary of the filing date of the first non-provisional application to which such patent claims priority. It is important to note, however, that the United States Patent & Trademark Office, or USPTO, sometimes requires the filing of a Terminal Disclaimer during prosecution, which may shorten the term of the patent. On the other hand, certain patent term adjustments may be available based on USPTO delays during prosecution. Similarly, in the pharmaceutical area, certain patent term extensions may be available based on the history of the drug in clinical trials. We cannot predict whether or not any such adjustments or extensions will be available or the length of any such adjustments or extensions.

4C. Organizational structure

We have two wholly owned subsidiaries, Protiva Biotherapeutics Inc., which is incorporated under the laws of British Columbia and is directly held by us, and Protiva Biotherapeutics (USA) Inc., which is incorporated in the State of Delaware and is a direct subsidiary of Protiva Biotherapeutics Inc.

4D. Property, plant and equipment

Facilities

Our head office and primary research and development facility is located in Burnaby, British Columbia. The lease for this approximately 51,000 square foot facility expires in July 2014, but can be further extended to 2017 and then to 2022 and then to 2027.

ITEM 4A UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5 OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following should be read in conjunction with our financial statements, forming a part of this Annual Report and Item 4 "*Information on the Company*" of this Annual Report. The financial statements for 2012 and 2011 have been prepared in accordance with in accordance with generally accepted accounting principles in the United States of America except as otherwise stated. The information presented below is in Canadian dollars unless otherwise stated.

Overview

Tekmira is a biopharmaceutical company focused on advancing novel RNA interference therapeutics and providing its leading lipid nanoparticle delivery technology to pharmaceutical partners.

Reorganization and Acquisition

Tekmira Pharmaceuticals Corporation was incorporated on October 6, 2005 as an inactive wholly owned subsidiary of Inex Pharmaceuticals Corporation. Pursuant to a reorganization effective April 30, 2007, the business and substantially all of the assets and liabilities of Inex were transferred to the Company. The consolidated financial statements for all periods presented herein include the consolidated operations of Inex until April 30, 2007 and the operations of the Company thereafter.

On May 30, 2008, we completed the acquisition of all of the outstanding shares of Protiva. At the time of the acquisition, Protiva was a privately owned Canadian company developing lipid nanoparticle delivery technology for small interfering RNA, or siRNA, a business similar to that of Tekmira. The acquisition of Protiva permitted us to combined our assets and focus them on the develop RNAi therapeutic products using our lipid nanoparticle delivery technology which we refer to as LNP or lipid nanoparticles. The business combination was completed through the acquisition by Tekmira, under a share purchase agreement, of all the outstanding shares of Protiva in consideration for common shares of Tekmira. Tekmira also agreed to issue common shares on the exercise of any Protiva share purchase options that remained outstanding at the closing.

Concurrent with the completion of the business combination with Protiva, we entered into initial research agreements with F. Hoffman-La Roche Ltd and Hoffman La-Roche Inc., which we refer to together as Roche, and completed private placement investments of 416,667 common shares for US$5.0 million (CDN$5.0 million, CDN$12.00 per share) with Alnylam and 416,667 common shares for CDN$5.0 million (CDN$12.00 per share) with a Roche affiliate.

The Protiva acquisition was accounted for using the purchase method of accounting.

Inflation

Inflation has not had a material impact on our operations.

Foreign Currency Fluctuations

We purchase goods and services in both Canadian and U.S. dollars and earn a significant portion of our revenues in U.S. dollars. We manage our U.S. dollar currency risk by using cash received from U.S. dollar revenues to pay U.S. dollar expenses. We have not entered into any agreements or purchased any instruments to hedge possible currency risks at this time. Our policy is to hold only working capital levels of U.S. dollars. However, as a large portion of our revenues and expenses are in U.S. dollars, exchange rate fluctuations will continue to create gains or losses as we continue holding U.S. denominated cash, accounts receivable and accounts payable.

Foreign exchange gains were $0.02 million in 2012 as compared to losses of $0.01 million in both 2011 and 2010. Our foreign exchange gains and losses relate almost entirely to changes in the US dollar to Canadian dollar exchange rate. We have some US dollar denominated cash and receivables which provide a natural exchange rate hedge against our US dollar denominated payables and we keep our US dollar cash balances to a working capital level to minimize exchange rate risk.

Government Regulation

We operate within a highly regulated environment. Regional and country specific laws and regulations define the data required to show safety and efficacy of product candidates such as ours, as well as govern testing, approval, manufacturing, labeling and marketing of these products. These regulatory requirements are a major factor in determining whether a product may be successfully developed and the amount of time and expense associated with this development. For a biopharmaceutical company to launch a new product, it must demonstrate to the national regulatory authorities in the countries in which it intends to market the new product, such as the Food and Drug Administration, or FDA, in the United States and the Therapeutic Products Directorate of Health Canada, or TPD, in Canada that the product is both effective and safe. The system of new drug approvals in North America is one of the most rigorous in the world.

A potential new product must first be tested in the laboratory, referred to as in vitro studies, and in several animal species, referred to as pre-clinical, before being evaluated in humans, referred to as clinical studies. Pre-clinical studies primarily involve in vitro evaluations of the therapeutic activity of the product and pre-clinical evaluations of the pharmacokinetic, metabolic and toxic effects of the product in selected animal species. Ultimately, based on data generated during pre-clinical studies, extrapolations will be made to evaluate the potential risks versus the potential benefits of use of the product in humans under specific conditions of use. Upon successful completion of the pre-clinical studies, the product typically undergoes a series of evaluations in humans, including healthy volunteers and patients with the targeted disease.

Before undertaking clinical studies, the pharmaceutical company sponsoring the new product must submit to the FDA, TPD, or other applicable regulatory body, an Investigational New Drug (IND) submission. The IND application must contain specified information including the results of the pre-clinical or clinical tests completed at the time of the application. Since the method of manufacture may affect the efficacy and safety of a product, information on manufacturing methods and standards and the stability of the product substance and dosage form must also be presented.

The activities which are typically completed prior to obtaining approval for marketing in North America may be summarized as follows:

- pre-clinical studies, which includes pharmacological and efficacy testing in animals, toxicology testing and formulation work based on in vitro results, performed to assess the safety and potential efficacy of the product, and subject to good laboratory practice requirements;
- Phase 1 clinical trials, the initial introduction of the product into human subjects, under which the compound is generally tested for safety, dosage, tolerance, metabolic interaction, distribution, excretion and pharmacokinetics;
- Phase 2 clinical trials involving studies in a limited patient population to: determine the efficacy of the product for specific, targeted indications, determine optimal dosage, and identify possible adverse effects and safety risks; and
- Phase 3 clinical trials which are undertaken to further evaluate clinical efficacy of the product and to further test for its safety within an expanded patient population at geographically dispersed clinical study sites in order to support marketing authorization.

Following Phase 3, the product sponsor submits a New Drug Application to the FDA or a New Drug Submission to the TPD for marketing approval. Once the data is reviewed and approved by the appropriate regulatory authorities such as TPD and FDA, the product may be sold on a commercial basis.

The approval process for new drugs in Europe is comparable to the approval process of the FDA.

Critical accounting policies and estimates

The significant accounting policies that we believe to be most critical in fully understanding and evaluating our financial results are revenue recognition, stock-based compensation and share purchase warrant valuation. These accounting policies require us to make certain estimates and assumptions. We believe that the estimates and assumptions upon which we rely are reasonable, based upon information available to us at the time that these estimates and assumptions are made. Actual results may differ from our estimates. Our critical accounting estimates affect our net income or loss calculation.

Revenue Recognition / Our primary sources of revenue have been derived from research and development collaborations and contracts, and licensing fees comprised of initial fees and milestone payments. Payments received under research and development agreements and contracts, which are non-refundable, are recorded as revenue as services are performed and as the related expenditures are incurred pursuant to the agreement, provided collectability is reasonably

assured. Revenue earned under research and development manufacturing collaborations where we bear some or all of the risk of a product manufacture failure is recognized when the purchaser accepts the product and there are no remaining rights of return. Revenue earned under research and development collaborations and contracts where we do not bear any risk of product manufacture failure is recognized in the period the work is performed. Initial fees and milestone payments which require our ongoing involvement are deferred and amortized into income over the estimated period of our involvement as we fulfill our obligations under our agreements. Revenue earned under contractual arrangements upon the occurrence of specified milestones is recognized as the milestones are achieved and collection is reasonably assured.

The revenue that we recognize is a critical accounting estimate because of the volume and nature of the revenues we receive. Some of the research, development and licensing agreements that we have entered into contain multiple revenue elements that are to be recognized for accounting in accordance with our revenue recognition policy. We need to make estimates as to what period the services will be delivered with respect to up-front licensing fees and milestone payments received because these payments are deferred and amortized into income over the estimated period of our ongoing involvement. The actual period of our ongoing involvement may differ from the estimated period determined at the time the payment is initially received and recorded as deferred revenue. This may result in a different amount of revenue that should have been recorded in the period and a longer or shorter period of revenue amortization. When an estimated period changes we amortize the remaining deferred revenue over the estimated remaining time to completion. The rate at which we recognize revenue from payments received for services to be provided under research and development agreements depends on our estimate of work completed to date and total work to be provided. The actual total services provided to earn such payments may differ from our estimates.

Our U.S. Government contract for TKM-Ebola is based on cost reimbursement plus an incentive fee. At the beginning of our fiscal year we estimate our labour and overhead rates for the year ahead. At the end of the year we calculate our actual labour and overhead rates and adjust our revenue accordingly. Our actual labour and overhead rates will differ from our estimate based on actual costs incurred and the proportion of our efforts on contracts and internal products versus indirect activities. Within minimum and maximum collars, the amount of incentive fee we can earn under the U.S. Government contract varies based on our costs incurred versus budgeted costs. We need to make an estimate of our final contract costs in order to calculate the final incentive fee we will receive. Until we are able to make a reliable estimate of the final contract costs, we recognize only the minimum incentive fee achievable and earned.

Our revenue for 2012 was $14.1 million (2011 - $16.6 million) and deferred revenue at December 31, 2012 was $3.8 million (December 31, 2011 - $4.5 million).

Stock-based compensation / The stock based compensation that we record is a critical accounting estimate due to the value of compensation recorded, the volume of our stock option activity, and the many assumptions that are required to be made to calculate the compensation expense.

Compensation expense is recorded for stock options issued to employees and directors using the fair value method. We must calculate the fair value of stock options issued and amortize the fair value to stock compensation expense over the vesting period, and adjust the expense for stock option forfeitures and cancellations. We use the Black-Scholes model to calculate the fair value of stock options issued which requires that certain assumptions, including the expected life of the option and expected volatility of the stock, be estimated at the time that the options are issued. This accounting estimate is reasonably likely to change from period to period as further stock options are issued and adjustments are made for stock option forfeitures and cancellations. We make an estimate for stock option forfeitures at the time of grant and revise this estimate in subsequent periods if actual forfeitures differ. The term “forfeitures” is distinct from “cancellations” or “expirations” and represents only the unvested portion of the surrendered stock option. We amortize the fair value of stock options using the straight-line method over the vesting period of the options, generally a period of three years for employees and immediate vesting for directors.

We recorded stock compensation expense in 2012 of $1.0 million (2011 - $0.6 million).

Share purchase warrant valuation / The valuation of share purchase warrants is a critical accounting estimate due to the value of liabilities recorded and the many assumptions that are required to be made to calculate the liability.

We classify warrants in our consolidated balance sheet as liabilities and revalue them at each balance sheet date. Any change in valuation is recorded in our statement of operations. We use the Black-Scholes pricing model to value the warrants. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment. A small change in the estimates used may cause a relatively large change in the estimated valuation. For the purpose of valuing warrants, the estimated volatility of our common stock at the date of issuance, and at each subsequent reporting period, is based upon observations of warrants in the market with similar characteristics and expected remaining lives. The risk-free interest rate is based on the zero-coupon rate for bonds with a maturity similar to the expected remaining life of the warrants at the valuation date. The expected life of the warrants is assumed to be equivalent to their remaining contractual term.

We recorded a loss for the change in fair value of warrant liability in 2012 of $3.8 million (2011 – income of $0.6 million).

RECENT ACCOUNTING PRONOUNCEMENTS

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (FASB) or other standard setting bodies that we adopt as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

In December 2011, the FASB issued ASU 2011-11, Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities. This newly issued accounting standard requires an entity to disclose both gross and net information about instruments and transactions eligible for offset in the statement of financial position as well as instruments and transactions executed under a master netting or similar arrangement and was issued to enable users of financial statements to understand the effects or potential effects of those arrangements on its financial position. This ASU is required to be applied retrospectively and is effective for fiscal years, and interim periods within those years, beginning on or after January 1, 2013. As this accounting standard only requires enhanced disclosure, the adoption of this standard is not expected to have an impact on our financial position or results of operations.

In June 2011, the FASB issued ASU No. 2011-05, Comprehensive Income (Topic 220): Presentation of Comprehensive Income. This newly issued accounting standard (1) eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity; (2) requires the consecutive presentation of the statement of net income and other comprehensive income; and (3) requires an entity to present reclassification adjustments on the face of the financial statements from other comprehensive income to net income. The amendments in this ASU do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income nor do the amendments affect how earnings per share is calculated or presented. In December 2011, the FASB issued ASU No. 2011-12, Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05, which defers the requirement within ASU 2011-05 to present on the face of the financial statements the effects of reclassifications out of accumulated other comprehensive income on the components of net income and other comprehensive income for all periods presented. During the deferral, entities should continue to report reclassifications out of accumulated other comprehensive income consistent with the presentation requirements in effect prior to the issuance of ASU 2011-05. These ASUs are required to be applied retrospectively and are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011, which for Tekmira means January 1, 2012. Adoption of the pronouncement did not have a material impact on our financial statements.

In February 2013, the FASB issued amendments to the accounting guidance for presentation of comprehensive income to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendments do not change the current requirements for reporting net income or other comprehensive income, but do require an entity to provide information about the amounts reclassified out of accumulated other comprehensive income by component. In addition, an entity is required to present, either on the face of the statement where the net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income but only if the amount reclassified is required under GAAP to be reclassified to net income in its entirety in the same reporting period. For other amounts that are not required under GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under GAAP that provide additional detail about these amounts. For public companies, these amendments are effective prospectively for reporting periods beginning after December 15, 2012. We do not believe the adoption of this guidance will have a material impact on our consolidated financial statements.

In May 2011, the FASB issued ASU No. 2011-04, Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs. This newly issued accounting standard clarifies the application of certain existing fair value measurement guidance and expands the disclosures for fair value measurements that are estimated using significant unobservable (Level 3) inputs. This ASU is effective on a prospective basis for annual and interim reporting periods beginning on or after December 15, 2011, which for Tekmira means January 1, 2012. Adoption of the pronouncement did not have a material impact on our financial statements.

5A. Operating Results

Year ended December 31, 2012 compared to the year ended December 31, 2011

For the fiscal year ended December 31, 2012, our net income was $29.8 million ($2.17 basic income per common share, $2.08 diluted income per common share) as compared to a net loss of $9.9 million ($0.88 basic and fully diluted loss per common share) for 2011.

Revenue / Revenue is detailed in the following table:

(in millions Cdn$)	**2012**	2011
Collaborations and contracts		
U.S. Government	**$11.5**	$11.4
Alnylam	**—**	4.1
BMS	**0.4**	0.4
Other RNAi collaborators	**0.1**	0.1
Total collaborations and contracts	**12.1**	16.1
Alnylam milestone payments	**1.0**	0.5
Talon milestone payment	**1.0**	—
Total revenue	**$14.1**	$16.6

U.S. Government revenue / On July 14, 2010, we signed a contract with the United States Government to advance an RNAi therapeutic utilizing our LNP technology to treat Ebola virus infection - see Item 4B. *"Business Overview."* The initial phase of the contract, which is funded under a Transformational Medical Technologies program, is budgeted at US$34.7 million. This initial funding is for the development of TKM-Ebola including completion of preclinical development, filing an IND application with the FDA and completing a Phase 1 human safety clinical trial.

Under the contract, we are being reimbursed for costs incurred, including an allocation of overheads, and we are being paid an incentive fee.

On August 6, 2012, we announced that we had received a temporary stop-work order from the U.S. Government in respect of our TKM-Ebola contract. On October 2, 2012, we announced that the stop-work order had been lifted and we have now resumed work.

In November 2012, we submitted a modification request to the existing contract to the U.S. Government in order to integrate recent advancements in LNP formulation and manufacturing technology in the TKM-Ebola development program.

Alnylam revenue / Under the previous Alnylam Manufacturing Agreement, we were the exclusive manufacturer of any products required by Alnylam that utilize our technology through to the end of Phase 2 clinical trials. Under the Agreement there was a contractual minimum payment for the provision of staff in each of the three years from 2009 to 2011 and Alnylam was reimbursing us for any external costs incurred. As discussed earlier, the Alnylam Manufacturing Agreement was replaced by a new licensing agreement as part of the settlement of the litigation between Tekmira and Alnylam, and we are no longer manufacturing for Alnylam.

In Q2 2012 we earned a US$1.0 million milestone from Alnylam following their initiation of a Phase 2 human clinical trial for their product candidate ALN-TTR02. ALN-TTR02 utilizes our LNP technology. In Q3 2011 we recorded a US$0.5 million milestone payment from Alnylam following their initiation of a Phase 1 human clinical trial for a product enabled by our LNP delivery technology.

BMS revenue / In May 2010 we signed a formulation agreement with BMS under which BMS paid us $3.2 million (US$3.0 million) to make a certain number of LNP formulations over the following four year period. The agreement was subsequently expanded to include a previous commitment worth $0.1 million and for the manufacture of formulations for extra-hepatic studies being conducted by BMS.

Other RNAi collaborators revenue / We have active research agreements with a number of other RNAi collaborators.

Talon revenue / In Q3 2012, we earned a $1.0 million (US$1.0 million) milestone payment from Talon based on the FDA approval of Marqibo and will receive royalty payments based on Marqibo's commercial sales.

Revenue guidance for 2013 / Total revenues for 2013 are expected to increase over 2012 and to be in the range of $20.0 to $25.0 million. This is based primarily on continued contract revenue from the U.S. Government and US$10.0 million in milestone payments expected from Alnylam.

Expenses / Research, development, collaborations and contracts / Research, development, collaborations and contracts expenses were $18.0 million in 2012 as compared to $19.9 million in 2011.

For reasons discussed in the revenue section above, third-party expenses on our TKM-Ebola program and our Alnylam collaboration were lower in 2012 as compared to 2011.

Spending on our internal earlier-stage research programs was reduced as we focused on TKM-Ebola, TKM-PLK1 and the litigation against Alnylam and AlCana.

We incurred $2.5 million in technology in-licensing expenses in 2012 as compared to $0.1 million in 2011. In addition to $0.9 million paid out for licensing in 2012 we have accrued $1.6 million for fees that we were committed to paying as at the end of 2012.

Compensation expenses are at a similar level in 2012 as compared to 2011. There was a reduction in workforce of 15 employees in June 2011 and a further reduction in workforce in January 2012 of 16 employees. However, the reduced number of employees was offset by bonus payouts in Q4 2012. There were no bonuses paid in 2011.

A significant portion of our research, development, collaborations and contracts expenses are not tracked by project as they benefit multiple projects or our technology platform and because our most-advanced programs are not yet in late-stage

clinical development. However, our collaboration agreements contain cost-sharing arrangements pursuant to which certain costs incurred under the project are reimbursed. Costs reimbursed under collaborations typically include certain direct external costs and hourly or full-time equivalent labor rates for the actual time worked on the project. In addition, we have been reimbursed under government contracts for certain allowable costs including direct internal and external costs. As a result, although a significant portion of our research, development, collaborations and contracts expenses are not tracked on a project-by-project basis, we do track direct external costs attributable to, and the actual time our employees worked on, our collaborations and government contracts.

Research, development, collaborations and contracts expenses guidance for 2013 / Total research, development, collaborations and contracts expenses are expected to increase to $24.0 to $29.0 million in 2013. TKM-PLK1 is expected to enter Phase 2 human clinical trials later in 2013. We will continue to incur costs developing TKM-Ebola (although these costs will be funded by revenue earned from the U.S. Government) and we are working toward nominating our next product candidate in 2013. Also, we expect our workforce to grow in support of our expanded product pipeline.

General and administrative / General and administrative expenses were $8.1 million in 2012 as compared to $6.3 million in 2011. The increase in 2012 relates to legal fees incurred in respect of our lawsuit with Alnylam and AlCana (excluding Licensing settlement legal fees that have been recorded as other losses) and bonus payouts in Q4 2012; there were no bonuses paid in 2011.

General and administrative expenses guidance for 2013 / Total general and administrative expenses are expected to decrease to $3.0 to $5.0 million in 2013.

Depreciation of property and equipment / Depreciation of property and equipment was $0.9 million in 2012 as compared to $1.0 million in 2011.

Other income (losses) / Licensing settlement payment / In November 2012 we received $65.0 million (US$65.0 million) in cash from Alnylam as a result of signing a new license agreement - see Item 4B. *"Business Overview"*.

Other income (losses) / Licensing settlement legal fees / In connection with the licensing settlement payment of $65.0 million, in December 2012, we paid our lead legal counsel $18.7 million in contingent legal fees - see Item 4B. *"Business Overview"*.

Change in fair value of warrant liability / In conjunction with equity and debt financing transactions in 2011 and an equity private placement that closed on February 29, 2012, we have issued warrants to purchase our common share. We are accounting for the warrants under the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. At each balance sheet date the warrants are revalued using the Black-Scholes model and the change in value is recorded in the consolidated statement of operations and comprehensive income (loss).

The aggregate increase in value of our common share purchase warrants outstanding at December 31, 2012 was $3.8 million as compared to a decrease in the value of common share purchase warrants outstanding at the end of 2011 of $0.6 million. The increase in value in 2012 is a result of an increase in the Company's share price from the previous balance sheet date of December 31, 2011.

We expect to see future changes in the fair value of our warrant liability and these changes will largely depend on the change in the Company's share price, any change in our assumed rate of share price volatility, our assumptions for the expected lives of the warrants and warrant issuances or exercises.

Year ended December 31, 2011 compared to the year ended December 31, 2010

For the fiscal year ended December 31, 2011, our net loss was $9.9 million ($0.88 per common share) as compared to a net loss of $12.4 million ($1.20 per common share) for 2010.

Revenue / Revenue is detailed in the following table:

(in millions Cdn$)	**2011**	2010
Collaborations and contracts		
U.S. Government	**$11.4**	$ 3.6
Alnylam	**4.1**	$ 6.3
Roche	**—**	4.5
BMS	**0.4**	0.2
Other RNAi collaborators	**0.1**	0.4
Total collaborations and contracts	16.1	14.9
Alnylam milestone payments	**0.5**	0.5
Talon license amendment payment	**—**	5.9
Total revenue	**$16.6**	$21.4

U.S. Government revenue / On July 14, 2010, we signed a contract with the United States Government to advance an RNAi therapeutic utilizing our LNP technology to treat Ebola virus infection - see Item 4B. *"Business Overview"*. The initial phase of the contract, which is funded under a Transformational Medical Technologies program, is budgeted at US$34.7 million. This initial funding is for the development of TKM-Ebola including completion of preclinical development, filing an IND application with the FDA and completing a Phase 1 human safety clinical trial.

Under the contract we are being reimbursed for costs incurred, including an allocation of overheads, and we are being paid an incentive fee.

Alnylam revenue / Under the previous Alnylam Manufacturing Agreement, we were the exclusive manufacturer of any products required by Alnylam that utilize our technology through to the end of Phase 2 clinical trials. Under the Agreement there was a contractual minimum payment for the provision of staff in each of the three years from 2009 to 2011 and Alnylam was reimbursing us for any external costs incurred. As discussed earlier, the Alnylam Manufacturing Agreement was replaced by a new licensing agreement as part of the settlement of the litigation between Tekmira and Alnylam, and we are no longer manufacturing for Alnylam.

In Q3 2010 and in Q3 2011 we recorded US$0.5 million milestone payments from Alnylam following their initiation of Phase 1 human clinical trials for two separate products enabled by our LNP delivery technology.

Roche revenue / Under the Roche Product Development Agreement dated May 2009 Roche was paying us for the provision of staff and for certain external costs incurred. In November 2010, Roche announced that, as part of a corporate restructuring, they intend to discontinue research and development in the field of RNAi. Following the announcement, Roche confirmed that, except for completing some product stability studies, they would be discontinuing product development with Tekmira. As at December 31, 2010, we retained a deferred revenue balance of $0.04 million to cover a small amount of stability study work to be completed for Roche and the rest of Roche deferred revenue was brought into income in 2010. The stability studies were completed in Q4 2011 so we now have no further obligation to Roche under this agreement.

BMS revenue / In May 2010 we signed a formulation agreement with BMS under which BMS paid us $3.2 million (US$3.0 million) to make a certain number of LNP formulations over the following four year period. The agreement was subsequently expanded to include a previous commitment worth $0.1 million and for the manufacture of formulations for extra-hepatic studies being conducted by BMS.

Other RNAi collaborators revenue / We have active research agreements with a number of other RNAi collaborators.

License amendment payment / On September 20, 2010, the license agreement with Talon was amended such that Talon paid $5.9 million (US$5.75 million) in consideration for reducing certain future payments associated with the product candidates. The payment of $5.9 million from Talon has been paid on to contingent creditors in full settlement of a contingent obligation and we included this in our 2010 other income (losses) as loss on purchase and settlement of exchangeable and development notes. Following the license agreement amendment we are eligible to receive milestone payments from Talon of up to US$19.0 million upon achievement of further development and regulatory milestones, of which US$1.0 million was received in 2012, and we are also eligible to receive single-digit royalties on product sales. If Talon sublicenses any of the product candidates, Tekmira is eligible to receive a percentage of any upfront fees or milestone payments received by Talon. We will retain any future milestones or royalties received from Talon as we no longer have an obligation to pay these on to any third parties.

Expenses / Research, development, collaborations and contracts / Research, development, collaborations and contracts expenses were $19.9 million in 2011 as compared to $22.1 million in 2010.

In Q3 2010 we signed a contract with the U.S. Government to develop TKM-Ebola and have since been incurring significant program costs such as materials and preclinical studies that have been included in research, development, collaborations and contracts expenses. These costs are being reimbursed by the U.S. Government who is also paying for TKM-Ebola related labour costs and overheads and an incentive fee.

The initiation of the TKM-Ebola contract added significant collaborations and contracts expenses. However, third party expenses on the Alnylam and Roche contracts were lower in 2011 as compared to 2010.

For our internal programs, spending was lower in 2011 than in 2010. Spending on TKM-PLK1 has increased in 2011 as we moved into a phase 1 clinical trial but TKM-ApoB spending has been minimal since mid-2010 when we decided to evaluate new formulations for potential TKM-ApoB development.

Compensation included in research, development, collaborations and contracts expenses was slightly higher in 2011 as compared to 2010. In June 2011 there was a reduction in workforce of 15 employees.

General and administrative / General and administrative expenses were $6.3 million in 2011 as compared to $4.8 million in 2010. The increase in 2011 largely relates to legal fees incurred in respect of our lawsuit with Alnylam and AlCana - see Item 4B. *"Business Overview"*.

Depreciation of property and equipment / Depreciation of property and equipment was $1.0 million in 2011 and $1.0 million in 2010.

Other income (losses) / Change in fair value of warrant liability / On June 16, 2011 we completed a public offering of 1,789,900 units at a price of $2.85 each for total proceeds, before expenses, of $5.1 million. Each unit consists of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to acquire one common share at a price of $3.35. The warrants have a five-year term.

We recorded a Black-Scholes value, upon issuance, of $0.74 million. At December 31, 2011 we calculated a Black-Scholes value for the warrants of $0.17 million and therefore recorded income of $0.57 million in 2011.

In addition, in part payment for establishing a loan facility, we have provided Silicon Valley Bank with 54,545 warrants with an exercise price of $1.65 and an expiration date of December 21, 2018. On the date of issuance, the Black-Scholes aggregate value of the 54,545 warrants was $0.04 million and is based on an assumed risk-free interest rate of 1.48%, volatility of 40%, a zero dividend yield and an expected life of 7 years. At December 31, 2011, the Black-Scholes value of the warrants was unchanged.

5B. Liquidity and Capital Resources

Since our incorporation, we have financed our operations through the sales of shares, units, debt, revenues from research and development collaborations and licenses with corporate partners, interest income on funds available for investment, and government contracts, grants and tax credits.

At December 31, 2012, we had cash and cash equivalents of approximately $46.8 million as compared to $9.2 million at December 31, 2011.

Operating activities provided $33.1 million in cash in 2012 as compared to $7.7 million of cash used in 2011. The positive operating cash flow was largely the result of the settlement reached with Alnylam which was recorded as “other income”.

Investing activities used $0.01 million in 2012 as compared to $0.1 million in 2011. Equipment we acquire under our TKM-Ebola contract is owned by the U.S. Government and is not recorded as a Company investment. We plan to invest approximately $1.0 million in property and equipment in 2013 to, amongst other things, upgrade our information technology systems and to support the scale-up of our manufacturing capabilities for TKM-PLK1.

In June 2011 we raised net proceeds of $4.5 million from the issuance of common shares and warrants. As planned, we used these proceeds for working capital and general corporate purposes, including, progressing our research and development programs, including our various collaborative arrangements, as well as advancing and protecting our LNP technology, including the lawsuit against Alnylam and AlCana.

On February 29, 2012, we completed a private placement of 1,848,601 units for gross proceeds of $4.1 million. Each unit, priced at $2.20, consists of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to acquire one common share at a price of $2.60 for a period of five years from closing. The common shares issued pursuant to the private placement were subject to a four-month hold period that expired on June 30, 2012. After financing costs and commissions, the offering generated net cash of $3.8 million. As planned, we used these proceeds for working capital and general corporate purposes, including, progressing our research and development programs, including our various collaborative arrangements, as well as advancing and protecting our LNP technology, including the lawsuit against Alnylam and AlCana.

In December 2011, we secured a US$3.0 million term loan facility from Silicon Valley Bank (SVB). In September 2012 SVB agreed to extend the latest draw down date to December 31, 2012. If the loan was used it would have matured on September 1, 2015 and would have carried a fixed interest rate of 8% annually. We did not draw down on the loan facility which, has now expired.

In January 2013 we filed a shelf prospectus in Canada and the United States. The shelf prospectus allows us to raise up to US$50.0 million through the sale of common shares and warrants during a 25 month period. Unless otherwise specified in a subsequent supplement to our shelf prospectus, the net proceeds that we receive from the issue of our securities will be used for working capital and general corporate purposes, including, but not limited to, progressing our research and development programs, supporting our clinical programs and manufacturing activities, and advancing and protecting our LNP technology.

We believe our current funds on hand, plus expected income, including payments from our current licensees, collaborative partners and the U.S. Government will be sufficient to continue our product development into 2015 – see Item 3D. “*Risk Factors*.” Based on assumptions discussed in the revenue and expense guidance above, we expect to have an aggregate balance of cash and cash equivalents and short-term investments of greater than $35.0 million at the end of 2013.

Financial Instruments

We are exposed to market risk related to changes in interest and foreign currency exchange rates, each of which could adversely affect the value of our assets and liabilities. We invest our cash reserves in a high interest savings account and in bankers’ acceptances with varying terms to maturity (not exceeding two years) issued by major Canadian banks, selected with regard to the expected timing of expenditures for continuing operations and prevailing interest rates. Investments with a maturity greater than three months are classified in our Balance Sheet as held-for-trading short-term investments and are

recorded at cost plus accrued interest. The fair value of our cash investments as at December 31, 2012 is at least equal to the face value of those investments and the value reported in our Balance Sheet. Due to the relatively short-term nature of the investments that we hold, we do not believe that the results of operations or cash flows would be affected to any significant degree by a sudden change in market interest rates relative to our investment portfolio. We purchase goods and services in both Canadian and U.S. dollars and earn a significant portion of our revenues in U.S. dollars. We manage our U.S. dollar currency risk by using cash received from U.S. dollar revenues to pay U.S. dollar expenses and by limiting holdings of U.S. dollar cash and cash equivalent balances to working capital levels. We used a forward exchange contract to convert US$45,000,000 into Canadian dollars in November 2012. We have not entered into any other agreements or purchased any instruments to hedge possible currency risks at this time.

Material Commitments for Capital Expenditures

As at the date of this Annual Report we do not have any material commitments for capital expenditure. We do, however, plan to invest approximately $0.9 million in property and equipment in 2013 to, amongst other things, upgrade our information technology systems and to support the scale-up of our manufacturing capabilities for TKM-PLK1.

5C. Research and Development, Patents and Licenses

Cost associated with our research, development, patents and licenses are discussed in Item 5.A. "*Operating Results*" and Item 4B. "*Business Overview.*"

5D. Trend Information

The following table presents our unaudited quarterly results of operations for each of our last eight quarters. These data have been derived from our unaudited condensed consolidated financial statements, which were prepared on the same basis as our annual audited financial statements and, in our opinion, include all adjustments necessary, consisting solely of normal recurring adjustments, for the fair presentation of such information.

	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012
Revenue								
Collaborations and contracts:								
U.S. Government	$ 3.4	$ 3.3	$ 2.0	$ 2.8	$ 3.5	$ 2.5	$ 1.9	$ 3.6
Alnylam	0.9	1.0	1.5	0.7	—	—	—	—
Other	—	0.1	0.2	0.2	0.1	0.1	0.1	0.3
	4.3	4.4	3.7	3.7	3.6	2.6	2.0	3.9
Alnylam milestone payments	—	—	0.5	—	—	1.0	—	—
Talon milestone payment	—	—	—	—	—	—	1.0	—
Total revenue	**4.3**	**4.4**	**4.2**	**3.7**	**3.6**	**3.6**	**3.0**	**3.9**
Expenses	(7.4)	(8.0)	(5.8)	(5.9)	(6.2)	(6.2)	(4.8)	(9.8)
Other income (losses)	—	0.1	0.2	0.3	(0.5)	0.7	(1.6)	44.2
Net (loss) income	**(3.1)**	**(3.5)**	**(1.5)**	**(1.8)**	**(3.2)**	**(1.9)**	**(3.4)**	**38.3**
Basic net (loss) income per share	**$(0.30)**	**$(0.33)**	**$(0.12)**	**$(0.15)**	**$(0.25)**	**$(0.14)**	**$(0.25)**	**$2.72**
Diluted net (loss) income per share	**$(0.30)**	**$(0.33)**	**$(0.12)**	**$(0.15)**	**$(0.25)**	**$(0.14)**	**$(0.25)**	**$2.51**

Quarterly Trends / Our revenue is derived from research and development collaborations and contracts, licensing fees and milestone payments. Over the past two years, our principal sources of ongoing revenue have been our Alnylam partnership entered into in March 2006 and our contract with the U.S. Government to advance TKM-Ebola which began in July 2010.

In January 2009 we signed a Manufacturing Agreement with Alnylam, which has subsequently been replaced by a new licensing agreement signed in November 2012, and under the new license agreement we are no longer manufacturing for Alnylam. Revenue from the previous Alnylam Manufacturing Agreement was higher than usual in Q3 2011 when deferred revenue related to minimum FTE payments was recognized based on our estimate of percentage of completion of the annual commitment.

In Q3 2010 we signed a contract with the U.S. Government to develop TKM-Ebola and have since incurred significant program costs related to equipment, materials and preclinical and clinical studies. These costs are included in our research, development, collaborations and contracts expenses. These third-party costs are being reimbursed by the U.S. Government so they are also recorded as revenue. U.S. Government revenue from the TKM-Ebola program also includes labour, overheads

and incentive fee charges. Third-party costs were lower in Q3 2011 as we focused on preparing to file the IND for TKM-Ebola. Costs were higher in Q1 2012 as our Phase 1 clinical trial for TKM-Ebola was initiated during the quarter. Also in Q1 2012, we began to acquire materials for continued work on scaling up our TKM-Ebola drug product manufacturing process. Revenues were lower in Q3 2012 due to a temporary stop-work order issued by the U.S. Government in August 2012. The stop-work order was subsequently lifted on October 2, 2012 and the contract has resumed.

In Q3 2011 we earned a $0.5 million milestone from Alnylam following their initiation of a Phase 1 human clinical trial enabled by our LNP delivery technology. In Q2 2012 we earned a $1.0 million milestone from Alnylam following their initiation of a Phase 2 human clinical trial enabled by our LNP delivery technology.

In Q3 2012 we earned a $1.0 million milestone from Talon when they received accelerated approval for Marqibo® from the U.S. Food and Drug Administration (FDA). We are eligible to receive royalty payments based on Marqibo's commercial sales.

We expect revenue to continue to fluctuate particularly due to the development stage of the TKM-Ebola contract and the irregular nature of licensing payments and milestone receipts.

Our Q3 2011 lower expenses and net loss are a result of an unusually high proportion of revenue being generated from the reimbursement of staff time and overheads through the TKM-Ebola contract. Staff time and overhead revenue has a greater impact on reducing our losses than third party research and development cost reimbursement. The increase in loss in Q1 2012, as compared to Q4 2011, is largely due to the reduction in Alnylam revenue in Q1 2012 and an increase in the fair value of our outstanding warrants in Q1 2012 as a result of our increasing share price. The increase in loss in Q3 2012 is largely due to the $1.7 million increase in the fair value of our warrant liability which is caused by an increase in our share price over the previous quarter end.

Fourth quarter of 2012 / Our Q4 2012 net income was $38.3 million ($2.72 basic income per common share, $2.51 diluted income per common share) as compared to a net loss of $1.8 million ($0.15 basic loss per common share, $0.15 diluted income per common share) for Q4 2011.

Revenue increased to $3.9 million in Q4 2012 as compared to $3.7 million in Q4 2011. The loss of Alnylam revenue was replaced with U.S. Government revenue. Also, U.S. Government revenue was unusually high in Q4 2012 due to an increase in our overhead rates. As described in the critical accounting policies section of this discussion, we estimate the labor and overhead rates to be charged under our TKM-Ebola contract and update these rate estimates throughout the year. In Q4 2012, we incurred unforecasted expenses, including staff bonuses. These unforecasted expenses led to an increase in our TKM-Ebola contract overhead rates and, therefore, an increase in our revenue under the contract.

Research, development, collaborations and contracts expenses increased to $7.2 million in Q4 2012 as compared to $3.7 million in Q4 2011. In Q4 2012 we paid out staff bonuses; there were no bonuses paid in 2011. In Q4 2012 we recorded $2.5 million in license fee charges related to AlCana, Marina and Halo-Bio - see Item 4B. *Business Overview.* The license fees recorded in Q4 2012 include $1.6 million in accruals for fees that we were committed to paying as at the end of 2012.

General and administrative expenses increased to $21.0 million in Q4 2012 from $2.0 million in Q4 2011. The increase primarily relates to legal fee success payments incurred in respect of our lawsuit against Alnylam and AlCana that was settled in the quarter (see Overview for further discussion of the lawsuit).

Other income in Q4 2012 is primarily $65.0 million received under the new Alnylam license agreement net of related contingent legal fees of $18.7 million paid to our lead litigation counsel - see Item 4B. *Business Overview*.

5E. Off-Balance Sheet Arrangements

Protiva promissory notes / On March 25, 2008, our subsidiary, Protiva, declared a dividend totaling US$12.0 million. The dividend was paid by issuing promissory notes on May 23, 2008. Recourse for payment of the promissory notes will be limited to our receipt, if any, of up to US$12.0 million in payments from a third party. We will pay these funds, if and when we receive them, to the former Protiva shareholders in satisfaction of the promissory notes. As contingent obligations that would not need to be funded by the Company, the US$12.0 million receivable and the related promissory notes payable are not included in our consolidated balance sheet.

5F. Tabular Disclosure of Contractual Obligations

The following table summarises our contractual obligations at December 31, 2012:

(in millions Cdn$)	Payments Due by Period				
	Total	Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Contractual Obligations					
Facility lease	2.0	1.3	0.7	—	—
Technology license obligations[1]	2.0	2.0	—	—	—
Total contractual obligations	4.0	3.3	0.7	—	—

[1] Relates to our expected fixed payment obligations under in-license agreements.

We in-license technology from a number of sources. Pursuant to these in-license agreements, we will be required to make additional payments if and when we achieve specified development, regulatory, financial and commercialization milestones. To the extent we are unable to reasonably predict the likelihood, timing or amount of such payments, we have excluded them from the table above. Our technology in-licenses are further described in Item 4B. *"Business Overview"*.

We also have contracts and collaborative arrangements that require us to undertake certain research and development work as further explained elsewhere in this discussion. It is not practicable to estimate the amount of these obligations.

ITEM 6 DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

6A. Directors and Management

The following table sets forth information relating to our directors and executives as at the date of this Annual Report:

Name[(1)]	Residence	Position
Michael J. Abrams[(3)]	Custer, Washington, U.S.A.	Director
Kenneth Galbraith[(2)(4)]	Surrey, British Columbia, Canada	Director
Donald G. Jewell[(2)(3)]	West Vancouver, British Columbia, Canada	Director
Frank Karbe[(2)]	Mill Valley, California, U.S.A.	Director
Daniel Kisner[(3)(4)]	Rancho Santa Fe, California, U.S.A.	Director (Chairman)
Mark J. Murray	Seattle, Washington, U.S.A.	President, Chief Executive Officer and Director
Ian C. Mortimer	North Vancouver, British Columbia, Canada	Executive Vice President, Finance and Chief Financial Officer
Ian MacLachlan	Mission, British Columbia, Canada	Executive Vice President and Chief Scientific Officer
Peter Lutwyche	Vancouver, British Columbia, Canada	Senior Vice President, Pharmaceutical Development
Paul Brennan	White Rock, British Columbia, Canada	Senior Vice President, Business Development
Diane Gardiner	Surrey, British Columbia, Canada	Vice President, Human Resources
R. Hector MacKay-Dunn, Q.C.	Vancouver, British Columbia, Canada	Corporate Secretary

Notes:

(1) Neither age nor date of birth of directors or senior managers is required to be reported in our home country (Canada) nor otherwise publicly disclosed.
(2) Member of Audit Committee.
(3) Member of Executive Compensation and Human Resources Committee.
(4) Member of Corporate Governance and Nominating Committee.

To the knowledge of management, no director is, at the date hereof, or has been, within ten years before the date hereof, a director, chief executive officer or chief financial officer of any company that: (i) was subject to a cease trade order or similar order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director was acting in the capacity as director, chief executive officer or chief financial officer; or (ii) was subject to a cease trade or similar order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

Other than as disclosed below, to the knowledge of management, no director or a holding company of such director: (i) is, as at the date hereof, or has been within ten years before the date hereof, a director or executive officer of any company

that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (ii) has, within the ten years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold assets of the director. Certain of the investee companies that Dr. Daniel Kisner served on the board of directors in Dr. Kisner's capacity as representative of Aberdare Ventures became bankrupt, made a proposal under legislation relating to bankruptcy or insolvency or were subject to or instituted proceedings, arrangements or compromises with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

Other than as disclosed below, to the knowledge of management, no director or a holding company of such director has been subject to: (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable security holder in deciding whether to vote for a director.

Mark J. Murray, Ph.D., President, Chief Executive Officer and Director. Dr. Murray has served as our President, Chief Executive Officer and Director since May 2008, when Dr. Murray joined Tekmira in connection with the closing of the business combination between Tekmira and Protiva. He previously was the President and CEO and founder of Protiva since its inception in the summer of 2000. Dr. Murray has over 20 years of experience in both the R&D and business development and management facets of the biotechnology industry. Dr. Murray has held senior management positions at ZymoGenetics and Xcyte Therapies prior to joining Protiva. Since entering the biotechnology industry Dr. Murray has successfully completed numerous and varied partnering deals, directed successful product development programs, been responsible for strategic planning programs, raised over $30 million in venture capital and executed extensive business development initiatives in the U.S., Europe and Asia. During his R&D career, Dr. Murray worked extensively on three programs that resulted in FDA approved drugs, including the first growth factor protein approved for human use, a program he led for several years following his discovery. Dr. Murray obtained his Ph.D. in Biochemistry from the University of Oregon Health Sciences University and was a Damon Runyon-Walter Winchell post-doctoral research fellow for three years at the Massachusetts Institute of Technology.

Daniel Kisner, M.D., Chairman and Director. Dr. Kisner has served as the Chairman of our Board since January 2010. Dr. Kisner is currently an independent consultant. From 2003 until December 2010, Dr. Kisner was a Partner at Aberdare Ventures. Prior to Aberdare, Dr. Kisner served as President and CEO of Caliper Technologies, a leader in microfluidic lab-on-a-chip technology. He led Caliper from a technology-focused start up to a publicly traded, commercially oriented organization. Prior to Caliper, he was President and COO of Isis Pharmaceuticals, Inc. Previously, Dr. Kisner was Division VP of Pharmaceutical Development for Abbott Laboratories and VP of Clinical Research and Development at SmithKline Beckman Pharmaceuticals. In addition, he held a tenured position in the Division of Oncology at the University of Texas, San Antonio School of Medicine and is certified by the American Board of Internal Medicine in Internal Medicine and Medical Oncology. Dr. Kisner holds a B.A. from Rutgers University and an M.D. from Georgetown University.

Michael J. Abrams, Ph.D., Director. Dr. Abrams has served as our Director since May 2008. Dr. Abrams has been active in the research, discovery and development of pharmaceuticals for over 20 years. In 1984, Dr. Abrams joined Johnson Matthey plc and in 1991 was promoted to Manager, Biomedical Research, worldwide for Johnson Matthey. In June 1996, Dr. Abrams initiated the Canadian venture-backed financing of AnorMED Inc. He is an inventor on the patents that led to the development of the Lantheus technetium-99m heart imaging agent, Cardiolite®, and is a co-inventor on several products currently in clinical trials. He is also a named inventor on an additional 15 patents and has authored over 60 scientific articles. Dr. Abrams served as CEO and a director of AnorMED Inc. until May 2006 and as a director of Migenix Inc. until August 2008. Dr. Abrams served as President and CEO of Inimex Pharmaceuticals from 2009 to 2011 and is currently VP of R&D and Chief Innovation Officer for CDRD Ventures, Inc.

Kenneth Galbraith, C.A., Director. Mr. Galbraith has served as our Director since January 2010. Mr. Galbraith is currently a General Partner at Ventures West. He joined Ventures West in 2007 and leads the firm's biotechnology practice. Prior to joining Ventures West, Mr. Galbraith was Chairman and Interim CEO of AnorMED, a biopharmaceutical company focused on new therapeutic products in hematology, HIV and oncology, until its sale to Genzyme Corp. in a cash transaction worth almost US$600 million. Previously, Mr. Galbraith spent 13 years in senior management with QLT Inc., a global biopharmaceutical company specializing in developing treatments for eye diseases, retiring in 2000 from his position as Executive VP and CFO. Mr. Galbraith was a founding Director of the BC Biotechnology Alliance and served as Chairman of the Canadian Bacterial Diseases Network, one of Canada's federally-funded Networks for Centers of Excellence (NCE). He was also a Director of the Michael Smith Foundation for Health Research and the Fraser Health Authority. He currently serves on the Board of Directors of a number of private biotechnology companies as well as the Vancouver Aquarium Marine Science Centre, one of the world's leading aquariums and Genome BC and has previously served on the Board of Directors of a number of NASDAQ-listed biotechnology companies, including Cardiome Pharma and Angiotech Pharmaceuticals. Mr. Galbraith earned a Bachelor of Commerce (Honours) degree from the University of British Columbia and is a Chartered Accountant.

Donald G. Jewell, C.A., Director. Mr. Jewell has served as our Director since May 2008. Mr. Jewell is a Chartered Accountant with over 30 years of business experience. Mr. Jewell spent 20 years with KPMG and at the time of his departure, he was the managing partner in charge of KPMG's management consulting practice in British Columbia. Until March 2010, Mr. Jewell was Chairman of Cal Investments Limited, a London based hedge fund. Mr. Jewell is currently the managing director of a private Canadian holding company; Trustee of a two substantial Canadian private trusts; and on the Board of the trusts' major operating companies. He is also on the Board of Directors of Lantic Inc.

Frank Karbe, Director. Mr. Karbe has served as our Director since January 2010. Mr. Karbe is currently the Executive Vice President and Chief Financial Officer of Exelixis, Inc., a NASDAQ-listed biotechnology company. Prior to joining Exelixis in 2004, Mr. Karbe worked as an investment banker for Goldman Sachs & Co., where he served most recently as Vice President in the healthcare group focusing on corporate finance and mergers and acquisitions in the biotechnology industry. Prior to joining Goldman Sachs in 1997, Mr. Karbe held various positions in the finance department of The Royal Dutch/Shell Group in Europe. Mr. Karbe holds a Diplom-Kaufmann from the WHU—Otto Beisheim Graduate School of Management, Koblenz, Germany (equivalent to a U.S. Masters of Business Administration).

Ian C. Mortimer, M.B.A., Executive Vice President, Finance and Chief Financial Officer. Mr. Mortimer has served as our Executive Vice President, Finance, and Chief Financial Officer since May 2008 and Senior Vice President, Finance, and Chief Financial Officer since April 2007. Mr. Mortimer became the Chief Financial Officer of Tekmira after its spin-out from Inex Pharmaceuticals Corporation in 2007 and has responsibilities for Finance and Investor Relations. From 2004 to 2007, Mr. Mortimer was Chief Financial Officer of Inex. From 1997 to 2004, Mr. Mortimer held positions of increasing responsibility at Inex including leading Inex's investor relations efforts and evaluation of product in-licensing opportunities. He has a B.Sc. in Microbiology from the University of British Columbia, an M.B.A. from Queen's University and is a Certified Management Accountant.

Ian MacLachlan, Ph.D., Executive Vice President, Chief Scientific Officer. Dr. MacLachlan has served as our Executive Vice President and Chief Scientific Officer since May 2008, when Dr. MacLachlan joined Tekmira in connection with the closing of the business combination between Tekmira and Protiva. Dr. MacLachlan was a founder of Protiva in 2000 and led Protiva's R&D program since the company's inception. A graduate of the University of Alberta, where he received both his B.Sc. and Ph.D. in Biochemistry, Dr. MacLachlan spent two years at the Vienna Bio-Center where some of the first experiments in systemic gene delivery were performed. Following this, Dr. MacLachlan conducted postdoctoral research at the Howard Hughes Medical Institute at the University of Michigan in the laboratory of Dr. Gary Nabel, a pioneer in the development of DNA-based therapeutics. Active in molecular therapeutics for more than a decade, he joined Protiva after five years leading the development of the gene transfer technology at Inex Pharmaceuticals. Dr. MacLachlan has been an invited speaker on nucleic acid delivery at the National Institutes of Health, the National Cancer Institute, numerous academic institutions and most major scientific meetings dealing with molecular therapy. He is a member of the New York Academy of Sciences, the Oligonucleotide Therapeutics Society and the American Society of Gene Therapy and serves on the Editorial Board of the journals Molecular Therapy and Oligonucleotides.

Peter Lutwyche, Ph.D., Senior Vice President, Pharmaceutical Development. Dr. Lutwyche has served as our Senior Vice President, Pharmaceutical Development since May 2008, when Dr. Lutwyche joined Tekmira in connection with the completion of the business combination between Tekmira and Protiva. Dr. Lutwyche joined Protiva in February 2008. His responsibilities at Tekmira include manufacturing, process development and quality control for all Tekmira product candidates as well as supporting Tekmira's collaborative partners as they advance products that utilize Tekmira's technology. Dr. Lutwyche joined Protiva from QLT Inc., where he was employed for ten years, most recently as Director, Pharmaceutical Development. During his tenure at QLT, Dr. Lutwyche contributed to the development and commercialization of Visudyne as well as leading manufacturing and chemistry efforts for numerous pre-clinical and clinical stage products. Prior to QLT, he was a research scientist at Inex Pharmaceuticals Corporation working with lipid-based formulations of nucleic acids and antibiotics. Dr. Lutwyche holds a Ph.D. in Chemistry from the University of British Columbia.

Paul Brennan, M.Sc., Senior Vice President, Business Development. Mr. Brennan has served as our Senior Vice President, Business Development since September 2010. Mr. Brennan has over 20 years of experience working for pharmaceutical and biotechnology companies in general management, business development, marketing and regulatory affairs. Prior to joining Tekmira, Mr. Brennan was a principal at Pacific BioPartners, a consulting company focused on supporting biotechnology companies with general management and business development expertise. Prior to that he served as CEO of Altair Therapeutics, an emerging biopharmaceutical company based in San Diego, which focused on developing inhaled oligonucleotides for respiratory diseases. Prior to Altair, Mr. Brennan was Senior Vice President, Business Development at Aspreva Pharmaceuticals and was involved in the sale of Aspreva to Vifor Pharma for $915 million. Prior to Aspreva, Mr. Brennan was at AnorMED where he held a number of roles including Acting President during which time he was involved in the sale of AnorMED to Genzyme for $580 million. Mr. Brennan has also held senior positions in business development and regulatory affairs at AstraZeneca, where he worked in Sweden, the United Kingdom and Canada. Mr. Brennan has an MSc and BSc from Queen's University in Kingston, Ontario.

Diane Gardiner, Vice President, Human Resources. Ms. Gardiner has served as Vice President, Human Resources since March 2013. Ms. Gardiner has more than 20 years of experience in Human Resources, working for biotechnology and life sciences companies. Prior to joining Tekmira, Ms. Gardiner was Head of Human Resources for Aquinox Pharmaceuticals Inc, and provided independent consulting services to biotechnology companies. Previously, she served as Vice President, Human Resources for the Centre for Drug Research and Development. Ms. Gardiner was Director of Human Resources for AnorMED Inc, until its acquisition by Genzyme in 2006. Before joining AnorMED, Ms. Gardiner spent nine years employed with MDS Metro Laboratories in various Human Resources roles, including Director, Human Resources. Ms. Gardiner holds a Bachelor of Business Administration degree from Simon Fraser University, and is a member of the BC Human Resources Management Association as well as the BC Human Resources High Tech group.

R. Hector MacKay-Dunn, Q.C., Corporate Secretary. Mr. MacKay-Dunn has served as our Corporate Secretary since May 2010. Mr. MacKay-Dunn is a Senior Partner at Farris, Vaughan, Wills & Murphy LLP. Mr. MacKay-Dunn advises and has served as a director and corporate secretary of private and public growth companies in a broad range of industries on domestic and cross-border private and public securities offerings, mergers and acquisitions, tender offers, and international partnering transactions. Mr. MacKay-Dunn was appointed Queen's Counsel in 2003. Mr. MacKay-Dunn is the immediate past Chair of the British Columbia Innovation Council, the Province's lead agency with the mandate to advance ideas into investment-ready companies in the areas of science and technology, a director of British Columbia Leading Edge Endowment Fund, British Columbia's $60 million program to attract top researchers to B.C.'s universities, and LifeSciences BC, and a former director of Genome British Columbia. Mr. Mackay-Dunn holds a B.A. and J.D. from the University of British Columbia.

6B. Compensation

The following disclosure sets out the compensation for our Named Executive Officers and directors for the financial year ended December 31, 2012. For the purposes herein, our Named Executive Officers includes our Chief Executive Officer, Chief Financial Officer, Chief Scientific Officer, Senior Vice President of Pharmaceutical Development and Senior Vice President of Business Development, as indicated in the "*Summary Compensation Table*" below.

Compensation Discussion and Analysis

Principles, Components and Policies

The Executive Compensation and Human Resources Committee, or the Compensation Committee, is responsible for recommending the compensation of our executive officers to the Board of Directors. In establishing compensation levels for executive officers, the Compensation Committee seeks to accomplish the following goals:

- to recruit and subsequently retain highly qualified executive officers by offering overall compensation which is competitive with that offered for comparable positions in other biotechnology companies;
- to motivate executives to achieve important corporate performance objectives and reward them when such objectives are met; and
- to align the interests of executive officers with the long-term interests of shareholders through participation in our stock-based compensation plan (the "2011 Plan").

Currently, our executive compensation package consists of the following components: base salary, discretionary annual incentive cash bonuses, long-term incentives in the form of share options and health and retirement benefits generally available to all of our employees. We have not granted any share appreciation rights to our directors and officers. We have established the above components for our executive compensation package because we believe a competitive base salary and opportunity for annual cash bonuses are required to retain key executives. Our 2011 Plan enables our executive officers to participate in our long term success and aligns their interests with those of the shareholders. Additional details on the compensation package for Named Executive Officers are described in the following sections.

Summary Compensation Table

The following table sets out the compensation paid, payable or otherwise provided to the Company's Named Executive Officers during the Company's three most recently completed financial years ending on December 31. All amounts are expressed in Canadian dollars unless otherwise noted.

Name and principal position	Year	Salary ($)	Option-based awards[1] ($)	Annual incentive cash bonuses [2] ($)	All other compensation [3] ($)	Total compensation ($)
Dr. Mark J. Murray[4]	2012	350,295	165,661	347,760	62,000	925,716
President and Chief Executive Officer	2011	344,708	134,953	—	41,868	522,969
	2010	345,000	88,453	86,250	55,584	575,287
Ian C. Mortimer	2012	285,000	118,329	285,000	8,550	696,879
Executive Vice President, Finance and Chief Financial Officer	2011	285,000	96,395	—	—	381,395
	2010	285,000	56,610	71,250	—	412,860
Dr. Ian MacLachlan	2012	295,000	118,329	295,000	8,850	717,179
Executive Vice President and Chief Scientific Officer	2011	295,000	96,395	—	1,439	392,834
	2010	295,000	56,610	73,750	2,965	428,325
Dr. Peter Lutwyche	2012	225,000	94,663	157,500	6,750	483,913
Senior Vice President of Pharmaceutical Development	2011	225,000	77,116	—	—	302,116
	2010	221,327	56,610	39,375	—	317,312
Paul A. Brennan[5]	2012	230,000	94,663	80,500	6,900	412,063
Senior Vice President of Business Development	2011	230,000	77,116	—	—	307,116
	2010	73,128	151,517	—	—	224,645

Notes:

(1) The fair value of each option is estimated as at the date of grant using the most widely accepted option pricing model, Black-Scholes. The weighted average option pricing assumptions and the resultant fair values for options awarded to Named Executive Officers in 2010 are as follows: expected average option term of eight years; a zero dividend yield; a weighted average expected volatility of 120.3%; and, a weighted average risk-free interest rate of 2.67%. The weighted average option pricing assumptions and the resultant fair values for options awarded to Named Executive Officers in 2011 are as follows: expected average option term of ten years; a zero dividend yield; a weighted average expected volatility of 115.5%; and, a weighted average risk-free interest rate of 2.51%. The weighted average option pricing assumptions and the resultant fair values for options awarded to Named Executive Officers in 2012 are as follows: expected average option term of eight years; a zero dividend yield; a weighted average expected volatility of 121.5%; and, a weighted average risk-free interest rate of 1.46%.

(2) The Executive Compensation and Human Resources Committee approved the payment of 50% of the available executive bonus pool during 2010. No bonuses were awarded to the Named Executive Officers in 2011. At the end of 2012, the Executive Compensation and Human Resources Committee approved the payment of 100% of the 2011 and 2012 executive bonuses except for Mr. Brennan who was paid 50% of his potential bonuses for 2011 and 2012.

(3) All other compensation in 2012 includes Registered Retirement Savings Plan, or RRSP, or equivalent matching payments of the lower of 3% of salary and 50% of the maximum annual contribution allowed by the Canada Revenue Agency. In 2012 all of our full-time employees and executives were eligible for RRSP or equivalent matching payments. In 2010 and 2011 RRSP match payments had been suspended to conserve cash. Dr. Murray's other compensation also includes reimbursement of personal tax filing service fees up to a maximum of $10,000 per year as per his contract. Dr. Murray's and Dr. MacLachlan's other compensation also includes amounts claimed under their contractual entitlement to reimbursement of any health expenses incurred, including their families' health expenses, that are not covered by insurance.

(4) Effective January 1, 2011 Dr. Murray's salary was denominated in US dollars and was increased to US$350,000. The amounts shown in the table for 2011 and 2012 are the Canadian equivalents of US$350,000. In 2010 Dr. Murray's salary was $345,000 and was denominated in Canadian dollars.

(5) Mr. Brennan commenced employment with in September 2010 with an annual salary of $230,000.

Base Salary. The Named Executive Officers are paid a base salary as an immediate means of rewarding the Named Executive Officer for efforts expended on our behalf. Base salaries for Named Executive Officers are evaluated against the responsibilities inherent in the position held and the individual's experience and past performance.

Effective January 1, 2010 the base salary of Dr. MacLachlan was increased 3.5% to $295,000. Dr. Lutwyche's salary was increased 5% to $215,000 on January 1, 2010 and by a further 5% to $225,000 in May 2010 when he was promoted to Senior Vice President of Pharmaceutical Development. Dr. Murray's and Mr. Mortimer's salaries of $345,000 and $285,000, respectively, remained unchanged in 2010. Mr. Brennan commenced employment with Tekmira as Senior Vice President of Business Development in September 2010 with a base salary of $230,000 per year.

In the fourth quarter of 2010, LaneCaputo Compensation Inc. was paid $32,480 to review Executive and Director Compensation and to benchmark against companies in the biotechnology industry. Based on the review of the LaneCaputo report, no changes were made to the base salaries of the Named Executive Officers except for Dr. Murray whose salary became US$350,000 effective January 1, 2011.

There were no changes to Named Executive Officer salaries in 2012, in order to preserve cash.

Effective January 1, 2013 the base salary of Dr. Murray was increased by 6% to US$377,500, the base salary of Dr. MacLachlan was increased by 7% to $315,000, the base salary of Mr. Mortimer was increased by 7% to $305,000, the

base salary of Mr. Brennan was increased by 4% to $240,000 and the base salary of Dr. Lutwyche was increased by 7% to $240,000. These increases reflect cost of living increases and taking into consideration that no increases were provided in 2012 as well as taking into consideration performance and retention measures.

Annual Incentive Cash Bonuses. Our current policy is to pay bonuses at the end of our fiscal year, assuming that we have sufficient financial stability, based upon our level of achievement of major corporate objectives as determined by the Compensation Committee and the Board of Directors. Our policy in 2010 was to pay bonuses if and when we achieved major corporate objectives as determined by the Compensation Committee and the Board of Directors. Cash bonus payments are at the full discretion of the Board of Directors.

For 2010, Dr. Murray, Mr. Mortimer and Dr. MacLachlan were eligible to earn cash bonuses of up to a maximum of 50% and Dr. Lutwyche up to a maximum of 35% of their respective base salaries based on the Board of Directors determination of achievement of corporate goals. Mr. Brennan, who joined Tekmira in September 2010, was eligible to earn a cash bonus up to a maximum of 35% of his base salary in 2010. Our objectives for 2010, as established by the Board of Directors included: initiating a Phase 1-2 clinical trial for TKM-ApoB; advancing TKM-PLK1 into a Phase 1 human clinical trial; selecting a third product candidate; supporting our pharmaceutical partners by providing research, development and manufacturing services; and, maintaining a strong cash position. The Compensation Committee recommended, and the Board of Directors approved, the payment of 50% of the maximum cash bonus for 2010 in August 2010 following the award of a contract with the U.S. Government to further develop TKM-Ebola. The bonus payment was based on the significance of this new contract combined with progress on some of our other corporate objectives relative to the remaining corporate objectives described above. The bonus is not based on any quantitative weighting of the corporate performance goals or other formulaic process. There were no further bonuses paid or payable to the Named Executive Officers in 2010.

Maximum percentage bonus potential for Drs. Murray, MacLachlan and Lutwyche and Mr. Mortimer and Mr. Brennan for 2011 was the same as for 2010. Our objectives for 2011, as established by the Board of Directors included: continued enrollment of patients in the Phase 1 clinical trial for TKM-PLK1; completion of pre-clinical toxicology studies for TKM-Ebola and filing of TKM-Ebola Investigational New Drug application; continued execution of TMT contract including manufacturing scale-up and lyophilization of LNP technology; generate pre-clinical proof of concept for next product candidate; and, maintain a strong cash position. Although good progress was made on the achievement of the 2011 objectives, in order to preserve cash, no cash bonuses were paid.

Maximum percentage bonus potential for Drs. Murray, MacLachlan and Lutwyche and Mr. Mortimer and Mr. Brennan for 2012 was the same as for 2011. Our objectives for 2012, as established by the Board of Directors included: completion of litigation against Alnylam Pharmaceuticals, Inc. and AlCana Technologies, Inc.; completing enrollment of patients in the Phase 1 clinical trial for TKM-PLK1; completion of a Phase 1 clinical trial for TKM-Ebola; continued execution of TKM-Ebola contract including manufacturing scale-up and lyophilization of LNP technology; and, complete an equity offering and maintain a strong cash position. At the end of 2012, the Compensation Committee recommended, and the Board of Directors approved, the payment of 100% of the maximum cash bonus for 2011 and 2012 for Drs. Murray, MacLachlan, Lutwyche and Mr. Mortimer and the payment of 50% of the maximum cash bonus for 2011 and 2012 for Mr. Brennan. The bonus payments were based on the significance of the successful outcome of our litigation against Alnylam and AlCana and progress and achievement against the other listed corporate objectives. The bonus is not based on any quantitative weighting of the corporate performance goals or other formulaic process.

Long-Term Incentives—Share Options. Share options are granted to reward individuals for current performance, expected future performance and to align the long term interest of Named Executive Officers with shareholders. Share options are generally granted in December of each year as part of the annual compensation review. The number of share options granted to Named Executive Officers is based on performance during the current year and expectations of our future needs.

We were in a share trading blackout at the end of 2009 so we were not able to grant share options at that time. In January 2010, once the share trading blackout had been lifted, we granted 25,000 options to Dr. Murray and 16,000 options to each of Mr. Mortimer, Dr. MacLachlan and Dr. Lutwyche. These share option grants were recommended by the Compensation Committee and approved by independent Directors based on corporate and individual performance and our needs for fiscal 2010.

Mr. Brennan was granted 20,000 new hire options in September 2010. Tekmira staff were granted options in December 2010, as is our usual practice. The Named Executive Officers and Board members were not, however, granted any options at that time as the Company wished to maintain a balance of ungranted options for use in future periods.

At our June 2011 Annual General Meeting our shareholders approved an increase to our available share option pool of 273,889. In August 2011 we granted 35,000 options to Dr. Murray, 25,000 options to each of Mr. Mortimer and Dr. MacLachlan and 20,000 options to each of Dr. Lutwyche and Mr. Brennan. These share option grants were recommended by the Compensation Committee and approved by independent Directors based on corporate and individual performance and vested upon the final resolution of the litigation against Alnylam and AlCana.

In December 2011, as part of our annual compensation review, we granted 35,000 options to Dr. Murray, 25,000 options to each of Mr. Mortimer and Dr. MacLachlan and 20,000 options to each of Dr. Lutwyche and Mr. Brennan. These share option grants were recommended by the Compensation Committee and approved by independent Directors based on corporate and individual performance and our needs for fiscal 2012. These options vest one quarter immediately and one quarter on the next three anniversaries of their grant date.

In December 2012, as part of our annual compensation review, we granted 35,000 options to Dr. Murray, 25,000 options to each of Mr. Mortimer and Dr. MacLachlan and 20,000 options to each of Dr. Lutwyche and Mr. Brennan. These share option grants were recommended by the Compensation Committee and approved by independent Directors based on corporate and individual performance and our needs for fiscal 2013. These options vest one quarter immediately and one quarter on the next three anniversaries of their grant date.

Share option grants are not based on pre-determined performance goals, either personal or corporate. Awards reflect the qualitative judgment of the Board of Directors as to whether a grant should be awarded for retention or incentive purposes and if so what the size and timing of such awards should be as well as taking into consideration the third party compensation survey completed for us in the third quarter of 2010.

Option Based Awards

Share options are generally awarded to executive officers at commencement of employment and periodically thereafter after taking into consideration the recommendations of the LaneCaputo compensation report completed in Q4 2010. Options are generally granted to corporate executives in December of each year as part of the annual compensation review. Any special compensation other than cash bonuses is typically granted in the form of options. Options are granted at other times of the year to individuals commencing employment with the Company or in special circumstances. The exercise price for the options is the closing price of the Common Shares on the last trading day before the grant of the option. See Item 6E. *"Share ownership"* for a description of the terms of the Company's current omnibus share compensation plan.

Named Executive Officer Incentive Plan Awards - Outstanding Option-based Awards

The following table sets out all option-based awards and share-based awards, including unvested awards, outstanding as at December 31, 2012, for each Named Executive Officer:

	Option-based Awards			
Name	Number of securities underlying unexercised options (#)	Option exercise price ($)	Option expiration date	Value of unexercised in-the-money options [1] ($)
Dr. Mark Murray [2]	219,428	0.44	September 12, 2015	996,203
	27,007	0.44	March 1, 2018	122,612
	30,000	4.65	August 30, 2018	9,900
	25,000	1.80	December 8, 2018	79,500
	25,000	3.85	January 27, 2020	28,250
	35,000	2.40	August 9, 2021	90,300
	35,000	1.70	December 22, 2021	114,800
	35,000	5.15	December 9, 2022	0
Ian C. Mortimer	3,000	7.00	December 14, 2014	0
	15,000	3.10	July 25, 2015	28,200
	10,000	5.40	March 28, 2016	0
	15,000	3.00	August 2, 2016	29,700
	10,000	6.50	August 6, 2017	0
	84,000	5.60	March 31, 2018	0
	11,000	1.80	December 8, 2018	34,980
	16,000	3.85	January 27, 2020	18,080
	25,000	2.40	August 9, 2021	64,500
	25,000	1.70	December 22, 2021	82,000
	25,000	5.15	December 9, 2022	0
Dr. Ian MacLachlan	30,000	4.65	August 30, 2018	9,900
	16,000	1.80	December 8, 2018	50,880
	16,000	3.85	January 27, 2020	18,080
	25,000	2.40	August 9, 2021	64,500
	25,000	1.70	December 22, 2021	82,000
	25,000	5.15	December 9, 2022	0
Dr. Peter Lutwyche	18,000	1.80	December 8, 2018	57,240
	16,000	3.85	January 27, 2020	18,080
	20,000	2.40	August 9, 2021	51,600
	20,000	1.70	December 22, 2021	65,600
	20,000	5.15	December 9, 2022	0
Paul A. Brennan	20,000	8.20	September 6, 2020	0
	20,000	2.40	August 9, 2021	51,600
	20,000	1.70	December 22, 2021	65,600
	20,000	5.15	December 9, 2022	0

Notes:

(1) This amount is based on the difference between Tekmira's year end TSX share price of $4.98 and the exercise price of the option.

(2) Dr. Murray holds options to purchase 365,000 common shares of Protiva, a wholly-owned subsidiary of Tekmira, with an exercise price of $0.30. As part of the business combination between Tekmira and Protiva, Tekmira agreed to issue 246,435 common shares of Tekmira on the exercise of these stock options giving an effective cost per Tekmira stock option of $0.44. The shares reserved for issue on the exercise of the Protiva options are equal to the number of Tekmira common shares that would have been issued if the options had been exercised before the completion of the business combination and the shares issued on exercise of the options had then been exchanged for Tekmira common shares. See Item 6E. *"Share ownership – Additional Shares Subject to Issue"*.

Named Executive Officer Incentive Plan Awards – Value Vested During the Year

The aggregate value of executive options vesting during the year ended December 31, 2012 measured at their date of vesting by comparing option exercise price to closing market price on that day was:

Name	Option-based awards – Value vested during the year ($)
Dr. Mark J. Murray	123,375
Ian C. Mortimer	88,125
Dr. Ian MacLachlan	88,125
Dr. Peter Lutwyche	70,500
Paul A. Brennan	70,500

Pension Plans or Similar Benefits for Named Executive Officers

We do not have any pension or deferred compensation plans for our Named Executive Officers.

Termination and Change of Control Benefits

The following table provides information concerning the value of payments and benefits following the termination of employment of the Named Executive Officers under various circumstances. Payments vary based on the reason for termination and the timing of a departure. The below amounts are calculated as if the Named Executive Officer's employment had been terminated on December 31, 2012. Receipt of payments on termination is contingent on the Named Executive Officer delivering a release to Tekmira.

Payment Type	Dr. Mark J. Murray	Dr. Ian MacLachlan	Ian C. Mortimer	Dr. Peter Lutwyche	Paul A. Brennan
Involuntary Termination by Tekmira for cause or upon death					
Cash payment	$ 0	$ 0	$ 0	$ 0	$ 0
Option values (1)	$1,377,103	$ 179,840	$211,940	$155,200	$ 84,400
Benefits (2)	$ 0	$ 0	$ 0	$ 0	$ 0
Involuntary Termination by Tekmira without cause					
Cash payment	$1,126,724	$ 945,000	$915,000	$200,000	$160,000
Option values (3)	$1,441,565	$ 225,360	$257,460	$159,720	$ 84,400
Benefits (2)	$ 245,084	$ 38,874	$ 34,638	$ 12,718	$ 10,180
Involuntary Termination by Tekmira without cause or by Executive with good reason after a change in control of the Company					
Cash payment	$1,126,724	$ 945,000	$915,000	$324,000	$324,000
Option values (3)	$1,441,565	$ 225,360	$257,460	$176,120	$100,800
Benefits (2)	$ 245,084	$ 38,874	$ 34,638	$ 15,261	$ 15,270

Notes:

(1) This amount is based on the difference between Tekmira's year end share price of $4.98 and the exercise price of the options that were vested as at December 31, 2012.

(2) Ongoing benefit coverage has been estimated assuming that benefits will be payable for the full length of the severance period which would be the case if new employment was not taken up during the severance period. Benefits include extended health and dental coverage that is afforded to all of the Company's full time employees. Dr. Murray's benefits also include a $2,000,000 life insurance policy, the reimbursement of up to $10,000 per annum in professional fees related to the filing of his tax returns. Dr. Murray and Dr. MacLachlan's benefits also include an estimate of the costs of reimbursement of health expenses incurred, including their families' health expenses, that are not covered by insurance.

(3) This amount is based on the difference between Tekmira's year end share price of $4.98 and the exercise price of the options that were vested as at December 31, 2012 and options that would vest during the severance period.

Director Compensation

The Board of Directors, or the Board, has adopted formal policies for compensation of non-executive directors. In order to align the interests of directors with the long-term interests of shareholders, the directors have determined that the most appropriate form of payment for their services as directors is through participation in the Tekmira's equity compensation plans, as well as an annual cash retainer and fees for meeting attendance. Directors who also serve as a member of our management team receive no additional consideration for acting as a director.

The Board has adopted a policy that non-executive directors are granted options upon appointment as a director and are eligible for annual grants thereafter. The Board fee schedule for 2010 was as follows: an annual cash retainer of US$18,000 per annum (US$25,500 for the Chairman of the Board; an additional US$5,000 for the Chairman of the Audit Committee; an additional US$2,500 for members of the Audit Committee; and an additional US$2,500 for the Chairman of any other Board constituted committees) and meeting fees of US$500 to US$1,750. In the fourth quarter of 2010, LaneCaputo conducted a review of Executive and Director Compensation. LaneCaputo's report recommended the following Board fee schedule: an annual cash retainer of US$25,000 per annum (US$50,000 for the Chairman of the Board; an additional US$10,000 for the Chairman of the Audit Committee; an additional US$6,000 for members of the Audit Committee; an additional US$7,500 for the Chairman of the Compensation and Governance Committees; and, an additional US$5,000 for members of the Compensation and Governance Committees) and Board meeting fees US$1,750 and no fees for Board committee meetings. The Board approved this new fee schedule effective January 1, 2011 but resolved to defer any payments in excess of the prior fee schedule until such time as the Company was more financially stable. Following the settlement of the litigation with Alnylam and AlCana the Board resolved to release the excess fees and continue with the LaneCaputo recommended Board fee schedule on an ongoing basis.

Non-executive directors earned cash compensation of $378,887 in 2012 as annual retainer and meeting attendance fees. We also reimburse directors for expenses they incur on behalf of the Company, including attending meetings of the Board.

The compensation provided to the directors, excluding Dr. Murray who is included in the Named Executive Officer disclosure above, for our most recently completed financial year of December 31, 2012 is:

Name	Fees earned ($)	Option-based awards [1] ($)	Total ($)
Daniel Kisner (Board Chair)	104,663	24,092	128,755
Don Jewell	62,127	24,092	86,219
Frank Karbe (Audit Committee Chair)	56,953	24,092	81,045
Kenneth Galbraith	62,292	24,092	86,384
R. Ian Lennox	15,267	—	15,267
Michael J. Abrams	63,512	24,092	87,604
Arthur M. Bruskin	14,073	—	14,073

Notes:

(1) The fair value of each option is estimated as at the date of grant using the most widely accepted option pricing model, Black-Scholes. The weighted average option pricing assumptions and the resultant fair values for options awarded in 2012 are as follows: expected average option term of ten years; a zero dividend yield; a weighted average expected volatility of 114.5%; and, a weighted average risk-free interest rate of 1.72%.

Director Incentive Plan Awards

Outstanding Option-based Awards and Share-based Awards

The following table sets out all option-based awards and share-based awards outstanding as at December 31, 2012, for each director serving for at least a portion of 2012:

	Option-Based Awards			
Name	Number of securities underlying unexercised options (#)	Option exercise price ($)	Option expiration date	Value of unexercised in-the-money options [1] ($)
Daniel Kisner	10,000	3.85	January 27, 2020	11,300
	5,000	2.40	August 9, 2021	12,900
	5,000	1.70	December 22, 2021	16,400
	5,000	5.15	December 9, 2022	0
Don Jewell	5,000	1.80	December 8, 2018	15,900
	5,000	3.85	January 27, 2020	5,650
	5,000	2.40	August 9, 2021	12,900
	5,000	1.70	December 22, 2021	16,400
	5,000	5.15	December 9, 2022	0
Frank Karbe	5,000	3.85	January 27, 2020	5,650
	5,000	2.40	August 9, 2021	12,900
	5,000	1.70	December 22, 2021	16,400
	5,000	5.15	December 9, 2022	0
Kenneth Galbraith	5,000	3.85	January 27, 2020	5,650
	5,000	2.40	August 9, 2021	12,900
	5,000	1.70	December 22, 2021	16,400
	5,000	5.15	December 9, 2022	0
R. Ian Lennox	5,000	1.80	December 8, 2018	15,900
	5,000	3.85	January 27, 2020	5,650
	5,000	2.40	August 9, 2021	12,900
	5,000	1.70	December 22, 2021	16,400
Michael J. Abrams [2]	675	0.44	January 21, 2013	3,065
	675	0.44	January 21, 2014	3,065
	675	0.44	January 22, 2015	3,065
	17,044	0.44	September 12, 2015	77,380
	5,445	0.44	December 31, 2015	24,720
	675	0.44	April 3, 2017	3,065
	13,503	0.44	May 27, 2017	61,304
	5,000	1.80	December 8, 2018	15,900
	5,000	3.85	January 27, 2020	5,650
	5,000	2.40	August 9, 2021	12,900
	5,000	1.70	December 22, 2021	16,400
	5,000	5.15	December 9, 2022	0
Arthur M. Bruskin	4,000	5.60	March 31, 2018	0
	5,000	1.80	December 8, 2018	15,900
	5,000	3.85	January 27, 2020	5,650
	5,000	2.40	August 9, 2021	12,900
	5,000	1.70	December 22, 2021	16,400

Notes:

(1) This amount is based on the difference between Tekmira's year end share price of $4.98 and the exercise price of the option.

(2) All of Dr. Abrams's options with an exercise price of $0.44 were granted to Dr. Abrams as a Director of Protiva. The shares reserved for these options are equal to the number of Tekmira common shares that would have been received if the options had been exercised prior to the business combination and subsequently exchanged for Tekmira common shares such that Dr. Abrams will receive Tekmira common share upon exercise of these options.

Director options are priced at the closing market price of the previous trading day and vest immediately upon granting. We typically grants options to directors at the time of their first appointment to the Board and then on an annual basis at the end of the fiscal year. The Company was in a share trading blackout at the end of 2009 so was not able to grant share options at the end of the fiscal year. In January 2010, once the share trading blackout had been lifted, we granted 5,000 share options to each of the directors except for the newly appointed Chairman, Dr. Daniel Kisner, who was granted 10,000 share options. The Named Executive Officers and Board members were not granted any options at the end of 2010 as we wished to maintain a balance of ungranted options for use in future periods. At our June 2011 Annual General Meeting our shareholders approved an increase to our available share option pool of 273,889. In August 2011 we granted 5,000 options to each of our non-executive Board members. In December 2011 we granted 5,000 options to each of our non-executive Board members. At our June 2012 Annual General and Special Meeting our shareholders approved an increase to our available share option pool of 550,726. In December 2012 we granted 5,000 options to each of our non-executive Board members.

Benefits on Termination of Directors

We do not have any contractual obligations arising when a director's service terminates. However, historical practice has been to waive the stock options plan's post termination 30 to 90 day cancellation period and extend stock options through to their original expiration date. This waiver was granted to Mr. Lennox and Dr. Bruskin following their resignations from the Board at the 2012 AGM.

Long-Term Incentive Plan Awards for our Directors

We do not have any long-term incentives for our Directors other than stock options.

Pension, Retirement or Similar Benefit for our Directors

We do not have any amounts set aside or accrued to provide for pension, retirement or similar benefits for our Directors.

Directors' and Officers' Liability Insurance

We purchase annual insurance coverage for our directors' and officers' (executives') liability.

6C. Board Practices

Our Directors have served in their respective capacities since their election or appointment and will serve until our next annual general meeting or until a successor is duly elected and qualified, unless their office is earlier vacated in accordance with the Law of Canada and our articles of incorporation. Our executives serve at the discretion of the board. The following table sets information on our directors as of June 20, 2012, the date of our last Annual General Meeting:

Name	Director Since
Michael J. Abrams	May 30, 2008(1)
Kenneth Galbraith	January 28, 2010
Donald G. Jewell	May 30, 2008(1)
Frank Karbe	January 28, 2010
Daniel Kisner	January 28, 2010
Mark J. Murray Ph.D.	May 30, 2008(1)

Notes:

(1) Messrs. Abrams, Jewell, and Murray were directors of Protiva before it was acquired by Tekmira on May 30, 2008.

Benefits on Termination of Employment of Directors

We do not have any contractual obligations arising if it terminates a director. However, historical practice has been to waive the stock options plan's post termination 30 day cancellation and extend stock options through to their original expiration date.

Committees of our Board of Directors

To assist in the discharge of its responsibilities, our Board of Directors currently has three committees: the Audit Committee, the Executive Compensation and Human Resources Committee, and the Corporate Governance and Nominating Committee.

Audit Committee

The members of our Audit Committee are Mr. Karbe, Mr. Jewell and Mr. Galbraith, each of whom is a non-employee member of our Board of Directors. Mr. Karbe chairs the Audit Committee. Our Board of Directors has determined that each of the members of the Audit Committee is financially literate and have financial expertise (as is currently defined under the applicable SEC rules). Our Board of Directors has determined that each member of our Audit Committee is an independent member of our Board of Directors under the current requirements of the NASDAQ and the rules and regulations of the SEC and Canadian provincial securities regulatory authorities.

Our Audit Committee is responsible for overseeing our financial reporting processes on behalf of our Board of Directors. Our auditor and independent registered public accounting firm reports directly to our Audit Committee. Specific responsibilities of our Audit Committee include:

- overseeing the work of the auditors engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company;
- evaluating the performance, and assessing the qualifications, of our auditor and recommending to our Board of Directors the appointment of, and compensation for, our auditor for the purpose of preparing or issuing an auditor report or performing other audit, review or attest services;
- subject to the appointment of our auditor in accordance with applicable corporate formalities, determining and approving the engagement of, and compensation to be paid to, our auditor;
- determining and approving the engagement, prior to the commencement of such engagement, of, and compensation for, our auditor and to perform any proposed permissible non-audit services;
- reviewing our financial statements and management's discussion and analysis of financial condition and results of operations and recommending to our Board of Directors whether or not such financial statements and management's discussion and analysis of financial condition and results of operations should be approved by our Board of Directors;
- conferring with our auditor and with our management regarding the scope, adequacy and effectiveness of internal financial reporting controls in effect;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by our employees of concerns regarding questionable accounting or auditing matters; and

- reviewing and discussing with our management and auditor, as appropriate, our guidelines and policies with respect to risk assessment and risk management, including our major financial risk exposures and investment and hedging policies and the steps taken by our management to monitor and control these exposures.

For more information concerning the Audit Committee and its members, see Item 16A – *"Audit Committee Financial"* Experts, Item 16C – *"Principal Accountant Fees and Services – Audit Committee Pre-Approved Policies and Procedures"*, and Item 16D – *"Exemptions from the Listing Standards for Audit Committees"*.

A copy of our Audit Committee's charter is available on our website at www.tekmirapharm.com.

Executive Compensation and Human Resources Committee

The members of our Executive Compensation and Human Resources Committee (the "Compensation Committee") are Dr. Abrams, Mr. Jewell, and Dr. Kisner. Dr. Abrams currently chairs the Compensation Committee. Our Board of Directors has determined that each of the members of the Compensation Committee has the appropriate experience for their Committee responsibilities based on their past or current senior roles in our industry. Our Board of Directors has determined that each member of our Compensation Committee is an independent member of our Board of Directors under the current requirements of the NASDAQ and as defined in the rules and regulations of the Canadian provincial securities regulatory authorities.

Specific responsibilities of our Compensation Committee include:

- reviewing and making recommendations to our Board of Directors for our chief executive officer and other executive officers: annual base salary; annual incentive bonus, including the specific goals and amount; equity compensation; employment agreements, severance arrangements and change in control agreements/provisions; and any other benefits, compensations, compensation policies or arrangements;
- reviewing and making recommendations to our Board of Directors regarding our overall compensation plans and structure, including incentive compensation and equity based plans;
- reviewing and making recommendations to our Board of Directors regarding the compensation to be paid to our non-employee directors, including any retainer, committee and committee chair fees and/or equity compensation;
- reviewing any report to be included in our periodic filings or proxy statement; and
- acting as administrator of our equity compensation plans.

We engaged a third party firm, LaneCaputo Compensation Inc., to evaluate our Named Executive Officer compensation, including base salaries, in the fourth quarter of 2010. LaneCaputo was paid a fee of $32,480 for this evaluation.

A copy of our Compensation Committee's charter is available on our website at www.tekmirapharm.com.

Corporate Governance and Nominating Committee

The members of our Corporate Governance and Nominating Committee are Mr. Galbraith and Dr. Kisner. Mr. Galbraith currently chairs the committee. Our Board of Directors has determined that each member of our Corporate Governance and Nominating Committee is an independent member of our Board of Directors under the current requirements of the NASDAQ and as defined in the rules and regulations of the Canadian provincial securities regulatory authorities.

Specific responsibilities of our Corporate Governance and Nominating Committee include:

- establishing criteria for Board membership and identifying, evaluating, reviewing and recommending qualified candidates to serve on the Board;
- evaluating, reviewing and considering the recommendation for nomination of incumbent directors for re-election to the Board;
- periodically reviewing and assessing the performance of our Board, including Board committees;
- developing and reviewing a set of corporate governance principles for Tekmira.

A copy of our Corporate Governance and Nominating Committee's charter is available on our website at www.tekmirapharm.com.

Our Board of Directors is responsible for approving nominees for election as directors. However, as is described above, our Corporate Governance and Nominating Committee is responsible for reviewing, soliciting and recommending nominees to our Board of Directors.

In evaluating prospective nominees, our Corporate Governance and Nominating Committee looks for the following minimum qualifications: strong business acumen, extensive previous experience as an executive or director with successful companies, the highest standards of integrity and ethics, and a willingness and ability to make the necessary time commitment to diligently perform the duties of a director. Nominees are selected with a view to our best interests as a whole, rather than as representative of any particular stakeholder or category of stakeholders. Our Corporate Governance and Nominating Committee will also consider the skill sets of the incumbent directors when recruiting replacements to fill vacancies in our Board of Directors. Our Board of Directors prefers a mix of experience among its members to maintain a diversity of viewpoints and ensure that our Board of Directors can achieve its objectives. When a vacancy on our Board of Directors occurs, in searching for a new director, the Corporate Governance and Nominating Committee will identify particular areas of specialization which it considers beneficial, in addition to the general qualifications, having regard to the skill sets of the other members of our Board of Directors. Potential nominees and their respective references are interviewed extensively in person by the Corporate Governance and Nominating Committee before any nomination is endorsed by that committee. All nominations proposed by the Corporate Governance and Nominating Committee must receive the approval of our Board of Directors.

6D. Employees

The number of employees as at December 31 of each of the last three fiscal years is as follows:

	2012	2011	2010
Research and development	48	64	81
General and administrative	9	10	13
Total	57	74	94

None of our employees are covered by collective bargaining agreements.

6E. Share Ownership

The shareholdings and share options of our directors, secretary and executives as of February 28, 2013 are as follows:

Name and Position	Number of Common Shares	Percentage of Outstanding Common Shares Owned[1]	Number of Common Share Options	Number of Common Share Warrants[2]	Percentage of Outstanding Common Shares Owned on a fully diluted basis[3]
Daniel Kisner, Director (Chairman)	12,500	0.09%	25,000	6,250	0.25%
Michael J. Abrams, Director	9,525	0.07%	63,017	2,500	0.42%
Kenneth Galbraith, Director	15,240	0.11%	20,000	—	0.20%
Donald G. Jewell, Director	476,955	3.32%	25,000	90,000	3.22%
Frank Karbe, Director	5,000	0.03%	20,000	2,500	0.15%
Mark J. Murray Ph.D., President, Chief Executive Officer and Director	59,961	0.42%	431,435	10,000	2.81%
Ian MacLachlan, Ph.D., Executive Vice President and Chief Scientific Officer	171,534	1.19%	137,000	5,000	1.76%
Ian C. Mortimer, Executive Vice President, Finance and Chief Financial Officer	32,000	0.22%	239,000	10,000	1.58%
Peter Lutwyche, Ph.D., Senior Vice President, Pharmaceutical Development	38,758	0.27%	94,000	2,500	0.76%
Paul Brennan, M.Sc., Senior Vice President, Business Development	19,000	0.13%	80,000	7,000	0.59%
R. Hector MacKay-Dunn, Q.C., Corporate Secretary	—	— %	—	—	— %
Total	840,473	5.85%	1,134,452	135,750	11.84%

Notes:

(1) Based on 14,362,722 common shares issued and outstanding as of February 28, 2013.
(2) These warrants were acquired through participation in Tekmira's June 2011 public share offering and/or Tekmira's February 2012 private placement.

(3) Based on 17,830,170 common shares on a fully diluted basis, which excludes options yet to be granted, as of February 28, 2013.

Named Executive Officer Outstanding Option-based Awards

Option-based awards and share-based awards outstanding as of February 28, 2013, for each Named Executive Officer are the same as those presented in Item 6B. "*Compensation*".

Director Outstanding Option-based Awards

The following table sets out all option-based awards and share-based awards outstanding as of February 28, 2013, for each director:

	Option-Based Awards		
Name	Number of securities underlying unexercised options (#)	Option exercise price ($)	Option expiration date
Daniel Kisner	10,000	3.85	January 27, 2020
	5,000	2.40	August 9, 2021
	5,000	1.70	December 22, 2021
	5,000	5.15	December 9, 2022
Don Jewell	5,000	1.80	December 8, 2018
	5,000	3.85	January 27, 2020
	5,000	2.40	August 9, 2021
	5,000	1.70	December 22, 2021
	5,000	5.15	December 9, 2022
Frank Karbe	5,000	3.85	January 27, 2020
	5,000	2.40	August 9, 2021
	5,000	1.70	December 22, 2021
	5,000	5.15	December 9, 2022
Kenneth Galbraith	5,000	3.85	January 27, 2020
	5,000	2.40	August 9, 2021
	5,000	1.70	December 22, 2021
	5,000	5.15	December 9, 2022
Michael J. Abrams (2)	675	0.44	January 21, 2014
	675	0.44	January 22, 2015
	17,044	0.44	September 12, 2015
	5,445	0.44	December 31, 2015
	675	0.44	April 3, 2017
	13,503	0.44	May 27, 2017
	5,000	1.80	December 8, 2018
	5,000	3.85	January 27, 2020
	5,000	2.40	August 9, 2021
	5,000	1.70	December 22, 2021
	5,000	5.15	December 9, 2022

Notes:

(1) All of Dr. Abrams's options with an exercise price of $0.44 were granted to Dr. Abrams as a Director of Protiva. The shares reserved for these options are equal to the number of Tekmira common shares that would have been received if the options had been exercised prior to the business combination and subsequently exchanged for Tekmira common shares such that Dr. Abrams will receive Tekmira common share upon exercise of these options.

Equity Compensation Plans

At Tekmira's annual general and special meeting of shareholders on June 22, 2011, shareholders approved the 2011 Plan and a 273,889 increase in the number common shares in respect of which Awards may be granted under the 2011 Plan. Tekmira's pre-existing 2007 Plan was limited to the granting of stock options as equity incentive awards whereas the 2011 Plan also allows for the issuance of tandem stock appreciation rights, restricted stock units and deferred stock units. The 2011 Plan replaces the 2007 Plan. The 2007 Plan will continue to govern the options granted there under. No further options will be granted under Tekmira's 2007 Plan. At Tekmira's last annual general and special meeting of shareholders on June 20, 2012, shareholders approved a 550,726 increase in the number common shares in respect of which Awards may be granted under the 2011 Plan.

There are a total of 2,361,158 common share options currently outstanding and available for future grant under the Tekmira Plans which represents approximately 16.4% of the Company's issued and outstanding common shares at February 28, 2013.

Since January 1996, the equivalent of 182,771 common shares of Tekmira have been issued pursuant to the exercise of options granted under Tekmira's Plans (which represents approximately 1.27% of the Company's issued and outstanding common shares), and as of February 28, 2013, there were 1,939,045 common shares of Tekmira subject to options outstanding under Tekmira's Plans (which represents approximately 13.5% of the Company's current issued and outstanding common shares). The number of common shares of Tekmira remaining available for future grants of options as at February 28, 2013 was 421,438 (which represents approximately 2.9% of the Company's current issued and outstanding common shares).

The following table sets out information for Tekmira's Plans as at the end of the financial year ended December 31, 2012.

Equity compensation plans approved by security holders	Number of securities to be issued upon exercise of outstanding options ("Column A Securities")	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under equity compensation plans (excluding Column A Securities)
2007 and 2011 Plan	1,648,846	$ 4.54	422,688

Terms of the 2011 Plan

The following is a summary of important provisions of the 2011 Plan. It is not a comprehensive discussion of all of the terms and conditions of the 2011 Plan. Readers are advised to review the full text of the 2011 Plan to fully understand all terms and conditions of the 2011 Plan. A copy of the 2011 Plan can be obtained by contacting the Company's Corporate Secretary.

Purpose. The purpose of the 2011 Plan is to promote the Company's interests and long-term success by providing directors, officers, employees and consultants with greater incentive to further develop and promote the Company's business and financial success, to further the identity of interest of persons to whom Awards may be granted with those of the shareholders generally through a proprietary ownership interest in the Company, and to assist the Company in attracting, retaining and motivating its directors, officers, employees and consultants.

Administration. Under the 2011 Plan, the board of directors can, at any time, appoint a committee (the "Compensation Committee") to, among other things, interpret, administer and implement the 2011 Plan on behalf of the board of directors in accordance with such terms and conditions as the board of directors may prescribe, consistent with the 2011 Plan (provided that if at any such time such a committee has not been appointed by the board of directors, the 2011 Plan will be administered by the board of directors).

Eligible Persons. Under the 2011 Plan, Awards may be granted to any director, officer, employee or consultant (as defined in the 2011 Plan) of the Company, or any of its affiliates, or a person otherwise approved by the Compensation Committee (an "Eligible Person"). A participant ("Participant") is an Eligible Person to whom an Award has been granted under the 2011 Plan.

Share Reserve. The number of common shares in respect of which Awards may be granted under the 2011 Plan is 2,193,870 common shares, with a balance of 421,438 available for grant under the 2011 Plan, which represents 2.9% of our outstanding common shares as of February 28, 2013.

Amending Provisions. In accordance with Toronto Stock Exchange policies, the 2011 Plan allows the Compensation Committee of the Board of Directors to amend the 2011 Plan or any award agreement under the 2011 Plan at any time provided that shareholder approval has been obtained by ordinary resolution. Notwithstanding the foregoing, shareholder approval would not be required for amendments of a clerical nature, amendments to reflect any regulatory authority requirements, amendments to vesting provisions, amendments to the term of options or tandem stock appreciation rights held by non-insiders, amendments to the option exercise price of options held by non-insiders, and any amendments which provide a cashless exercise feature to an award that provides for the full deduction of the number of underlying common shares from the total number of common shares subject to the 2011 Plan.

Limits on Grants to Insiders. In accordance with Toronto Stock Exchange policies and emerging practice, the 2011 Plan limits the number of common shares:

(i) issuable, at any time, to Participants that are insiders of Tekmira; and

(ii) issued to Participants that are insiders of Tekmira within any one year period,

pursuant to the 2011 Plan, or when combined with all of Tekmira's other security based share compensation arrangements, to a maximum of 10% of the total number of outstanding common shares (on a non-diluted basis). The

common shares issued pursuant to an entitlement granted prior to the grantee becoming an insider will be excluded in determining the number of common shares issuable to insiders. Additionally, under the terms of the 2011 Plan, the number of common shares reserved for issuance to any one person shall not, in the aggregate, exceed 5% of the total number of outstanding common shares (on a non-diluted basis).

Issuance of Awards. The 2007 Plan authorizes only one type of award, stock options, thus limiting flexibility to provide for other types of awards. The 2011 Plan allows for the issuance of tandem stock appreciation rights, restricted stock units and deferred stock units, each is briefly described below:

Tandem Stock Appreciation Rights — Tandem Stock Appreciation Rights, or Tandem SARs, provide option holders with a right to surrender vested options for termination in return for common shares (or the cash equivalent) equal to the net proceeds that the option holder would otherwise have received had the options been exercised and the underlying common shares immediately sold. Settlement may be made, in the sole discretion of the Compensation Committee, in common shares or cash, or any combination thereof.

Restricted Stock Units — Restricted Stock Units, or RSUs, entitle the holder to receive common shares (or the cash equivalent) at a future date. RSUs are granted with vesting conditions (typically based on continued service or achievement of personal or corporate objectives) and settle upon vesting by delivery of common shares (or the cash equivalent). The value of the RSU increases or decreases as the price of the common shares increases or decreases, thereby promoting alignment of the interests of the RSU holders with shareholders. Settlement may be made, in the sole discretion of the Compensation Committee, in common shares or cash, or any combination thereof. Vesting of RSUs is determined by the Compensation Committee in its sole discretion and specified in the award agreement pursuant to which the RSU is granted.

Deferred Stock Units — Deferred Stock Units, or DSUs, represent a future right to receive common shares (or the cash equivalent) at the time of the holder's retirement, death, or the holder otherwise ceasing to provide services to Tekmira, allowing Tekmira to pay compensation to holders of DSUs on a deferred basis. Each DSU awarded by Tekmira is initially equal to the fair market value of a common shares at the time the DSU is awarded. The value of the DSU increases or decreases as the price of the common shares increases or decreases, thereby promoting alignment of the interests of the DSU holders with shareholders. Settlement may be made, in the sole discretion of the Compensation Committee, in common shares or cash, or any combination thereof. Vesting of DSUs is determined by the Compensation Committee in its sole discretion and specified in the award agreement pursuant to which the DSU is granted.

Adjustment of exercise/settlement during blackout periods. Further to our Insider Trading Policy, our officers, directors and employees may be prohibited from trading in our securities for an interval of time, or the Blackout Period. As Blackout Periods are of varying length and may occur at unpredictable times, Awards may expire or settle during a Blackout Period. As a result, the 2011 Plan provides that: (i) where the expiry date of an option or Tandem SAR occurs during or within ten non-blackout trading days following the end of a Blackout Period, the expiry date for such option or Tandem SAR shall be the date which is ten non-blackout trading days following the end of such Blackout Period; and (ii) where the date for the settlement of Restricted Stock Units or the payment of a settlement amount in the case of a DSU occurs during a Blackout Period, Tekmira shall make such settlement or pay such settlement amount to the holder of such an Award within ten non-blackout trading days following the end of such Blackout Period.

Computation of Available Shares. For the purposes of computing the number of Common Shares available for grant under the 2011 Plan, the 2011 Plan provides that Common Shares subject to any Award (or portion thereof) that have expired or are forfeited, surrendered, cancelled or otherwise terminated prior to the issuance or transfer of such Common Shares, or are settled in cash in lieu of settlement in Common Shares, shall again be available for grant under the 2011 Plan. Notwithstanding the foregoing, any Common Shares subject to an Award that are withheld or otherwise not issued in order to satisfy the Participant's withholding obligations, or in payment of any option exercise price, shall reduce the number of Common Shares available for grant.

Exercise Price of Options. The 2011 Plan provides that the exercise price for each option is to be determined by the Compensation Committee, but in no event may be lower than:

(i) where the Common Shares are listed on a stock exchange or other organized market, the closing price of the Common Shares on such stock exchange or other organized market as determined by the Compensation Committee for the trading session ending on the day prior to the time of grant; or

(ii) where the Common Shares are not publicly traded, the value which is determined by the Compensation Committee to be the fair value of the Common Shares at the time of grant, taking into consideration all factors that the Compensation Committee deems appropriate, including, without limitation, recent sale and offer prices of the Common Shares in private transactions negotiated at arm's length.

Settlement of Awards. Subject to the terms and limitations of the 2011 Plan, we propose that the 2011 Plan be amended to allow payments or transfers to be made upon the exercise or settlement of an Award be made in such form or forms as the Compensation Committee may determine (including, without limitation, cash or Common Shares), and payment or transfers made in whole or in part in Common Shares may, in the discretion of the Compensation Committee, be issued from treasury or purchased in the open market.

Grant, Exercise, Vesting, Settlement Awards. Subject to the terms of the 2011 Plan, the Compensation Committee may grant to any eligible person one or more Awards as it deems appropriate. The Compensation Committee may also impose such limitations or conditions on the exercise, vesting, or settlement of any Awards as it deems appropriate.

Payment of Exercise Price of Options. Participants in the 2011 Plan may pay the exercise price by cash, bank draft or certified cheque, or by such other consideration as the Compensation Committee may permit.

Term of Options. Subject to the Blackout Period provisions described above, an option will expire on the date determined by the Compensation Committee and specified in the option agreement pursuant to which such option is granted, which date shall not be later than the tenth anniversary of the date of grant, or such earlier date as may be required by applicable law, rules or regulations, including those of any exchange or market on which the common shares are listed or traded. If an optionee's status as a director, officer, employee or consultant terminates for any reason other than death or termination for cause, the option will expire on the date determined by the Compensation Committee or as specified by agreement among Tekmira and the director, officer, employee or consultant, and in the absence of such specification, will be deemed to be the date that is three months following the director, officer, employee or consultant's termination. If the optionee's status as a director, officer, employee or consultant is terminated for cause, the option shall terminate immediately. In the event that the optionee dies before otherwise ceasing to be a director, officer, employee or consultant, or before the expiration of the option following such a termination, the option will expire one year after the date of death, or on such other date determined by the Compensation Committee and specified in the option agreement. Notwithstanding the foregoing, except in the case of death or as expressly permitted by the Compensation Committee, all stock options will cease to vest as at the date upon which the optionee ceases to be eligible to participate in the 2011 Plan.

U.S. Qualified Incentive Stock Options. Options intended to qualify as an "incentive stock option", as that term is defined in Section 422 of the Internal Revenue Code, may be granted under the 2011 Plan. To the extent required by the Internal Revenue Code, these options are subject to additional terms and conditions as set out in the 2011 Plan. In addition, if any Participant who is a citizen or resident of the U.S. to whom an "incentive stock option" for the purposes of section 422 of the U.S. Internal Revenue Code (a "U.S. Qualified Incentive Stock Option") is to be granted under the 2011 Plan, and at the time of the grant the Participant is an owner of shares possessing more than 10% of the total combined voting power of all classes of the Company's common shares, then special provisions will be applicable to the U.S. Qualified Incentive Stock Option granted to such individual. These special provisions applicable only to U.S. Qualified Incentive Stock Options will be: (i) the exercise price (per common share) cannot be less than 110% of the fair market value of one common share at the time of grant; and (ii) the option exercise period cannot exceed five years from the date of grant.

Change in Control. In the event of a merger or acquisition transaction that results in a change of control of Tekmira, the Compensation Committee may, at its option, take any of the following actions: (a) determine the manner in which all unexercised or unsettled Awards granted under the 2011 Plan will be treated, including the accelerated vesting of such options; (b) offer any participant under the 2011 Plan the opportunity to obtain a new or replacement award, if applicable; or (c) commute for or into any other security or any other property or cash, any award that is still capable of being exercised or settled.

Transferability. Awards granted under the 2011 Plan are not transferable or assignable and may be exercised only by the grantee, subject to exceptions in the event of the death or disability of the grantee.

Termination. The 2011 Plan will terminate on June 22, 2021.

Terms of the 2007 Share Option Plan

The 2007 Share Option Plan (the "Plan") was adopted by the Company's Board of Directors on April 30, 2007. In 2011, the Company and its shareholders adopted the 2011 Plan to replace the Plan. Following adoption of the 2011 Plan, and pursuant to the terms of the 2011 Plan, no further awards were to be granted under the Plan. All awards under the Plan continue to be governed by the terms of the Plan.

The Company is not permitted to issue new awards under the Plan, however, Options outstanding under the Plan may be exercised until they expire or terminate in accordance with their terms. As of February 28, 2013, Options to purchase 926,346 shares of Common Stock remained outstanding and all Options were vested.

Tekmira options may not be exercised after an optionee ceases to be an eligible recipient under the Plan, except as follows:

- in the case of death, all unvested options of the optionee will be deemed to have become fully vested immediately before death, and the personal representatives of the optionee will be entitled to exercise the options at any time by the earlier of (a) the expiry date, and (b) the first anniversary of the date of death;
- in the case of retirement options will be exercisable by the earlier of (a) the expiry date, or (b) the first anniversary of the date of retirement;
- in the case of an optionee becoming unable to work due to illness, injury or disability, all option rights will be exercisable, on the same terms as if the optionee had continued to be an eligible recipient under the Plan; and
- in the case of an optionee resigning his office, or terminating his employment or service, or being dismissed without cause, the option rights that have accrued to such optionee up to the time of termination will be exercisable within the 30 days after the date of termination.

In the case of an optionee being dismissed from office, employment or service for cause, all option rights that had accrued to the optionee to the date of termination will immediately terminate.

Except in the case of the death of an optionee, an option may be exercisable only by the optionee to whom it is granted and may not be assigned. The Plan does not provide for any financial assistance to Plan members in exercising their options.

As specifically provided for in the Plan, the number of common shares of Tekmira that, under all share compensation arrangements:

- may be reserved for issuance to all insiders, may not exceed 10% of the common shares of Tekmira outstanding on a non-diluted basis (Outstanding Issue) at that time;
- may be issued to all insiders within a one-year period may not exceed 10% of the Outstanding Issue at that time;
- to any one insider and his or her associates, within a one-year period, may not exceed 5% of the Outstanding Issue at that time; and
- may be reserved for issuance to non-employee directors, may not exceed 2% of the Outstanding Issue at that time (Non-Employee Director Cap).

The Board reserves the right, in its absolute discretion, to at any time amend, modify or terminate the Plan. Any amendment to any provision of the Plan will be subject to any necessary approvals by shareholders and any stock exchange or regulatory body having jurisdiction over the securities of the Company.

Shareholder approval is required for any amendment or modification to the Plan that does any of the following:

- reduces the exercise price of an option except for the purpose of maintaining option value in connection with a subdivision or consolidation of, or payment of a dividend payable in, common shares of Tekmira or a reorganization, reclassification or other change or event affecting the common shares of Tekmira (for this purpose, cancellation or termination of an option of a Share Option Plan participant prior to its expiry date for the purpose of reissuing options to the same participant with a lower exercise price shall be treated as an amendment to reduce the exercise price of an option);
- extends the term of an option beyond the expiry date or allow for the expiry date to be greater than 10 years (except where an expiry date would have fallen within a blackout period of the Company);
- permits options to be assigned or exercised by persons other than the optionholder except for normal estate planning or estate settlement purposes;
- permits equity compensation, other than Tekmira options, to be made under the Share Option Plan; or
- changes to the Non-Employee Director Cap from a maximum of 2% of the Outstanding Issue at that time.

Except for the above noted matters, the Board retains the power to approve all other changes to the Plan without shareholder approval. Such amendments may include the following:

- amendments to the terms and conditions of the Plan necessary to ensure that the Plan complies with the applicable regulatory requirements, including without limitation the rules of the Toronto Stock Exchange or any national securities exchange or system on which the common shares of Tekmira are then listed or reported, or by any regulatory body having jurisdiction with respect thereto;
- making adjustments to outstanding options in the event of certain corporate transactions;
- the addition of a cashless exercise feature, payable in cash or securities, whether or not such feature provides for a full deduction of the number of underlying securities from the number of common shares of Tekmira reserved for issuance under the Plan;
- a change to the termination provisions of a security or the Plan which does not entail an extension beyond the original expiry date;

- amendments to the provisions of the Plan respecting administration of the Plan and eligibility for participation under the Plan;
- amendments to the provisions of the Plan respecting the terms and conditions on which options may be granted pursuant to the Plan, including the provisions relating to the exercise price, and option period; and
- amendments to the Share Option Plan that are of a "housekeeping nature".

Additional Shares Subject to Issue Under an Equity Compensation Plan

On May 30, 2008, as a condition of the acquisition of Protiva, the Company reserved 350,457 common shares (which represents approximately 2.5% of the Company's issued and outstanding common shares as at May 15, 2012) for the exercise of up to 519,073 Protiva share options ("Protiva Options"). These shares are reserved for the issue to those shareholders who did not exercise their Protiva share options and exchange the shares of Protiva issuable on exercise for common shares of Tekmira on the closing of the business combination with Protiva. The shares reserved for them are equal to the same number of Tekmira common shares they would have received if they had exercised their options and transferred the shares to Tekmira. The Protiva Options are not part of Tekmira's 2011 Plan or 2007 Plan and the Company is not permitted to grant any further Protiva stock options. The Protiva Options all have a $0.30 exercise price and expire on dates ranging from January 21, 2014 to March 1, 2018. As at February 28, 2013, Protiva options equating to 29,833 common shares had been exercised and Protiva options equating to 319,949 common shares remained outstanding.

ITEM 7 MAJOR SHAREHOLDER AND RELATED PARTY TRANSACTIONS

7A. Major Shareholders

Major Shareholders

We are a publicly-held corporation, with our shares held by residents of the United States, Canada and other countries. As a reporting issuer under the securities laws of the Provinces of Canada, only insiders (generally officers, directors and holders of 10% or more of our shares) are required to file reports disclosing their ownership of securities of Tekmira. Based on a review of publicly available information in Canada, as of March 1, 2013 no person, corporation or other entity beneficially owns, directly or indirectly, or controls more than 5% of our common shares. Each of our common shares entitles the holder thereof to one vote.

Geographic Breakdown of Shareholders

As of March 1, 2013, our shareholder register indicates that our common shares are held as follows:

Location	Number of Shares	Percentage of Total Shares	Number of Registered Shareholders of Record
Canada	14,121,288	98.32%	128
United States	240,625	1.68%	13
Other	809	0.01%	4
Total	**14,362,722**	**100%**	**145**

Our securities are recorded in registered form on the books of our transfer agent, CIBC Mellon Trust Company of Canada, located at 1600-1066 West Hastings Street, Vancouver, BC V6E 3X1. However, the majority of such shares are registered in the name of intermediaries such as brokerage houses and clearing houses (on behalf of their respective brokerage clients). We are permitted, upon request to our transfer agent, to obtain a list of our beneficial shareholders who do not object to their identities being disclosed to us. We are not permitted to obtain from our transfer agent a list of our shareholders who have objected to their identities being disclosed to us.

Shares registered in intermediaries were assumed to be held by residents of the same country in which the clearing house was located.

Control

To the best of our knowledge, we are not directly or indirectly owned or controlled by any other corporation, by any foreign government or by any other natural or legal person, severally or jointly. To the best of our knowledge, there are no arrangements currently in place which may at a subsequent date result in a change in control of Tekmira.

Insider Reports under the Securities Act (British Columbia)

Under the policies promulgated under the Securities Act (British Columbia), insiders (generally officers, directors and holders of 10% or more of our shares) are required to file insider reports of changes in their ownership within 5 days following a trade in our securities. Insider reports must be filed electronically within the deadline outlined above, and the public is able to access these reports at www.sedi.ca.

7B. Related Party Transactions

No director or executive of Tekmira, and no associate or affiliate of the foregoing persons, and no insider has or has had any material interest, direct or indirect, in any transactions, or in any proposed transaction, which in either such case has materially affected or will materially affect us or our predecessors since January 1, 2010.

7C. Interests of Experts and Counsel

Not applicable.

ITEM 8 FINANCIAL INFORMATION

8A. Consolidated Statements and Other Financial Information

Financial Statements

The financial statements required as part of this Annual Report are filed under Item 18 of this Annual Report.

Legal Proceedings

On November 12, 2012, we entered into an agreement to settle all litigation between Tekmira and Alnylam and AlCana Technologies, Inc. (AlCana), and we also entered into a new licensing agreement with Alnylam that replaces all earlier licensing, cross-licensing, collaboration, and manufacturing agreements. Tekmira expects to enter into a separate cross-license agreement with AlCana that will include milestone and royalty payments.

As a result of the new Alnylam license agreement, Tekmira received US$65 million in cash in November. This includes US$30 million associated with the termination of the manufacturing agreement and US$35 million associated with the termination of the previous license agreements, as well as a reduction of the milestone and royalty schedules associated with Alnylam's ALN-VSP, ALN-PCS, and ALN-TTR programs. Of the US$65 million received from Alnylam, US$18.7 million was subsequently paid by us to our lead legal counsel representing us in the lawsuit against Alnylam and AlCana, in satisfaction of the contingent obligation owed to that counsel. We are also eligible to receive an additional US$10 million in near-term milestones, comprised of a US$5 million payment upon ALN-TTR entering a pivotal trial and a US$5 million payment related to initiation of clinical trials for ALN-VSP in China. Both near-term milestones are expected to occur in 2013. In addition, Alnylam has transferred all agreed upon patents and patent applications related to LNP technology for the systemic delivery of RNAi therapeutic products, including the MC3 lipid family, to Tekmira and we will own and control prosecution of this intellectual property portfolio. Tekmira is the only company able to sublicense LNP intellectual property in future platform-type relationships. Alnylam has a license to use Tekmira's intellectual property to develop and commercialize products and may only sublicense Tekmira's LNP technology to its partners if it is part of a product sublicense. Alnylam will pay Tekmira milestones and single-digit percentage royalties as Alnylam's LNP-enabled products are developed and commercialized.

The licensing agreement with Alnylam also grants us intellectual property rights to develop our own proprietary RNAi therapeutics. Alnylam has granted us a worldwide license for the discovery, development and commercialization of RNAi products directed to thirteen gene targets – three exclusive and ten non-exclusive licenses – provided that they are not subject to a binding contractual obligation to a third party by Alnylam, or subject to an active internal development program by Alnylam. Licenses for five of the ten non-exclusive targets – ApoB, PLK1, Ebola, WEE1, and CSN5 – have already been granted, along with an additional license for ALDH2, which has been granted on an exclusive basis. In consideration for this license, we have agreed to pay single-digit percentage royalties to Alnylam on product sales and have milestone obligations of up to US$8.5 million on the non-exclusive licenses (with the exception of TKM-Ebola, which has no milestone obligations). Alnylam no longer has "opt-in" rights to Tekmira's lead oncology product, TKM-PLK1, so we now hold all development and commercialization rights related to TKM-PLK1. We will have no milestone obligations on the three exclusive licenses.

Tekmira and AlCana have agreed to settle all on-going litigation between the parties. Tekmira and AlCana have entered into a binding term sheet, which outlines a cross-license agreement that will include milestone and royalty payments, and AlCana has agreed not to compete in the RNAi field for five years.

Dividends

Tekmira Pharmaceuticals Corporation has not paid any dividends on our common shares since incorporation and do not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends will be at our board of directors' discretion after taking into account many factors including our operating results, financial condition and current and anticipated cash needs.

8B. Significant Changes

We have not experienced any significant changes relating to the annual financial statements since December 31, 2012.

ITEM 9 THE OFFER AND LISTING

Common Shares

On November 2, 2010 we completed a 5-to-1 consolidation of our Common Shares. Each 5 Common Shares were consolidated to represent 1 Common Share as of such date with fractional shares rounded down to the nearest whole share. Issued and outstanding stock options were consolidated on a 5-to-1 basis and exercise prices were adjusted to give effect to the consolidation. All Common Share, Common Share price, stock option, per share and exercise price data set forth in this prospectus have been adjusted to give retroactive effect to our 5-to-1 share consolidation. For the purpose of giving retroactive effect to the proposed Common Share Consolidation, we have rounded fractional shares to the nearest whole share and rounded fractional dollar information to the nearest whole number with fractions of 0.5 or greater rounded up and fractions less than 0.5 rounded down. Actual amounts may differ.

Our authorized share capital consists of an unlimited number of Common shares without par value, of which 14,305,356 were issued and outstanding as at December 31, 2012, and an unlimited number of Preferred shares without par value of which none were issued and outstanding as at December 31, 2012. In addition, we have outstanding certain incentive options to purchase Common shares as noted in Item 6B. *"Compensation of this Annual Report"*.

9A. Offer and Listing Details

Trading Markets

Our common shares are traded on the Toronto Stock Exchange in the Canada under the symbol "TKM". On November 15, 2010, our common shares began to trade on the NASDAQ Capital Market under the symbol "TKMR". The following table shows the progression in the high and low trading prices of our common shares on the Toronto Stock Exchange and the NASDAQ Capital Market for the periods listed:

	NASDAQ High[1] (US$)	NASDAQ Low[1] (US$)	TSX High[1] (CDN$)	TSX Low[1] (CDN$)
Year Ended:				
December 31, 2012	$ 6.78	$ 1.52	$ 6.49	$ 1.41
December 31, 2011	$ 7.94	$ 1.29	$ 7.64	$ 1.50
December 31, 2010	$ 7.55	$ 4.48	$ 9.75	$ 3.45
December 31, 2009	—	—	$ 7.45	$ 2.25
December 31, 2008	—	—	$ 7.25	$ 1.40
Quarter Ended:				
December 31, 2012	$ 6.78	$ 3.22	$ 6.49	$ 3.21
September 30, 2012	$ 4.22	$ 2.04	$ 4.09	$ 1.98
June 30, 2012	$ 2.80	$ 1.77	$ 2.64	$ 1.91
March 31, 2012	$ 2.91	$ 1.52	$ 2.85	$ 1.41
December 31, 2011	$ 2.05	$ 1.29	$ 7.64	$ 1.50
September 30, 2011	$ 2.63	$ 1.63	$ 9.75	$ 3.45
June 30, 2011	$ 3.52	$ 2.44	$ 7.45	$ 2.25
March 31, 2011	$ 7.94	$ 2.94	$ 7.25	$ 1.40
Month Ended				
February 28, 2013	$ 4.87	$ 4.31	$ 4.89	$ 4.41
January 31, 2013	$ 5.53	$ 4.52	$ 5.45	$ 4.52
December 31, 2012	$ 5.35	$ 4.72	$ 5.30	$ 4.67
November 30, 2012	$ 6.78	$ 4.09	$ 6.49	$ 4.08
October 31, 2012	$ 4.35	$ 3.22	$ 4.14	$ 3.21
September 30, 2012	$ 4.22	$ 3.20	$ 4.09	$ 3.17

Notes:

(1) Our common shares were consolidated on April 30, 2007, on a basis of two common shares for one new common share. On November 2, 2010 we completed a 5-to-1 consolidation of our Common Shares in order to meet requirements for trading on the NASDAQ Capital Market. Annual trading information in the table has been restated to reflect these share consolidations on a retroactive basis.

9B. Plan of Distribution

Not applicable.

9C. Markets

Our common shares trade on Toronto Stock Exchange under the symbol "TKM" and, since November 15, 2010, on the NASDAQ Capital Market under the symbol "TKMR."

9D. Selling Shareholders

Not applicable.

9E. Dilution

Not applicable.

9F. Expenses of the Issue

Not applicable.

ITEM 10 ADDITIONAL INFORMATION

10A. Share Capital

Not applicable.

10B. Notice of Articles and Articles

The following is a summary of certain material provisions of our Notice of Articles and Articles and material provisions of the BCBCA that apply to us:

1. Objects and Purposes

Our Notice of Articles and Articles do not specify objects or purposes. We are entitled under the BCBCA to carry on all lawful businesses which can be carried on by a natural person.

2. Directors

Director and senior officer's power to vote on a proposal, arrangement or contract in which the director or senior officer is interested.

Our Articles state that a director or senior officer who holds any office or possesses any property, right or interest that could result, directly or indirectly, in the creation of a duty or interest that materially conflicts with his or her duty or interest as a director or senior officer must disclose the nature and extent of the conflict in accordance with the provisions of the Act. A director who holds a disclosable interest in a contract or transaction into which the Company has entered or proposed to enter is not entitled to vote on any directors' resolution to approve that contract or transaction, unless all the directors have a disclosable interest in that contract or transaction, in which case any or all of those directors may vote on such resolution.

According to the BCBCA, a director or senior officer does not hold a disclosable interest in a contract or transaction merely because:

(i) the contract or transaction is an arrangement by way of security granted by us for money loaned to, or obligations undertaken by, the director or senior officer, or a person in whom the director or senior officer has a material interest, for the benefit of us or an affiliate of ours;

(ii) the contract or transaction relates to an indemnity or insurance of officers and directors under the Act;

(iii) the contract or transaction relates to the remuneration of the director or senior officer in that person's capacity as director, officer, employee or agent of the Company or an affiliate of ours;

(iv) the contract or transaction relates to a loan to us, and the director or senior officer or a person in whom the director or senior officer has a material interest, is or is to be a guarantor of some or all of the loan; or

(v) the contract or transaction has been or will be made with or for the benefit of a corporation that is affiliated with us and the director or senior officer is also a director or senior officer of that corporation or an affiliate of that corporation.

Directors' power to vote compensation to themselves.

Our Articles provide that the directors are entitled to remuneration for acting as directors, if any, as the directors may determine from time to time.

Borrowing powers exercisable by the directors.

Under our Articles, our board may:

1. borrow money in the manner and amount, on the security, from the sources and on the terms and conditions that the directors consider appropriate;
2. issue bonds, debentures and other debt obligations either outright or as security for any liability or obligation of the Company or any other person and at such discounts or premiums and on such other terms as the directors consider appropriate;
3. guarantee the repayment of money by any other person or the performance of any obligation of any other person; and

4. mortgage, charge, whether by way of specific or floating charge, grant a security interest in, or give other security on, the whole or any part of the present and future assets and undertaking of the Company.

Retirement and non-retirement of directors under an age limit requirement.

There are no such provisions applicable to us under our Articles or the BCBCA.

Number of shares required for a director's qualification.

Directors need not own any of our shares in order to qualify as directors.

3. Rights, Preferences and Restrictions Attaching to Each Class of Shares

Dividends

Dividends may be declared by our Board and paid to our shareholders according to their respective rights and interests in us. The BCBCA provides that dividends may not be declared or paid if there are reasonable grounds for believing that the Company is insolvent, or the payment of the dividend would render the Company insolvent.

Voting Rights

Each of our shares is entitled to one vote on matters to which common shares ordinarily vote including the annual election of directors, the appointment of auditors and the approval of corporate changes. Our directors are elected yearly to hold office until the close of the next annual meeting of shareholders. Where directors fail to be elected at any such meeting then the incumbent directors will continue in office until their successors are elected or they cease to hold office under the Act or our Articles. We do not permit cumulative voting rights.

Rights to Profits and Liquidation Rights

All of our common shares participate rateably in any of our net profit or loss and shares participate rateably in any of our available assets in the event of a winding up or other liquidation.

Redemption

We currently have no redeemable securities authorized or issued.

Sinking Fund Provisions

We have no sinking fund provisions or similar obligations.

Shares Fully Paid

All of our shares must, by applicable law, be issued as fully paid for cash, property or services. They are therefore non-assessable and not subject to further calls for payment.

Pre-emptive Rights

There is nothing in our Notice of Articles or Articles, or the BCBCA, which grants shareholders with any pre-emptive rights to participate in any equity or other securities offering. We have granted certain contractual pre-emptive rights described earlier in this Item under "*Share Capital*".

With respect to the rights, preferences and restrictions attaching to our common shares, there are generally no significant differences between Canadian and United States law as the shareholders, or the applicable corporate statute, will determine the rights, preferences and restrictions attaching to each class of our shares.

4. Special Rights and Restrictions to Shares

Subject to the Act, our Articles provide that we may, by ordinary resolution of our shareholders:

(a) create special rights or restrictions for, and attach those special rights or restrictions to, the shares of any class or series of shares, whether or not any or all of those shares have been issued; or

(b) vary or delete any special rights or restrictions attached to those shares of any class or series of shares, whether or not any or all of those shares have been issued, and alter our Notice of Articles and Articles accordingly.

Generally, there are no significant differences between Canadian and United States law with respect to changing the rights of shareholders as most state corporation statutes require shareholder approval (usually a majority) for any such changes that affect the rights of shareholders.

5. Meetings of Shareholders

Our Articles provide that we must hold our annual general meeting at least once in each calendar year and not more than 15 months from our last annual general meeting. Our Board also has the power to call special meetings. Our Articles provide that in addition to any location in British Columbia, any shareholder meeting may be held in a location outside British Columbia approved by a resolution of the directors. Shareholder meetings are governed by our Articles, but many important shareholder protections are also contained in provincial securities legislation and the BCBCA. Our Articles provide that we provide at least 21 days notice of a shareholder meeting. Our directors may fix in advance a date, which is no fewer than 21 days prior to the date of the meeting for the purpose of determining shareholders entitled to receive notice of and to attend and vote at a general meeting.

The provincial securities legislation and the BCBCA superimpose requirements that generally provide that shareholder meetings require notice in excess of 50 days prior to the date of the meeting, and that we make a thorough advanced search of intermediary and brokerage registered shareholdings to facilitate communication with beneficial shareholders so that meeting materials (including proxies) can be sent via to our beneficial shareholders. The form and content of information circulars, proxies and like matters are governed by provincial securities legislation. This legislation specifies the disclosure requirements for the proxy materials and various corporate actions, background information on the nominees for election for director, executive compensation paid in the previous year and full details of any unusual matters or related party transactions. We must hold an annual shareholders meeting open to all shareholders for personal attendance or by proxy at each shareholder's determination.

Most state corporation statutes in the United States require a public company to hold an annual meeting for the election of directors and for the consideration of other appropriate matters. The state statutes also include general provisions relating to shareholder voting and meetings. Apart from the timing of when an annual meeting must be held and the percentage of shareholders required to call an annual meeting, or an extraordinary meeting, there are generally no material differences between Canadian and United States law respecting annual meetings and extraordinary meetings.

6. Rights to Own Securities

There are no limitations under our Notice of Articles and Articles, or in the BCBCA that address the right of persons who are not citizens of Canada to hold or vote common shares. Certain provisions of the Investment Canada Act (Canada), or the Investment Act, may affect the ability of a non-resident to hold or vote our common shares.

The following discussion summarizes the principal features of the Investment Act for a non-resident who proposes to acquire our common shares. It is general only, it is not a substitute for independent legal advice from an investor's own advisor, and it does not anticipate statutory or regulatory amendments.

The *Investment Canada Act* is legislation of general application which regulates investments in Canadian businesses by non-Canadians. The Act is enforced by Industry Canada, other than an acquisition of a cultural business which is enforced by the Department of Canadian Heritage. The Act requires that non-Canadians notify Investment Canada regarding the acquisition of Canadian businesses. In addition, certain investments are subject to review and may not be proceeded with until the responsible Minister has determined that the investment will be a net benefit to Canada.

Under the Act, investments are reviewable if the investor is directly acquiring assets of a Canadian business with a value of $5 million or more or indirectly acquiring assets of a Canadian business with a value of $50 million or more. This monetary threshold is increased for "WTO investors" (meaning investors that are controlled by persons who are residents of WTO member countries). The current threshold for WTO investors is $330 million and is indexed to inflation. Under recent amendments to the Act, the review thresholds for WTO Investors will be increased in three stages from $600 million to $1 billion and be annually adjusted thereafter.

A party to a reviewable transaction must provide certain prescribed information to Investment Canada. The responsible Minister has 45 days from receipt of the information to complete the review and may elect to extend this period by an additional 30 days. A party to a non-reviewable transaction must provide notice of the transaction and certain prescribed information to Investment Canada which can be provided within 30 days after completion of a transaction.

The responsible Minister is required to assess a number of factors to determine if an investment will be a "net benefit to Canada". These factors include economic activity in Canada, employment, exports, participation by Canadians in the business, productivity, technological development, national policies, competition in Canada and Canada's ability to compete in world markets.

Certain transactions in relation to our common shares would be exempt from review from the Investment Act, including:

- acquisition of our common shares by a person in the ordinary course of that person's business as a trader or dealer in securities;
- acquisition or control of us in connection with the realization of security granted for a loan or other financial assistance and not for any purpose related to the provisions of the Investment Act; and

- acquisition or control of us by reason of an amalgamation, merger, consolidation or corporate reorganization following which the ultimate direct or indirect control in fact of us, through the ownership of voting interests, remains unchanged.

7. Restrictions on Changes in Control, Mergers, Acquisitions or Corporate Restructuring of Us

We have not implemented any shareholders' rights or other "poison pill" protections against possible take-overs and we do not have any agreements which are triggered by a take-over or other change of control. There are no provisions in our Articles triggered by or affected by a change in outstanding shares which gives rise to a change in control.

The BCBCA does not contain any provision that would have the effect of delaying, deferring or preventing a change of control of a company.

Generally, there are no significant differences between Canadian and United States law in this regard, as many state corporation statutes also do not contain such provisions and only empower a company's board of directors to adopt such provisions.

8. Ownership Threshold Requiring Public Disclosure

Neither our Notice of Articles or Articles require disclosure of share ownership. Share ownership of director nominees must be reported annually in proxy materials sent to our shareholders. There are no requirements under Canadian corporate law to report ownership of shares but the provincial securities legislation currently requires insiders (generally officers, directors and holders of 10% of voting shares) to file insider reports of changes in their ownership within 10 days following a trade in our securities. As a result of recent changes to the policies promulgated under the Securities Act (British Columbia), insiders will be required to file insider reports of changes in their ownership within 5 days following a trade in our securities that occurs after October 31, 2010. Insider reports must be filed electronically within the deadlines outlined above, and the public is able to access these reports at www.sedi.ca. Shareholders acquiring 10% or more of the voting securities of a reporting issuer are required to file a publicly available "early warning report", and update such report upon further acquisitions exceeding certain thresholds, up to 20% ownership, at which time such acquirer will generally be subject to Canadian takeover bid rules.

Most state corporation statutes do not contain provisions governing the threshold above which shareholder ownership must be disclosed. United States federal securities laws require a company that is subject to the reporting requirements of the Securities Exchange Act of 1934 to disclose, in its annual reports filed with the Securities and Exchange Commission those shareholders who own more than 5% of a corporation's issued and outstanding shares.

9. Differences in Law between the U.S. and Canada

Differences in the law between the United States and Canada, where applicable, have been explained above within each category.

10. Changes in Our Capital

There are no conditions imposed by our Articles which are more stringent than those required by the BCBCA.

10C. Material Contracts

The material contracts, other than contracts entered into in the ordinary course of business, which we entered into during the last two years are as follows:

- The agreement with U.S. Government to develop TKM-Ebola described under Item 4B. "*Business Overview—Internal Product Development—TKM-Ebola*";
- The Amendment No. 2 to the Amended and Restated Agreement, between us (formerly Inex Pharmaceuticals Corporation) and Hana Biosciences, Inc. described under Item 4B. "*Business Overview—Partnerships and Collaborations*"; and,
- The License and Collaboration Agreement between Protiva Biotherapeutics Inc. and Halo-Bio RNAi Therapeutics, Inc. described under Item 4B. "*Business Overview—Partnerships and Collaborations*"; and,
- The Loan Agreement Silicon Valley Bank as described under Item 5B "*Liquidity and Capital Resources*"; and,
- The settlement agreement among Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., Alnylam Pharmaceuticals, Inc. and AlCana Technologies, Inc. dated November 12, 2012, which includes a binding term sheet between Tekmira and AlCana described under Item 8A. "*Legal Proceedings*"; and,

- The cross-license agreement by and among Alnylam Pharmaceuticals, Inc., Tekmira Pharmaceuticals Corporation and Protiva Biotherapeutics Inc. dated November 12, 2012 described under Item 8A. "*Legal Proceedings*" and,
- The License Agreement among Protiva Biotherapeutics Inc. and Marina Biotech, Inc. dated November 28, 2012; and,
- Employment Agreement with Diane Gardiner dated March 1, 2013.

10D. Exchange Controls

There is no law or governmental decree or regulation in Canada that restricts the export or import of capital, or affects the remittance of dividends, interest or other payments to a non-resident holder of our common shares, other than withholding tax requirements. See Item 10E. "*Taxation.*"

10E. Taxation

Material Canadian Federal Income Tax Consequences for United States Residents

The following summarizes the material Canadian federal income tax consequences generally applicable to the holding and disposition of our shares by a holder (in this summary, a U.S. holder), who, (a) for the purposes of the Income Tax Act (Canada), or the Tax Act, and at all relevant times, is not resident in Canada, deals at arm's length with us, is not affiliated with us, holds our shares as capital property and does not use or hold and is not deemed to use or hold our shares in the course of carrying on, or otherwise in connection with, a business in Canada, and (b) for the purposes of the Canada-United States Income Tax Convention, 1980, or the Treaty, and at all relevant times, is a resident of the U.S. This summary does not apply to traders or dealers in securities, limited liability companies, tax-exempt entities, insurers, financial institutions (including those to which the mark-to-market provisions of the Tax Act apply), or any other holder in special circumstances.

This summary is based on the current provisions of the Tax Act including all regulations thereunder, the Treaty, all proposed amendments to the Tax Act, the regulations and the Treaty publicly announced by the Government of Canada to the date hereof, and our understanding of the current administrative practice of the Canada Revenue Agency. It has been assumed that all currently proposed amendments will be enacted as proposed and that there will be no other relevant change in any governing law or administrative practice, although no assurances can be given in these respects. The summary does not take into account Canadian provincial, U.S. federal (which follows further below), state or other foreign income tax law or practice. **The tax consequences to any particular U.S. holder will vary according to the status of that holder as an individual, trust, corporation, partnership or other entity, the jurisdictions in which that holder is subject to taxation, and generally according to that holder's particular circumstances. Accordingly, this summary is not, and is not to be construed as, Canadian tax advice to any particular U.S. holder. All U.S. holders are advised to consult with their own tax advisors regarding their particular circumstances. The discussion below is qualified accordingly.**

Dividends

Dividends paid or deemed to be paid to a U.S. holder by us will be subject to Canadian withholding tax. The Tax Act requires a 25% withholding unless reduced under a tax treaty. Under the Treaty, the rate of withholding tax on dividends paid to a U.S. holder that is the beneficial owner of such dividends is generally limited to 15% of the gross amount of the dividend (or 5% if the U.S. holder is a corporation and beneficially owns at least 10% of our voting shares). We will be required to withhold the applicable withholding tax from any dividend and remit it to the Canadian government for the U.S. holder's account.

Disposition

For purposes of the following discussion, we have assumed that our shares will remain listed on the Toronto Stock Exchange. A U.S. holder is not subject to tax under the Tax Act in respect of a capital gain realized on the disposition of our shares in the open market unless the shares are "taxable Canadian property" to the holder thereof and the U.S. holder is not entitled to relief under the Treaty. Our shares will be taxable Canadian property to a U.S. holder (a) if, at any time during the 60 months preceding the disposition, the U.S. holder or persons with whom the U.S. holder did not deal at arm's length alone or together owned 25% or more of our issued shares of any class or series, and more than 50% of the fair market value of the shares was derived directly or indirectly from any one or combination of (i) real or immovable property situated in Canada, (ii) Canadian resource properties, (iii) timer resource properties, and (iv) options in respect of, or interests in, or for civil rights law rights in, property described in any of (i) to (iii), whether or not that property exists. Notwithstanding the foregoing, in other specific circumstances, including where shares were acquired for other securities in a tax-deferred transaction, our shares could be deemed to be taxable Canadian property.

If our shares constitute taxable Canadian property to the holder, the holder will (unless relieved under the Treaty) be subject to Canadian income tax on any gain. The taxpayer's capital gain or loss from a disposition of the share is the amount, if any, by which the proceeds of disposition exceed (or are exceeded by) the aggregate of the adjusted cost base and reasonable expenses of disposition. One-half of the capital gain is included in income and one-half of the capital loss is deductible from capital gains realized in the same year. Unused capital losses may be carried back three taxation years or forward indefinitely and applied to reduce capital gains realized in those years.

A U.S. holder whose shares do constitute taxable Canadian property should consult with the holder's own tax advisors regarding any possible relief (if any) from Canadian tax under the Treaty based on applicable circumstances at the relevant time. Such Treaty relief should not be anticipated under current circumstances.

Certain United States Federal Income Tax Considerations

The following is a general summary of certain material U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership, and disposition of our common shares.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder arising from and relating to the acquisition, ownership, and disposition of common shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S. Holder, including without limitation specific tax consequences to a U.S. Holder under an applicable tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any U.S. Holder. Except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. This summary does not address the U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences to U.S. Holders of the acquisition, ownership, and disposition of common shares. Each prospective U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences relating to the acquisition, ownership, and disposition of common shares.

No legal opinion from U.S. legal counsel or ruling from the Internal Revenue Service (IRS) has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the conclusions described in this summary.

Scope of this Summary

Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (Code), Treasury Regulations (whether final, temporary, or proposed), published rulings of the IRS, published administrative positions of the IRS, the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (Canada-U.S. Tax Convention), and U.S. court decisions that are applicable and, in each case, as in effect and available, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive or prospective basis which could affect the U.S. federal income tax considerations described in this summary. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis.

U.S. Holders

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of common shares that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the U.S.;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) organized under the laws of the U.S., any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the U.S. and the control of one or more U.S. persons for all substantial decisions or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Non-U.S. Holders

For purposes of this summary, a "non-U.S. Holder" is a beneficial owner of common shares that is not a U.S. Holder. This summary does not address the U.S. federal income tax consequences to non-U.S. Holders arising from and relating to the acquisition, ownership, and disposition of common shares. Accordingly, a non-U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences (including the potential application of and operation of any income tax treaties) relating to the acquisition, ownership, and disposition of common shares.

U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including, but not limited to, the following: (a) U.S. Holders that are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) U.S. Holders that are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) U.S. Holders that are broker-dealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method; (d) U.S. Holders that have a "functional currency" other than the U.S. dollar; (e) U.S. Holders that own common shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position; (f) U.S. Holders that acquired common shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) U.S. Holders that hold common shares other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); or (h) U.S. Holders that own or have owned (directly, indirectly, or by attribution) 10% or more of the total combined voting power of the outstanding shares of the Company. This summary also does not address the U.S. federal income tax considerations applicable to U.S. Holders who are: (a) U.S. expatriates or former long-term residents of the U.S.; (b) persons that have been, are, or will be a resident or deemed to be a resident in Canada for purposes of the Income Tax Act (Canada) (the "Tax Act"); (c) persons that use or hold, will use or hold, or that are or will be deemed to use or hold common shares in connection with carrying on a business in Canada; (d) persons whose common shares constitute "taxable Canadian property" under the Tax Act; or (e) persons that have a permanent establishment in Canada for the purposes of the Canada-U.S. Tax Convention. U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders described immediately above, should consult their own tax advisor regarding the U.S. federal, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences relating to the acquisition, ownership and disposition of common shares.

If an entity or arrangement that is classified as a partnership (or other "pass-through" entity) for U.S. federal income tax purposes holds common shares, the U.S. federal income tax consequences to such entity and the partners (or other owners) of such entity generally will depend on the activities of the entity and the status of such partners (or owners). This summary does not address the tax consequences to any such owner. Partners (or other owners) of entities or arrangements that are classified as partnerships or as "pass-through" entities for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership, and disposition of common shares.

Ownership and Disposition of Common Shares

The following discussion is subject to the rules described below under the heading "Passive Foreign Investment Company Rules."

Taxation of Distributions

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to a common share will be required to include the amount of such distribution in gross income as a dividend (without reduction for any foreign income tax withheld from such distribution) to the extent of the current or accumulated "earnings and profits" of the Company, as computed for U.S. federal income tax purposes. To the extent that a distribution exceeds the current and accumulated "earnings and profits" of the Company, such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the common shares and thereafter as gain from the sale or exchange of such common shares (see " Sale or Other Taxable Disposition of Common Shares" below). However, the Company may not maintain the calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder should therefore assume that any distribution by the Company with respect to the common shares will constitute ordinary dividend income. Dividends received on common shares generally will not constitute qualified dividend income eligible for the "dividends received deduction". Subject to applicable limitations and provided that the Company is eligible for the benefits of the Canada-U.S. Tax Convention, dividends paid by the Company to non-corporate U.S. Holders, including individuals, generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied, including that the Company not be classified as a PFIC (as defined below) in the tax year of distribution or in the preceding tax year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of such rules.

Sale or Other Taxable Disposition of Common Shares

A U.S. Holder will recognize gain or loss on the sale or other taxable disposition of common shares in an amount equal to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in such common shares sold or otherwise disposed of. Any such gain or loss generally will be capital gain or loss, which will be long-term capital gain or loss if, at the time of the sale or other disposition, such common shares are held for more than one year.

Preferential tax rates apply to long-term capital gains of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gains of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

Passive Foreign Investment Company Rules

If the Company were to constitute a PFIC for any year during a U.S. Holder's holding period, then certain potentially adverse rules would affect the U.S. federal income tax consequences to a U.S. Holder resulting from the acquisition, ownership and disposition of common shares. The Company believes that it was classified as a PFIC for its tax year ended December 31, 2008 and for certain prior tax years. The Company does not believe that it was a PFIC for the tax years ended December 31, 2009, 2010, 2011 and 2012. Despite the fact that the Company believes it was not a PFIC in 2012, due to a significant increase in its cash balances, the Company may be a PFIC for the tax year ending December 31, 2013 and subsequent tax years. However, PFIC classification is fundamentally factual in nature, generally cannot be determined until the close of the tax year in question, and is determined annually. Additionally, the analysis depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. Consequently, there can be no assurance that the Company has never been and will not become a PFIC for any tax year during which U.S. Holders hold common shares.

In addition, in any year in which the Company is classified as a PFIC, such holder would be required to file an annual report with the IRS containing such information as Treasury Regulations and/or other IRS guidance may require. U.S. Holders should consult their own tax advisors regarding the requirements of filing such information returns under these rules, including the requirement to file a IRS Form 8621.

The Company generally will be a PFIC under Section 1297 of the Code if, for a tax year, (a) 75% or more of the gross income of the Company for such tax year is passive income (the "income test") or (b) 50% or more of the value of the Company's assets either produce passive income or are held for the production of passive income (the "asset test"), based on the quarterly average of the fair market value of such assets. "Gross income" generally includes all sales revenues less the cost of goods sold, plus income from investments and from incidental or outside operations or sources, and "passive income" generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions.

For purposes of the PFIC income test and asset test described above, if the Company owns, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, the Company will be treated as if it (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the PFIC income test and asset test described above and assuming certain other requirements are met, "passive income" does not include certain interest, dividends, rents, or royalties that are received or accrued by the Company from a "related person" (as defined in Section 954(d)(3) of the Code), to the extent such items are properly allocable to the income of such related person that is not passive income.

Under certain attribution rules, if the Company is a PFIC, U.S. Holders will be deemed to own their proportionate share of any subsidiary of the Company which is also a PFIC (a ''Subsidiary PFIC''), and will be subject to U.S. federal income tax on (i) a distribution on the shares of a Subsidiary PFIC or (ii) a disposition of shares of a Subsidiary PFIC, both as if the holder directly held the shares of such Subsidiary PFIC.

If the Company were a PFIC in any tax year and a U.S. Holder held common shares in such year, such holder generally would be subject to special rules with respect to "excess distributions" made by the Company on the common shares and with respect to gain from the disposition of common shares. An "excess distribution" generally is defined as the excess of distributions with respect to the common shares received by a U.S Holder in any tax year over 125% of the average annual distributions such U.S. Holder has received from the Company during the shorter of the three preceding tax years, or such U.S. Holder's holding period for the common shares. Generally, a U.S. Holder would be required to allocate any excess distribution or gain from the disposition of the common shares ratably over its holding period for the common shares. Such amounts allocated to the year of the disposition or excess distribution would be taxed as ordinary income, and amounts allocated to prior tax years would be taxed as ordinary income at the highest tax rate in effect for each such year and an interest charge at a rate applicable to underpayments of tax would apply.

While there are U.S. federal income tax elections that sometimes can be made to mitigate these adverse tax consequences (including, without limitation, the "QEF Election" under Section 1295 of the Code and the "Mark-to-Market Election" under Section 1296 of the Code), such elections are available in limited circumstances and must be made in a timely manner.

U.S. Holders should be aware that, for each tax year, if any, that the Company is a PFIC, the Company can provide no assurances that it will satisfy the record keeping requirements of a PFIC, or that it will make available to U.S. Holders the information such U.S. Holders require to make a QEF Election with respect to the Company or any Subsidiary PFIC. Thus,

U.S. Holders may not be able to make a QEF Election with respect to their common shares. U.S. Holders are urged to consult their own tax advisors regarding the potential application of the PFIC rules to the ownership and disposition of common shares, and the availability of certain U.S. tax elections under the PFIC rules.

Additional Considerations

Additional Tax on Passive Income

Individuals, estates and certain trusts whose income exceeds certain thresholds will be required to pay a 3.8% Medicare surtax on "net investment income" including, among other things, dividends and net gain from disposition of property (other than property held in a trade or business). U.S. Holders should consult with their own tax advisors regarding the effect, if any, of this tax on their ownership and disposition of common shares.

Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency, or on the sale, exchange or other taxable disposition of common shares, generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). A U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who converts or otherwise disposes of the foreign currency after the date of receipt may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Each U.S. Holder should consult its own U.S. tax advisor regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the common shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year.

Complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of a U.S. Holder's U.S. federal income tax liability that such U.S. Holder's "foreign source" taxable income bears to such U.S. Holder's worldwide taxable income. In applying this limitation, a U.S. Holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source." Generally, dividends paid by a foreign corporation should be treated as foreign source for this purpose, and gains recognized on the sale of stock of a foreign corporation by a U.S. Holder should be treated as U.S. source for this purpose, except as otherwise provided in an applicable income tax treaty, and if an election is properly made under the Code. However, the amount of a distribution with respect to the common shares that is treated as a "dividend" may be lower for U.S. federal income tax purposes than it is for Canadian federal income tax purposes, resulting in a reduced foreign tax credit allowance to a U.S. Holder. In addition, this limitation is calculated separately with respect to specific categories of income. The foreign tax credit rules are complex, and each U.S. Holder should consult its own U.S. tax advisor regarding the foreign tax credit rules.

Backup Withholding and Information Reporting

Under U.S. federal income tax law and Treasury Regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, U.S. return disclosure obligations (and related penalties) are imposed on individuals who are U.S. Holders that hold certain specified foreign financial assets in excess of certain threshold amounts. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person and any interest in a foreign entity. U. S. Holders may be subject to these reporting requirements unless their common shares are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult with their own tax advisors regarding the requirements of filing information returns, including the requirement to file an IRS Form 8938.

Payments made within the U.S. or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from the sale or other taxable disposition of, common shares will generally be subject to information reporting if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, certain exempt persons generally are excluded from these information reporting and backup withholding rules. Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup

withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner. Each U.S. Holder should consult its own tax advisor regarding the information reporting and backup withholding rules.

10F. Dividends and Paying Agents

Not applicable.

10G. Statement by Experts

Not applicable.

10H. Documents on Display

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and file reports, registration statements and other information with the SEC. However, we are a "foreign private issuer" as defined under U.S. securities laws. As a result, , we are exempt from certain informational requirements of the Securities Exchange Act of 1934 which domestic issuers are subject to, including the proxy rules under Section 14 of the Securities Exchange Act of 1934, the insider reporting and short-profit provisions under Section 16 of the Securities Exchange Act of 1934 and the requirement to file current reports Form 8-K upon the occurrence of certain material events. We intend to fulfill all informational requirements that do apply to us as a foreign private issuer under Securities Exchange Act of 1934 by filing all such information with the SEC. We are also subject to the full informational requirements of the securities commissions in all provinces of Canada. Our reports, registration statements and other information can be inspected on the SEC's website at www.sec.gov and such information can also be inspected and copies ordered at the public reference facilities maintained by the SEC at the following location: 100 F Street NE, Washington, D.C. 20549. You are also invited to read and copy any reports, statements or other information, other than confidential filings, that we intend to file with the Canadian provincial securities commissions. These filings are also electronically available from the Canadian System for Electronic Document Analysis and Retrieval (SEDAR) at www.sedar.com, the Canadian equivalent of the SEC's electronic document gathering and retrieval system.

10I. Subsidiary Information

See Item 4C. "*Organizational Structure*" of this Annual Report.

ITEM 11 QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

a) Transaction Risk and Currency Risk Management

Our operations do not employ complex financial instruments or derivatives, and given that we keep our excess funds in high-grade short-term instruments, we have determined that we have no material market risk. In the event we experience substantial growth in the future, our business and results of operations may be materially affected by the granting of credit options to our customers and certain other credit risks associated with our operations.

We purchase goods and services in both Canadian and U.S. dollars and earn a significant portion of our revenues in U.S. dollars. We manage our U.S. dollar currency risk by, as far as possible, using cash received from U.S. dollar revenues to pay U.S. dollar expenses and by limiting holdings of U.S. dollar cash and cash equivalent balances to working capital levels. We used a forward exchange contract to convert US$45,000,000 into Canadian dollars in November 2012. We have not entered into any other agreements or purchased any instruments to hedge possible currency risks at this time.

b) Interest Rate Risk and Equity Price Risk

We are equity financed and do not have any debt which could be subject to significant interest rate change risks. We have raised equity funding through the sale of securities denominated in Canadian and U.S. dollars, and will likely raise additional equity funding denominated in Canadian and U.S. dollars in the future.

We invest our cash reserves in a high interest savings account and in bankers' acceptances with varying terms to maturity (not exceeding two years) issued by major Canadian banks, selected with regard to the expected timing of expenditures for continuing operations and prevailing interest rates. Investments with a maturity greater than three months are classified in our Balance Sheet as held-for-trading short-term investments and are recorded at cost plus accrued interest. The fair value of our cash investments as at December 31, 2012 is at least equal to the face value of those investments and the value reported in our Balance Sheet. Due to the relatively short-term nature of the investments that we hold, we do not believe that the results of operations or cash flows would be affected to any significant degree by a sudden change in market interest rates relative to our investment portfolio.

c) Exchange Rate Sensitivity

An analysis of our sensitivity to foreign currency exchange rate movements is not provided as a large proportion of our foreign currency purchases are reimbursed by collaborators and customers which mitigates our foreign currency risk; therefore, the impact on the Company is not material.

d) Commodity Price Risk

Not applicable.

ITEM 12 DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

12A. Debt Securities

Not applicable.

12B. Warrants and Rights

Not applicable.

12C. Other Securities

Not applicable.

12D. American Depository Shares

Not applicable.

PART II

ITEM 13 DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

ITEM 14 MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS/ USE OF PROCEEDS

Not applicable.

ITEM 15 CONTROLS AND PROCEDURES

a) Disclosure Controls and Procedures

As of the end of our fiscal year ended December 31, 2012, an evaluation of the effectiveness of our “disclosure controls and procedures” (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) was carried out by the our management, with the participation of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO). Based upon that evaluation, the CEO and CFO have concluded that as of the end of that fiscal year, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission (the “Commission”) rules and forms and (ii) accumulated and communicated to the management of the registrant, including the CEO and CFO, to allow timely decisions regarding required disclosure.

It should be noted that while the CEO and CFO believe that our disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

b) Management’s Annual Report on internal control over financial reporting

Management is responsible for establishing and maintaining adequate internal control over our financial reporting. Our internal control system was designed to provide reasonable assurance that all transactions are accurately recorded, that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our assets are safeguarded.

Management has assessed the effectiveness of our internal control over financial reporting as at December 31, 2012. In making its assessment, management used the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework in Internal Control – Integrated Framework to evaluate the effectiveness of our internal control over financial reporting. Based on this assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2012.

(c) Attestation report of the registered public accounting firm

The Company is a “non-accelerated filer” within the meaning of Rule 12b-2 under the Exchange Act. Therefore, this annual report is not required to include an attestation report of our registered public accounting firm regarding our internal control over financial reporting.

(d) Changes in internal control over financial reporting

There have been no changes in our internal control over financial reporting during the period covered by the annual report, being the fiscal year ended December 31, 2012, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting and disclosure controls and procedures.

ITEM 16A AUDIT COMMITTEE FINANCIAL EXPERTS

The Audit Committee meets with the financial officers of the Company and the independent auditors to review and inquire into matters affecting financial reporting matters, the system of internal accounting and financial controls and procedures, and the audit procedures and plans. The committee also makes recommendations to the Board regarding the appointment of independent auditors. In addition, the committee reviews and recommends to the Board for approval the annual financial statements and the annual report and certain other documents including the interim financial statements required by the regulatory authorities. The committee is also responsible for approving the policies under which the financial officers of the Company may invest the funds in excess of those required for current operations. In 2010, the Audit Committee charter was revised to reflect our upcoming listing on the NASDAQ Capital Market. In its August 11, 2010 meeting, the Board of Directors approved the revised Audit Committee charter. The charter, in its most recently approved form dated August 14, 2012, is attached as an appendix to this Annual Report.

The committee has also adopted a policy that requires its approval of non-audit services to be provided by the Company's auditors.

The committee is currently composed of Messrs. Jewell, Galbraith and Karbe (the committee chairman), none of whom are current or former executive officers of the Company. Our Board has determined that all three members of the Audit Committee are "audit committee financial experts," as defined by the SEC because they meet the additional criteria for independence of Audit Committee members under the NASDAQ rules, they are financially literate, and based on either their training as a professional accountant or experience as a chief financial officer. See the biographies found in Item 6A. "*Directors and Management*" for a description of the education and experience of each audit committee member that is relevant to the performance of his responsibilities as an audit committee member.

ITEM 16B CODE OF ETHICS

The Board of Directors of Tekmira Pharmaceuticals Corporation has adopted a Code of Business Conduct (Code) for all directors, officers and employees of the Company.

The purpose of this Code is to promote:

- Honest and ethical conduct, including ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- Full, fair, accurate, timely, and understandable disclosure in the reports that Tekmira is required to file with such securities exchange or quotation system or regulatory agency as may from time to time apply to Tekmira and in other public communications made by Tekmira;
- Compliance with all applicable laws, rules and regulations.

The Company's Code of Business Conduct and related documents have been posted on Tekmira's website at www.tekmirapharm.com.

ITEM 16C PRINCIPAL ACCOUNTANT FEES AND SERVICES

Fees billed by external auditors

The aggregate fees billed for professional services rendered by KPMG for the years ended December 31, 2012 and December 31, 2011 are as follows:

	December 31, 2012	December 31, 2011
Audit fees[1]	$ 187,000	$ 208,800
Audit-related fees	$ 0	$ 0
Tax fees[2]	$ 33,550	$ 28,605
Other fees	$ 0	$ 0
Total fees	$ 220,550	$ 237,405

(1) Quarterly reviews, review of SEC listing documents and review of prospectus.
(2) Tax compliance and tax planning.

Audit Committee Pre-Approval Policies and Procedures

The Company has complied with the Canadian Institute of Chartered Accountants' Rules of Professional Conduct on auditor independence (the Rules) by adopting pre-approval policies and procedures for non-audit services to be provided by

the Company's auditors, KPMG LLP (KPMG). As they relate to public companies these Rules are very similar to the revised independence rules of the Securities and Exchange Commission (SEC) that became effective on May 6, 2003. They include prohibitions or restrictions on services that may be provided to audit clients and require that all services provided to a listed entity audit client, including its subsidiaries, be pre-approved by the client's audit committee.

The Rules identify the following ten types of non-audit services that are deemed inconsistent with an auditors' independence ("Prohibited Services"): bookkeeping or other services related to the audit client's accounting records or financial statements; financial information systems design and implementation; appraisal or valuation services for financial reporting purposes; actuarial services for items recorded in the financial statements; internal audit outsourcing services; management functions; human resources; certain corporate finance and other services; legal services; certain expert services unrelated to the audit.

The Rules provide further details as to the specific nature of services within these categories that are prohibited. The Company and its subsidiaries will not engage KPMG to carry out any Prohibited Service. For services that are not prohibited the following pre-approval policies will apply:

- The Audit Committee will pre-approve all audit services provided by KPMG through their recommendation of KPMG as shareholders' auditors at the Company's annual meeting and through the Audit Committee's review of KPMG's annual audit plan.
- Annually, the Audit Committee will review a list of audit, audit-related, tax and other non-audit services and recommend pre-approval of these services for the upcoming year. Any additional requests will be addressed on a case-by-case specific engagement basis as described below. The Audit Committee will be informed quarterly of the services on the pre-approved list for which the auditor has been engaged.
- All requests to engage KPMG for other services will be addressed on a case-by-case specific engagement basis. The Company employee making the request is to submit the request for service to the Company's Executive Vice President, Finance. The request for service should include a description of the service, the estimated fee, a statement that the service is not a Prohibited Service and the reason KPMG is being engaged.

For additional requests for services where the aggregate fees are estimated to be less than or equal to $20,000, recommendations, in respect of each engagement, will be submitted by Executive Vice President, Finance, the official responsible for coordinating services with KPMG to the chairman of the Audit Committee for consideration and approval. The full Audit Committee will subsequently be informed of the service, at its next meeting. The engagement may commence upon approval of the chairman of the Audit Committee. For services where the aggregate fees are estimated to be greater than $20,000, recommendations, in respect of each engagement, will be submitted by the Company's Executive Vice President, Finance to the full Audit Committee for consideration and approval, generally at its next meeting. The engagement may commence upon approval of the Committee.

Of the fees reported in the table above under the heading "Principal Accountant Fees and Services – Fees Billed by External Auditor", none of the fees billed by KPMG LLP were approved by the Company's audit committee pursuant to the de minimus exception provided by Section (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.

ITEM 16D EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

ITEM 16F CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G CORPORATE GOVERNANCE

Tekmira believes in building a strong governance foundation. We are subject to many provisions of the Sarbanes-Oxley Act of 2002 and related rules of the SEC, the governance standards of the NASDAQ and TSX and the rules and policies of the Canadian provincial securities regulators regarding audit committees, corporate governance and the certification of certain annual and interim filings. The Board of Directors continues to further its commitment to corporate governance by ensuring that all corporate governance documents are current, including the following documents:

- Audit Committee Charter;
- Corporate Governance and Nominating Committee Charter;
- Executive Compensation and Human Resource Committee Charter;
- Code of Conduct for Directors, Officers and Employees;
- Whistleblower Policy; and

- Insider Trading Policy.

With respect to monitoring compliance with our Code of Business Conduct and Code of Ethics for Senior Financial Officers our employees signed a declaration confirming that they had read and understood the codes. Employees are periodically re-trained on the Code.

The Board of Directors approved all current Committee Charters and Guidelines on August 14, 2012. All of the above listed documents are publicly available on the Tekmira website at www.tekmirapharm.com.

NASDAQ Corporate Governance Exemptions

As a Canadian corporation listed on the NASDAQ Capital Market, we are not required to comply with most of the NASDAQ corporate governance requirements, so long as we comply with Canadian corporate governance practices. In order to claim such an exemption, we must disclose the significant differences between our corporate governance practices and those required to be followed by U.S. domestic issuers under NASDAQ's corporate governance requirements. We are in compliance with the NASDAQ corporate governance requirements except as described below:

(1) Quorum Requirements

Rule 5620(c) of the NASDAQ Marketplace Rules requires that the minimum quorum requirement for a meeting of shareholders is 33.33% of the outstanding common shares. In addition, Rule 5620(c) requires that an issuer listed on NASDAQ state its quorum requirement in its bylaws. Our articles provide that a quorum for purposes of any meeting of shareholders of the Company consists of at least two persons who are, or who represent by proxy, one or more shareholders who, in the aggregate, hold at least 5% of the issues shares entitled to be voted at a meeting of shareholders. Our common shares are also listed on the Toronto Stock Exchange, the primary stock exchange in Canada, which does not prescribe a minimum quorum requirement. We follow applicable Canadian laws with respect to quorum requirements.

(2) Shareholder Approval

Rule 5635 of the NASDAQ Marketplace Rules requires shareholder approval to be obtained prior to the issuance of securities in connection with the undertaking of certain corporate actions. The circumstances under which shareholder approval is required under the NASDAQ Marketplace Rules are not identical to the circumstances under which shareholder approval is required under Canadian law and the requirements of the Toronto Stock Exchange. For example, but without limitation, Rule 5635 requires shareholder approval of most equity compensation plans and material revisions to such plans. This requirement covers plans that provide for the delivery of both newly issued and treasury securities. We follow the Toronto Stock Exchange rules with respect to the requirements for shareholder approval of potential transactions, including, without limitation, shareholder approval of equity compensation plans and material revisions to such plans.

ITEM 16H MINE SAFETY DISCLOSURE

Not applicable.

PART III

ITEM 17 FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18.

ITEM 18 FINANCIAL STATEMENTS

Our consolidated financial statements are included in this Annual Report beginning on page F-1.

ITEM 19 EXHIBITS

The following exhibits are included in this Annual Report

Exhibit Number	Description
1.1*	Notice of Articles and Articles of the Company (incorporated herein by reference to Exhibit 1.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
2.1*	Subscription Agreement, between the Company and Alnylam Pharmaceuticals, Inc., dated March 28, 2008 (incorporated herein by reference to Exhibit 2.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
2.2*	Subscription Agreement, between the Company and Roche Finance Ltd., dated March 31, 2008 (incorporated herein by reference to Exhibit 2.2 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.1†*	Amendment No. 1 to the Amended and Restated Agreement, between the Company (formerly Inex Pharmaceuticals Corporation) and Hana Biosciences, Inc., effective as of May 27, 2009 (incorporated herein by reference to Exhibit 4.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.2†*	Amended and Restated License Agreement, between Inex Pharmaceuticals Corporation and Hana Biosciences, Inc, dated April 30, 2007 (incorporated herein by reference to Exhibit 4.2 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.3†*	Sublicense Agreement, between Inex Pharmaceuticals Corporation and Alnylam Pharmaceuticals, Inc., dated January 8, 2007 (incorporated herein by reference to Exhibit 4.3 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.4†*	Amended and Restated License and Collaboration Agreement, between the Company and Alnylam Pharmaceuticals, Inc., effective as of May 30, 2008 (incorporated herein by reference to Exhibit 4.4 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.5†*	Amended and Restated Cross-License Agreement, between Alnylam Pharmaceuticals, Inc. and Protiva Biotherapeutics Inc., dated May 30, 2008 (incorporated herein by reference to Exhibit 4.5 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.6†*	License Agreement, between Inex Pharmaceuticals and Aradigm Corporation, dated December 8, 2004 (incorporated herein by reference to Exhibit 4.6 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.7†*	Settlement Agreement, between Sirna Therapeutics, Inc. and Merck & Co., Inc. and Protiva Biotherapeutics Inc. and Protiva Biotherapeutics (USA), Inc., effective as of October 9, 2007 (incorporated herein by reference to Exhibit 4.7 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.8†*	Development, Manufacturing and Supply Agreement, between the Company and Alnylam Pharmaceuticals, Inc., dated January 2, 2009 (incorporated herein by reference to Exhibit 4.8 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.9†*	Executive Employment Agreement with Ian Mortimer, dated March 26, 2008 (incorporated herein by reference to Exhibit 4.9 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).

Exhibit Number	Description
4.10*	Executive Employment Agreement with Ian MacLachlan, dated May 30, 2008 (incorporated herein by reference to Exhibit 4.10 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.11*	Executive Employment Agreement with Mark Murray, dated May 30, 2008 (incorporated herein by reference to Exhibit 4.11 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.12*	Executive Employment Agreement with Peter Lutwyche, dated January 1, 2009 (incorporated herein by reference to Exhibit 4.12 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.13*	Share Option Plan amended through May 12, 2009 (including form stock option agreements) (incorporated herein by reference to Exhibit 4.13 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.14*	Lease Agreement with Canada Lands Company CLC Limited dated December 15, 1997, as amended (incorporated herein by reference to Exhibit 4.14 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.15*	Form of Indemnity Agreement (incorporated herein by reference to Exhibit 4.15 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.16*	Award Contract with USASMDC/ARSTRAT effective date July 14, 2010 (incorporated herein by reference to Exhibit 4.16 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.17†*	License Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation executed on July 30, 2001 (incorporated herein by reference to Exhibit 4.17 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.18†*	Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated July 11, 2006 (incorporated herein by reference to Exhibit 4.18 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.19†*	Second Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated January 8, 2007 (incorporated herein by reference to Exhibit 4.19 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.20†*	Consent Agreement of the University of British Columbia to Inex/Alnylam Sublicense Agreement dated January 8, 2007 (incorporated herein by reference to Exhibit 4.20 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.21†*	Amendment No. 2 to the Amended and Restated Agreement, between the Company (formerly Inex Pharmaceuticals Corporation) and Hana Biosciences, Inc., effective as of September 20, 2010 (incorporated herein by reference to Exhibit 4.21 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.22†*	License and Collaboration Agreement between the Company and Halo-Bio RNAi Therapeutics, Inc. as of August 24, 2011 (incorporated herein by reference to Exhibit 4.22 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).
4.23*	Loan Agreement with Silicon Valley Bank dated as of December 21, 2011 (incorporated herein by reference to Exhibit 4.23 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).
4.24*	Employment Agreement with Paul Brennan dated August 24, 2010 (incorporated herein by reference to Exhibit 4.24 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).
4.25*	Tekmira 2011 Omnibus Share Compensation Plan approved by shareholders on June 22, 2011 (incorporated herein by reference to Exhibit 4.25 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).

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Exhibit Number	Description
4.26††**	Settlement Agreement and General Release, by and among Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., Alnylam Pharmaceuticals, Inc., and AlCana Technologies, Inc., dated November 12, 2012
4.27††**	Cross-License Agreement by and among Alnylam Pharmaceuticals, Inc., Tekmira Pharmaceuticals Corporation and Protiva Biotherapeutics Inc., dated November 12, 2012
4.28††**	License Agreement by and among Protiva Biotherapeutics Inc. and Marina Biotech, Inc. dated November 28, 2012
4.29**	Employment Agreement with Diane Gardiner dated March 1, 2013
8.1*	List of Subsidiaries (incorporated herein by reference to Exhibit 8.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
12.1**	Certification of Chief Executive Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2**	Certification of Chief Financial Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
13.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
15.1**	Consent of KPMG LLP
101	Interactive Data Files

* Previously filed.
** Filed herewith.
† Confidential treatment granted as to portions of this exhibit.
†† Confidential treatment has been requested as to portions of this exhibit.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

TEKMIRA PHARMACEUTICALS CORPORATION

/s/ Mark J. Murray
Mark J. Murray
President and Chief Executive Officer

Date: March 27, 2013

INDEX TO THE FINANCIAL STATEMENTS

For the period ended December 31, 2012

TEKMIRA PHARMACEUTICALS CORPORATION

Consolidated Financial Statements (expressed in Canadian dollars)

(Prepared in accordance with generally accepted accounting principles used in the United States of America (U.S. GAAP))

December 31, 2012

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The consolidated financial statements contained in this report have been prepared by management in accordance with generally accepted accounting principles in the United States of America and have been approved by the Board of Directors. The integrity and objectivity of these consolidated financial statements are the responsibility of management.

In support of this responsibility, management maintains a system of internal controls to provide reasonable assurance as to the reliability of financial information and the safe-guarding of assets. The consolidated financial statements include amounts which are based on the best estimates and judgments of management.

The Board of Directors is responsible for ensuring that management fulfills its responsibility for financial reporting and internal control and exercises this responsibility principally through the Audit Committee. The Audit Committee consists of three directors not involved in the daily operations of the Company. The Audit Committee meets with management and meets independently with the external auditors to satisfy itself that management's responsibilities are properly discharged and to review the consolidated financial statements prior to their presentation to the Board of Directors for approval.

The external auditors, KPMG LLP, conduct an independent examination, in accordance with Canadian generally accepted auditing standards and the Public Company Accounting Oversight Board (United States), and express their opinion on the consolidated financial statements. Their examination includes a review of the Company's system of internal controls and appropriate tests and procedures to provide reasonable assurance that the consolidated financial statements are, in all material respects, presented fairly and in accordance with accounting principles generally accepted in the United States of America. The external auditors have free and full access to the Audit Committee with respect to their findings concerning the fairness of financial reporting and the adequacy of internal controls.

/s/ Mark J. Murray

Dr. Mark J. Murray
President and
Chief Executive Officer

/s/ Ian C. Mortimer

Ian C. Mortimer
Executive Vice President, Finance and
Chief Financial Officer

March 27, 2013

AUDITORS' REPORT TO THE DIRECTORS

To the Shareholders and Board of Directors

We have audited the accompanying consolidated financial statements of Tekmira Pharmaceuticals Corporation, which comprise the consolidated balance sheets as at December 31, 2012 and December 31, 2011, the consolidated statements of operations and comprehensive income (loss), stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2012, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with generally accepted accounting principles in the United States of America, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Tekmira Pharmaceuticals Corporation as at December 31, 2012 and December 31, 2011 and its consolidated results of operations and its consolidated cash flows for each of the years in the three-year period ended December 31, 2012 in accordance with generally accepted accounting principles in the United States of America.

/s/ KPMG LLP
Chartered Accountants

March 27, 2013
Vancouver, Canada

TEKMIRA PHARMACEUTICALS CORPORATION

Consolidated Balance Sheets
(Expressed in Canadian Dollars)
(Prepared in accordance with U.S. GAAP)

	December 31 2012	December 31 2011
Assets		
Current assets:		
Cash and cash equivalents	**$ 46,785,518**	$ 9,184,134
Accounts receivable	**1,069,437**	880,693
Accrued revenue	**2,361,836**	185,356
Deferred expenses	**429,221**	788,111
Investment tax credits receivable	**9,825**	331,032
Prepaid expenses and other assets	**327,609**	424,387
Total current assets	**50,983,446**	11,793,713
Property and equipment (note 4)	**13,121,268**	18,684,491
Less accumulated depreciation and impairment (note 4)	**(11,776,396)**	(16,486,912)
Property and equipment net of accumulated depreciation and impairment (note 4)	**1,344,872**	2,197,579
Total assets	**$ 52,328,318**	$ 13,991,292
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities (note 11)	**$ 3,776,287**	$ 3,972,551
Deferred revenue (note 3)	**3,127,629**	2,807,898
Warrants (note 6)	**3,994,449**	205,044
Total current liabilities	**10,898,365**	6,985,493
Deferred revenue, net of current portion (note 3)	**718,779**	1,690,529
Total liabilities	**11,617,144**	8,676,022
Stockholders' equity:		
Common shares (note 6)		
Authorized - unlimited number with no par value Issued and outstanding:		
14,305,356 (December 31, 2011 - 12,148,635)	**238,245,333**	233,501,253
Additional paid-in capital	**31,520,480**	30,661,704
Deficit	**(229,054,639)**	(258,847,687)
Total stockholders' equity	**40,711,174**	5,315,270
Total liabilities and stockholders' equity	**$ 52,328,318**	$ 13,991,292

Nature of business and future operations (note 1)
Contingencies and commitments (note 9)

See accompanying notes to the consolidated financial statements.

TEKMIRA PHARMACEUTICALS CORPORATION

Consolidated Statements of Operations and Comprehensive Income (Loss)
(Expressed in Canadian Dollars)
(Prepared in accordance with U.S. GAAP)

	Year ended December 31		
	2012	2011	2010
Revenue (note 3)			
Collaborations and contracts	**$ 12,097,378**	$ 16,122,843	$ 14,923,860
Licensing fees and milestone payments	**2,010,100**	524,100	514,129
License amendment payment (note 3(f))	**—**	—	5,916,750
Total revenue	**14,107,478**	16,646,943	21,354,739
Expenses			
Research, development, collaborations and contracts	**18,031,718**	19,898,969	22,133,983
General and administrative	**8,135,528**	6,312,487	4,780,745
Depreciation of property and equipment	**865,041**	975,512	1,038,573
Loss on purchase and settlement of exchangeable and development notes (note 3(f))	**—**	—	5,916,750
Total expenses	**27,032,287**	27,186,968	33,870,051
Loss from operations	**(12,924,809)**	(10,540,025)	(12,515,312)
Other income (losses)			
Interest income	**138,231**	124,852	106,957
Licensing settlement payment (note 3(b))	**65,039,000**	—	—
Licensing settlement legal fees (note 3(b))	**(18,618,043)**	—	—
Foreign exchange gains (losses)	**24,839**	(14,522)	(7,125)
Warrant issuance costs (note 6(a))	**(47,000)**	(80,000)	—
(Increase) decrease in fair value of warrant liability	**(3,819,170)**	572,769	—
Net income (loss) and comprehensive income (loss)	**$ 29,793,048**	$ (9,936,926)	$(12,415,480)
Income (loss) per common share (note 1)			
Basic	**$ 2.17**	$ (0.88)	$ (1.20)
Diluted	**$ 2.08**	$ (0.88)	$ (1.20)
Weighted average number of common shares (note 1)			
Basic	**13,727,925**	11,318,766	10,332,941
Diluted	**14,320,814**	11,318,766	10,332,941

See accompanying notes to the consolidated financial statements.

TEKMIRA PHARMACEUTICALS CORPORATION

Consolidated Statement of Stockholders' Equity
For the years ended December 31, 2012, 2011 and 2010
(Expressed in Canadian Dollars)
(Prepared in accordance with U.S. GAAP)

	Number of shares	Share capital	Additional paid-in capital	Deficit	Total stockholders' equity
Balance, December 31, 2009	10,328,587	$229,426,757	$29,531,049	$(236,495,281)	$ 22,462,525
Stock-based compensation	—	—	650,620	—	650,620
Issuance of common shares pursuant to exercise of options	10,115	64,772	(29,859)	—	34,913
Net loss	—	—	—	(12,415,480)	(12,415,480)
Balance, December 31, 2010	10,338,702	$229,491,529	$30,151,810	$(248,910,761)	$ 10,732,578
Stock-based compensation	—	—	626,119	—	626,119
Issuance of common shares pursuant to exercise of options	20,033	126,886	(116,225)	—	10,661
Issuance of common shares in conjunction with the public offering, net of issuance costs of $475,568 and net of initial fair value of warrants of $742,809	1,789,900	3,882,838	—	—	3,882,838
Net loss	—	—	—	(9,936,926)	(9,936,926)
Balance, December 31, 2011	12,148,635	$233,501,253	$30,661,704	$(258,847,687)	$ 5,315,270
Stock-based compensation	**—**	**—**	**981,656**	**—**	**981,656**
Issuance of common shares pursuant to exercise of options	**38,635**	**193,925**	**(122,880)**	**—**	**71,045**
Issuance of common shares pursuant to exercise of warrants	**269,485**	**1,511,997**	**—**	**—**	**1,511,997**
Issuance of common shares in conjunction with the private offering, net of issuance costs of $178,407 and net of initial fair value of warrants of $850,358	**1,848,601**	**3,038,158**	**—**	**—**	**3,038,158**
Net income	**—**	**—**	**—**	**29,793,048**	**29,793,048**
Balance, December 31, 2012	**14,305,356**	**$238,245,333**	**$31,520,480**	**$(229,054,639)**	**$ 40,711,174**

See accompanying notes to the consolidated financial statements.

TEKMIRA PHARMACEUTICALS CORPORATION

Consolidated Statements of Cash Flow
(Expressed in Canadian Dollars)
(Prepared in accordance with U.S. GAAP)

	Year ended December 31		
	2012	2011	2010
OPERATING ACTIVITIES			
Income (loss) for the year	**$29,793,048**	$ (9,936,926)	$(12,415,480)
Items not involving cash:			
Depreciation of property and equipment	**865,041**	975,512	1,038,573
Stock-based compensation expense	**981,656**	626,119	650,620
Foreign exchange (gains) losses arising on foreign currency cash balances	**29,273**	(20,095)	7,187
Warrant issuance costs	**47,000**	80,000	—
Change in fair value of warrant liability	**3,819,170**	(572,769)	—
Fair value of warrants issued in conjunction with debt facility	**—**	35,004	—
Net change in non-cash operating items:			
Accounts receivable	**(188,744)**	2,438,036	(2,265,834)
Accrued revenue	**(2,176,480)**	632,108	(817,464)
Deferred expenses	**358,890**	(230,855)	(557,256)
Investment tax credits receivable	**321,207**	72,548	(123,448)
Inventory	**—**	150,731	(150,731)
Prepaid expenses and other assets	**96,778**	(109,330)	(88,076)
Accounts payable and accrued liabilities	**(196,264)**	(2,179,372)	498,096
Deferred revenue	**(652,019)**	360,685	2,975,305
Net cash provided by (used in) operating activities	**33,098,556**	(7,678,604)	(11,248,508)
INVESTING ACTIVITIES			
Proceeds from sale of property and equipment	**2,490**	—	—
Acquisition of property and equipment	**(14,824)**	(59,675)	(830,948)
Net cash provided by (used in) investing activities	**(12,334)**	(59,675)	(830,948)
FINANCING ACTIVITIES			
Proceeds from issuance of common shares and warrants, net of issuance costs	**3,841,516**	4,545,647	—
Issuance of common shares pursuant to exercise of options	**71,045**	10,661	34,913
Issuance of common shares pursuant to exercise of warrants	**631,874**	—	—
Net cash provided by financing activities	**4,544,435**	4,556,308	34,913
Foreign exchange gains (losses) arising on foreign currency cash balances	**(29,273)**	20,095	(7,187)
Increase (decrease) in cash and cash equivalents	**37,601,384**	(3,161,876)	(12,051,730)
Cash and cash equivalents, beginning of period	**9,184,134**	12,346,010	24,397,740
Cash and cash equivalents, end of period	**$46,785,518**	$ 9,184,134	$ 12,346,010
Supplemental cash flow information			
Investment tax credits received	**$ 321,207**	$ 102,464	$ 36,613
Fair value of warrants issued in conjunction with public offering	**$ 850,358**	$ 742,809	$ —
Fair value of warrants issued in conjunction with debt facility	**$ —**	$ 35,004	$ —

See accompanying notes to the consolidated financial statements.

TEKMIRA PHARMACEUTICALS CORPORATION
Notes to Consolidated financial statements
(Expressed in Canadian dollars)

1. Nature of business and future operations

Tekmira Pharmaceuticals Corporation (the "Company") is a Canadian biopharmaceutical business focused on advancing novel RNA interference therapeutics and providing its leading lipid nanoparticle delivery technology to pharmaceutical partners.

The success of the Company is dependent on obtaining the necessary regulatory approvals to bring its products to market and achieve profitable operations. The continuation of the research and development activities and the commercialization of its products are dependent on the Company's ability to successfully complete these activities and to obtain adequate financing through a combination of financing activities and operations. It is not possible to predict either the outcome of future research and development programs or the Company's ability to fund these programs in the future.

2. Significant accounting policies

Basis of presentation

Tekmira Pharmaceuticals Corporation was incorporated on October 6, 2005 as an inactive wholly owned subsidiary of Inex Pharmaceuticals Corporation ("Inex"). Pursuant to a "Plan of Arrangement" effective April 30, 2007 the business and substantially all of the assets and liabilities of Inex were transferred to the Company. The consolidated financial statements for all periods presented herein include the consolidated operations of Inex until April 30, 2007 and the operations of the Company thereafter.

These consolidated financial statements include the accounts of the Company and its two wholly-owned subsidiaries, Protiva Biotherapeutics Inc. and Protiva Biotherapeutics (USA), Inc., which were acquired on May 30, 2008. All intercompany transactions and balances have been eliminated on consolidation.

Use of estimates

The preparation of the consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions about future events that affect the reported amounts of assets, liabilities, revenue, expenses, contingent assets and contingent liabilities as at the end or during the reporting period. Actual results could significantly differ from those estimates. Significant areas requiring the use of management estimates relate to recognition of revenue, stock-based compensation, share purchase warrant valuation and the amounts recorded as accrued liabilities.

Cash and cash equivalents

Cash and cash equivalents are all highly liquid instruments with an original maturity of three months or less when purchased. Cash equivalents are recorded at cost plus accrued interest. The carrying value of these cash equivalents approximates their fair value.

Fair value of financial instruments

We measure certain financial instruments and other items at fair value.

To determine the fair value, we use the fair value hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows:

- Level 1 inputs are quoted market prices for identical instruments available in active markets.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets.

(Expressed in Canadian dollars)

- Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.

The Company's financial instruments consist of cash and cash equivalents, accounts receivable, investment tax credits receivable, accounts payable and accrued liabilities, warrants and promissory notes.

The carrying values of cash and cash equivalents are recorded at fair value based on quoted prices in active markets. The carrying values of accounts receivable, investment tax credits receivable and accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.

As quoted prices for the warrants are not readily available, the Company has used a Black-Scholes pricing model, as described in Notes 5 and 6, to estimate fair value. These are level 3 inputs as defined above.

The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:

	Level 1	Level 2	Level 3	December 31, 2012
Assets				
Cash	$44,148,562	—	—	$ 44,148,562
Guaranteed Investment Certificates	2,636,956	—	—	2,636,956
Total	$46,785,518	—	—	$ 46,785,518
Liabilities				
Warrants	—	—	$3,994,449	$ 3,994,449

	Level 1	Level 2	Level 3	December 31, 2011
Assets				
Cash	$ 1,556,253	—	—	$ 1,556,253
Guaranteed Investment Certificates	7,627,881	—	—	7,627,881
Total	$ 9,184,134	—	—	$ 9,184,134
Liabilities				
Warrants	—	—	$ 205,044	$ 205,044

The following table presents the changes in fair value of the Company's warrants:

	Liability at beginning of the period	Opening liability of warrants issued in the period	Fair value of warrants exercised in the period	Increase (decrease) in value of warrants	Liability at end of the period
Year ended December 31, 2011	$ —	$ 777,813	$ —	$ (572,769)	$ 205,044
Year ended December 31, 2012	$ 205,044	$ 850,358	$ (880,123)	$ 3,819,170	$ 3,994,449

Inventory

Inventory includes materials assigned for the manufacture of products for collaborative partners and manufacturing costs for products awaiting acceptance by collaborative partners. Inventory is carried at the lower of cost and net realizable value. The cost of inventories includes all costs of purchase, costs of manufacturing and other costs incurred in bringing the inventories to their present location and condition.

Materials purchased for the Company's own research and development products, or, for collaborative partners where an acceptance criteria does not apply, are not recorded as inventory but are expensed at the time of receipt.

Property and equipment

Property and equipment is recorded at cost less impairment losses, accumulated depreciation, related government grants and investment tax credits. The Company records depreciation using the straight-line method over the estimated useful lives of the capital assets as follows:

	Rate
Laboratory equipment	5 years
Computer and office equipment	2-5 years
Furniture and fixtures	5 years

Leasehold improvements are depreciated over their estimated useful lives but in no case longer than the lease term, except where lease renewal is reasonably assured. Assets held under capital leases that do not allow for ownership to pass to the Company are depreciated using the straight-line method over their useful life, not exceeding the lease term.

Intangible assets

The costs incurred in establishing and maintaining patents for intellectual property developed internally are expensed in the period incurred.

Impairment of long-lived assets

If there is a major event indicating that the carrying value of property and equipment may be impaired then management will perform an impairment test and if the recoverable value, based on undiscounted future cash flows, exceeds carrying value then such assets are written down to their fair values.

Revenue recognition

The Company earns revenue from research and development collaboration and contract services, licensing fees and milestone payments. Revenues associated with multiple element arrangements are attributed to the various elements based on their relative fair values or are recognized as a single unit of accounting when relative fair values are not determinable. Non-refundable payments received under collaborative research and development agreements are recorded as revenue as services are performed and related expenditures are incurred. Non-refundable upfront license fees from collaborative licensing and development arrangements are recognized as the Company fulfills its obligations related to the various elements within the agreements, in accordance with the contractual arrangements with third parties and the term over which the underlying benefit is being conferred. Revenue earned under contractual arrangements upon the occurrence of specified milestones is recognized as the milestones are achieved and collection is reasonably assured.

Revenue earned under research and development manufacturing collaborations where the Company bears some or all of the risk of a product manufacturing failure is recognized when the purchaser accepts the product and there are no remaining rights of return.

Revenue earned under research and development collaborations where the Company does not bear any risk of product manufacturing failure is recognized in the period the work is performed.

Revenue and expenses under the contract with the United States Government are being recorded using the percentage-of-completion method. Contract progress is based on costs incurred to date. Expenses under the contract are recorded in the Company’s consolidated statement of operations and comprehensive income (loss) as they are incurred. Government contract revenues related to expenses incurred under the contract are recorded in the same period as those expenses. Expenses accrued under the contract but not yet invoiced are recorded in the Company’s balance sheet as accrued liabilities and accrued revenues. Equipment purchased under the contract is recorded on the Company’s balance sheet as deferred expense and deferred revenue and amortized, on a straight-line basis, over the life of the contract.

Cash or other compensation received in advance of meeting the revenue recognition criteria is recorded on the balance sheet as deferred revenue. Revenue meeting recognition criteria but not yet received or receivable is recorded on the balance sheet as accrued revenue.

(Expressed in Canadian dollars)

Leases and lease inducements

Leases entered into are classified as either capital or operating leases. Leases which substantially transfer all benefits and risks of ownership of property to the Company are accounted for as capital leases. At the time a capital lease is entered into, an asset is recorded together with its related long-term obligation to reflect the purchase and financing.

All other leases are accounted for as operating leases wherein rental payments are expensed as incurred.

Lease inducements represent leasehold improvement allowances and reduced or free rent periods and are amortized on a straight-line basis over the term of the lease and are recorded as a reduction of rent expense.

Research and development costs

Research and development costs, including acquired in-process research and development expenses for which there is no alternative future use, are charged as an expense in the period in which they are incurred.

Income or loss per share

Income or loss per share is calculated based on the weighted average number of common shares outstanding. Diluted loss per share does not differ from basic loss per share since the effect of the Company's stock options and warrants is anti-dilutive. Diluted income per share is calculated using the treasury stock method which uses the weighted average number of common shares outstanding during the period and also includes the dilutive effect of potentially issuable common shares from outstanding, in-the-money stock options and warrants.

The following table sets out the computation of basic and diluted net income (loss) per common share:

	Year ended December 31		
	2012	2011	2010
Numerator:			
Net income (loss)	**$29,793,048**	$ (9,936,926)	$(12,415,480)
Denominator:			
Weighted average number of common shares	**13,727,925**	11,318,766	10,332,941
Effect of dilutive securities:			
Warrants	**177,374**	—	—
Options	**415,515**	—	—
Diluted weighted average number of common shares	**14,374,160**	11,318,766	10,332,941
Basic income (loss) per common share	**$ 2.17**	$ (0.88)	$ (1.20)
Diluted income (loss) per common share	**$ 2.08**	$ (0.88)	$ (1.20)

For the year ended December 31, 2012, potential common shares of 1,085,503 were excluded from the calculation of income per common share because their inclusion would be anti-dilutive (December 31, 2011 –2,830,635; December 31, 2010 – 1,627,280).

Government grants and refundable investment tax credits

Government grants and tax credits provided for current expenses is included in the determination of income or loss for the year, as a reduction of the expenses to which it relates. Government grants and tax credits towards the acquisition of property and equipment is deducted from the cost of the related property and equipment.

Foreign currency translation

The functional currency of the Company is the Canadian dollar. For the Company and its integrated subsidiaries (Protiva Biotherapeutics Inc. and Protiva Biotherapeutics (USA), Inc.), foreign currency monetary assets and liabilities are translated into Canadian dollars at the rate of exchange prevailing at the balance sheet date. Non-monetary assets and liabilities are translated at historical exchange rates. The previous month's closing rate of exchange is used to translate revenue and expense transactions. Exchange gains and losses are included in income or loss for the period.

Deferred income taxes

Income taxes are accounted for using the asset and liability method of accounting. Deferred income taxes are recognized for the future income tax consequences attributable to differences between the carrying values of assets and liabilities and their respective income tax bases and for loss carry-forwards. Deferred income tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the periods in which temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax laws or rates is included in earnings in the period that includes the enactment date. When realization of deferred income tax assets does not meet the more-likely-than-not criterion for recognition, a valuation allowance is provided.

Stock-based compensation

The Company grants stock options to employees and directors pursuant to a share incentive plan described in note 6. Compensation expense is recorded for issued stock options using the fair value method with a corresponding increase in additional paid-in capital. Any consideration received on the exercise of stock options is credited to share capital.

The fair value of stock options is typically measured at the grant date and amortized on a straight-line basis over the vesting period.

Warrants

The Company accounts for the warrants under the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own stock, on the understanding that in compliance with applicable securities laws, the registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. The Company classifies warrants in its consolidated balance sheet as a liability which is revalued at each balance sheet date subsequent to the initial issuance. The Company uses the Black-Scholes pricing model to value the warrants. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment. A small change in the estimates used may cause a relatively large change in the estimated valuation. The estimated volatility of the Company's common stock at the date of issuance, and at each subsequent reporting period, is based upon observations of warrants in the market with similar characteristics and expected remaining lives. The risk-free interest rate is based on the zero-coupon rate for bonds with a maturity similar to the expected remaining life of the warrants at the valuation date. The expected life of the warrants is assumed to be equivalent to their remaining contractual term.

Segment information

The Company operates in a single reporting segment, the research and development of RNA interference therapeutics. Substantially all of the Company's revenues to date were earned from customers or collaborators based in the United States. Substantially all of the Company's premises, property and equipment is located in Canada.

Recent accounting pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (FASB) or other standard setting bodies that are adopted by the Company as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

In December 2011, the FASB issued ASU 2011-11, *Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities*. This newly issued accounting standard requires an entity to disclose both gross and net information about instruments and transactions eligible for offset in the balance sheet as well as instruments and transactions executed under a master netting or similar arrangement and was issued to enable users of financial statements to understand the effects or potential effects of those arrangements on its balance sheet. This ASU is required to be applied retrospectively and is effective for fiscal years, and interim periods within those years,

beginning on or after January 1, 2013. As this accounting standard only requires enhanced disclosure, the adoption of this standard is not expected to have an impact on the Company's financial position or statement of operations.

In June 2011, the FASB issued ASU No. 2011-05, *Comprehensive Income (Topic 220): Presentation of Comprehensive Income*. This newly issued accounting standard (1) eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity; (2) requires the consecutive presentation of the statement of net income and other comprehensive income; and (3) requires an entity to present reclassification adjustments on the face of the financial statements from other comprehensive income to net income. The amendments in this ASU do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income nor do the amendments affect how earnings per share is calculated or presented. In December 2011, the FASB issued ASU No. 2011-12, *Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05*, which defers the requirement within ASU 2011-05 to present on the face of the financial statements the effects of reclassifications out of accumulated other comprehensive income on the components of net income and other comprehensive income for all periods presented. During the deferral, entities should continue to report reclassifications out of accumulated other comprehensive income consistent with the presentation requirements in effect prior to the issuance of ASU 2011-05. These ASUs are required to be applied retrospectively and are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011, which for the Company means January 1, 2012. As these accounting standards do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income, the adoption of these standards did not have an impact on the Company's financial position or results of operations.

In February 2013, the FASB issued amendments to the accounting guidance for presentation of comprehensive income to improve the reporting of reclassifications out of accumulated other comprehensive income. The amendments do not change the current requirements for reporting net income or other comprehensive income, but do require an entity to provide information about the amounts reclassified out of accumulated other comprehensive income by component. In addition, an entity is required to present, either on the face of the statement where the net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income but only if the amount reclassified is required under GAAP to be reclassified to net income in its entirety in the same reporting period. For other amounts that are not required under GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under GAAP that provide additional detail about these amounts. For public companies, these amendments are effective prospectively for reporting periods beginning after December 15, 2012. We do not believe the adoption of this guidance will have a material impact on our consolidated financial statements.

In May 2011, the FASB issued ASU No. 2011-04, *Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs*. This newly issued accounting standard clarifies the application of certain existing fair value measurement guidance and expands the disclosures for fair value measurements that are estimated using significant unobservable (Level 3) inputs. This ASU is effective on a prospective basis for annual and interim reporting periods beginning on or after December 15, 2011, which for the Company means January 1, 2012. The adoption of this standard did not have a material impact on the Company's financial position or results of operations.

(Expressed in Canadian dollars)

3. Collaborations, contracts and licensing agreements

The following tables set forth revenue recognized under collaborations, contracts and licensing agreements:

	Year ended December 31		
	2012	2011	2010
Collaborations and contracts			
U.S. Government (a)	**$ 11,528,660**	$ 11,432,163	$ 3,560,711
Alnylam (b)	**9,713**	4,142,796	6,258,535
BMS (c)	**439,995**	432,106	227,995
Roche (d)	**—**	40,232	4,499,689
Other RNAi collaborators (e)	**119,010**	75,546	376,930
Total research and development collaborations and contracts	**12,097,378**	16,122,843	14,923,860
Licensing fees and milestone payments			
Alnylam milestone payments (b)	**1,018,100**	524,100	514,129
Talon payments (f)	**992,000**	—	5,916,750
Total licensing fees and milestone payments	**2,010,100**	524,100	6,430,879
Total revenue	**$ 14,107,478**	$ 16,646,943	$ 21,354,739

The following table sets forth deferred collaborations and contracts revenue:

	December 31, 2012	December 31, 2011
U.S. Government (a)	**$ 1,381,922**	$ 1,593,946
BMS current portion (c)	**1,745,707**	1,213,952
Deferred revenue, current portion	**3,127,629**	2,807,898
BMS long-term portion (c)	**718,779**	1,690,529
Total deferred revenue	**$ 3,846,408**	$ 4,498,427

(a) Contract with U.S. Government to develop TKM-Ebola

On July 14, 2010, the Company signed a contract with the United States Government to advance TKM-Ebola, an RNAi therapeutic utilizing the Company's lipid nanoparticle technology to treat Ebola virus infection.

In the initial phase of the contract, funded as part of the Transformational Medical Technologies program, the Company is eligible to receive up to US$34.7 million. This initial funding is for the development of TKM-Ebola including completion of preclinical development, filing an Investigational New Drug application with the United States Food and Drug Administration ("FDA") and completing a Phase 1 human safety clinical trial.

The U.S. Government has the option of extending the contract beyond the initial funding period to support the advancement of TKM-Ebola through to the completion of clinical development and FDA approval. Based on the contract's budget this would provide the Company with up to US$140.0 million in funding for the entire program.

Under the contract, the Company is reimbursed for costs incurred, including an allocation of overhead costs, and is paid an incentive fee. At the beginning of the fiscal year the Company estimates its labour and overhead rates for the year ahead. At the end of the year the actual labour and overhead rates are calculated and revenue is adjusted accordingly. The Company's actual labour and overhead rates will differ from its estimated rates based on actual costs incurred and the proportion of the Company's efforts on contracts and internal products versus indirect activities. Within minimum and maximum collars, the amount of incentive fee the Company can earn

under the contract varies based on costs incurred versus budgeted costs. Until the Company is able to make a reliable estimate of the final contract costs, only the minimum incentive fee achievable and earned is recognized.

On August 6, 2012, the Company announced that it had received a temporary stop-work order from the U.S. Government in respect of this contract. On October 2, 2012, the Company announced that the stop-work order had been lifted and work on the contract resumed. On November 1, 2012, the Company submitted a contract modification request to the U.S. Government in order to integrate recent advancements in the Company's formulation technology. The modification request is currently being negotiated while work is continuing on the contract.

(b) License and collaboration with Alnylam Pharmaceuticals, Inc. ("Alnylam")

License and Collaboration Agreement with Alnylam through Tekmira

On January 8, 2007, the Company entered into a licensing and collaboration agreement with Alnylam ("Alnylam License and Collaboration"), which was amended and restated in May 2008, giving them an exclusive license to certain of the Company's historical lipid nanoparticle intellectual property for the discovery, development, and commercialization of ribonucleic acid interference ("RNAi") therapeutics.

The Alnylam License and Collaboration was replaced by a new license agreement as part of the settlement which is discussed below.

Cross-License with Alnylam acquired through Protiva

As a result of the acquisition of Protiva on May 30, 2008, the Company acquired a Cross-License Agreement between Protiva and Alnylam (the "Alnylam Cross-License"). Alnylam was granted a non-exclusive license to the Protiva intellectual property.

The Alnylam Cross-License was replaced by a new license agreement as part of the settlement which is discussed below.

Manufacturing agreement with Alnylam

Under a manufacturing agreement with Alnylam (the "Alnylam Manufacturing Agreement") effective January 1, 2009, the Company was the exclusive manufacturer of any products required by Alnylam through to the end of Phase 2 clinical trials that utilize the Company's technology. Alnylam was paying the Company for the provision of staff and for external costs incurred. Time charged to Alnylam was at a fixed rate and under the Alnylam Manufacturing Agreement there was a contractual minimum for the provision of staff of $11,200,000 over the three year period ending December 31, 2011.

The Alnylam Manufacturing Agreement was terminated as part of the settlement which is discussed below.

Milestone payments

In June 2012 the Company earned a $1,018,100 (US$1,000,000) milestone from Alnylam in respect of the initiation of Alnylam's ALN-TTR02 Phase 2 human clinical trial.

Settlement of litigation with Alnylam and AlCana Technologies Inc. ("AlCana")

On March 16, 2011 the Company filed a complaint against Alnylam. On November 12, 2012, the Company entered into an agreement to settle all litigation between the Company and Alnylam and AlCana (the "Settlement") and also entered into a new licensing agreement with Alnylam that replaces all earlier licensing, cross-licensing, collaboration, and manufacturing agreements. The Company expects to enter into a separate cross license agreement with AlCana which will include milestone and royalty payments and AlCana has agreed not to compete in the RNAi field for five years. In conjunction with the Settlement, the Company paid AlCana $298,080 (US$300,000). A further $1,492,350 (US$1,500,000) (see note 11), which the Company expects to pay upon the execution of a cross license agreement with AlCana, was included in research, development, collaborations and contracts expenses in the year ended December 31, 2012 .

As a result of the new Alnylam license agreement, on November 26, 2012, the Company received $65,039,000 (US$65,000,000) in cash from Alnylam. This includes US$30,000,000 associated with the termination of the

manufacturing agreement and US$35,000,000 associated with the termination of the previous license agreements, as well as a modification of the milestone and royalty schedules associated with Alnylam's ALN-VSP, ALN-PCS, and ALN-TTR programs. In addition, Alnylam has transferred all agreed upon patents and patent applications related to lipid nanoparticle ("LNP") technology for the systemic delivery of RNAi therapeutic products, including the MC3 lipid family, to the Company, who will own and control prosecution of this intellectual property portfolio. The Company is the only entity able to sublicense its LNP intellectual property in future platform-type relationships. Alnylam has a license to use the Company's intellectual property to develop and commercialize products and may only grant access to the Company's LNP technology to its partners if it is part of a product sublicense. Alnylam will pay the Company milestones and royalties as Alnylam's LNP-enabled products are developed and commercialized.

The new licensing agreement with Alnylam also grants the Company intellectual property rights to develop its own proprietary RNAi therapeutics. Alnylam has granted the Company a worldwide license for the discovery, development and commercialization of RNAi products directed to thirteen gene targets – three exclusive and ten non-exclusive licenses – provided that they have not been committed by Alnylam to a third party or are not otherwise unavailable as a result of the exercise of a right of first refusal held by a third party or are part of an ongoing or planned development program of Alnylam. Licenses for five of the ten non-exclusive targets – ApoB, PLK1, Ebola, WEE1, and CSN5 – have already been granted, along with an additional license for ALDH2, which has been granted on an exclusive basis. In consideration for this license, the Company has agreed to pay single-digit royalties to Alnylam on product sales and have milestone obligations of up to US$8,500,000 on the non-exclusive licenses (with the exception of TKM-Ebola, which has no milestone obligations). Alnylam no longer has "opt-in" rights to the Company's lead oncology product, TKM-PLK1, so the Company now holds all development and commercialization rights related TKM-PLK1. The Company will have no milestone obligations on the three exclusive licenses.

As a result of the settlement of the litigation between the Company and Alnylam, $18,618,043 (US$18,737,966) in a contingent obligation payment to Orrick, Herrington and Sutcliffe LLP ("Orrick"), lead legal counsel for the lawsuit against Alnylam and AlCana, was paid out on December 10, 2012 and recorded as other income (losses).

(c) Bristol-Myers Squibb ("BMS") collaboration

On May 10, 2010 the Company announced the expansion of its research collaboration with BMS. Under the new agreement, BMS uses small interfering RNA ("siRNA") molecules formulated by the Company in LNP technology to silence target genes of interest. BMS is conducting the preclinical work to validate the function of certain genes and share the data with the Company. The Company can use the preclinical data to develop RNAi therapeutic drugs against the therapeutic targets of interest. The Company received $3,233,400 (US$3,000,000) from BMS concurrent with the signing of the agreement and recorded the amount as deferred revenue. The Company is required to provide a pre-determined number of LNP batches over the four-year agreement. BMS has a first right to negotiate a licensing agreement on certain RNAi products developed by the Company that evolve from BMS validated gene targets.

Revenue from the May 10, 2010 agreement with BMS is being recognized as the Company produces the related LNP batches.

(d) Roche collaboration

On May 11, 2009 the Company announced a product development agreement with F. Hoffman-La Roche Ltd (the "Roche Product Development Agreement"). Under the Roche Product Development Agreement Roche was to pay the Company up to US$8,800,000 to support the advancement of each Roche RNAi product candidate using the Company's lipid nanoparticle technology through to the filing of an Investigational New Drug ("IND") application.

Under the Roche Product Development Agreement Roche was paying the Company for the provision of staff and for external costs incurred. The Company recognized revenue in proportion to the services provided up to the reporting date by comparing actual hours spent to estimated total hours for each product under the contract. Revenue from external costs incurred on Roche product candidates was recorded in the period that Roche was invoiced for those costs. The difference between service revenue recognized and cash received was recorded in the Company's balance sheet as deferred revenue.

On November 17, 2010, Roche announced that, as part of a corporate restructuring, they would discontinue research and development in the field of RNAi. Following the announcement Roche confirmed that, except for completing some product stability studies, they would be discontinuing product development with the Company. The stability studies were completed in 2011 and the Company has no further obligation to Roche.

(e) Other RNAi collaborators

The Company has active research agreements with a number of other RNAi collaborators.

(f) Agreements with Talon Therapeutics, Inc. ("Talon", formerly Hana Biosciences, Inc.) and related contingent obligation

On May 6, 2006, the Company signed a number of agreements with Talon including the grant of worldwide licenses (the "Talon License Agreement") for three of the Company's chemotherapy products, Marqibo®, Alocrest™ (Optisomal Vinorelbine) and Brakiva™ (Optisomal Topotecan).

On May 27, 2009, the Talon License Agreement was amended to decrease the size of near-term milestone payments and increase the size of long-term milestone payments. On September 20, 2010, the Talon License Agreement was amended a second time such that Talon paid $5,916,750 (US$5,750,000) in consideration for reducing certain future payments associated with the product candidates. The payment of $5,916,750 was recorded as license amendment revenue. If Talon sublicenses any of the product candidates, the Company is eligible to receive a percentage of any upfront fees or milestone payments received by Talon.

The Company had a contingent obligation that arose through a Purchase and Settlement Agreement dated June 20, 2006 whereby the Company retired exchangeable and development notes in exchange for contingent consideration including certain future milestone and royalty payments from Talon. Concurrent with signing the second amendment of the Talon License Agreement the Company signed a Waiver and Release with certain contingent creditors, the "Former Noteholders". The balance of the contingent obligation related to the Talon milestones and royalties immediately prior to signing the Waiver and Release was US$22,835,476. As per the terms of the Waiver and Release, in 2010, the Company paid the Former Noteholders $5,916,750 (US$5,750,000) in full settlement of the contingent obligation and recorded the payment as a loss on the purchase and settlement of the exchangeable and development notes. From the date of the Waiver and Release, the Company has no further obligation to the Former Noteholders and will retain any milestones or royalties received from Talon.

On August 9, 2012, the Company announced that Talon had received accelerated approval for Marqibo® from the FDA for the treatment of adult patients with Philadelphia chromosome negative acute lymphoblastic leukemia in second or greater relapse or whose disease has progressed following two or more anti-leukemia therapies. Marqibo is a liposomal formulation of the chemotherapy drug vincristine. In the year ended December 31, 2012, the Company received a milestone of $992,000 (US$1,000,000) based on the FDA's approval of Marqibo and will receive royalty payments based on Marqibo's commercial sales. There are no further milestones related to Marqibo but the Company is eligible to receive total milestone payments of up to US$18,000,000 on Alocrest and Brakiva.

(g) License agreement with Merck & Co., Inc. ("Merck")

As a result of the acquisition of Protiva in 2008, the Company received a non-exclusive royalty-bearing world-wide license, of certain intellectual property acquired by Merck. Under the license Merck will pay up to US$17,000,000 in milestones for each product it develops using the acquired intellectual property except for the first product for which Merck will pay up to US$15,000,000 in milestones. Merck will also pay royalties on product sales. The license agreement with Merck was entered into as part of a settlement of litigation between Protiva and a Merck subsidiary. No payments have been made under this license to date.

Merck has granted a license to the Company to certain of its intellectual property.

(Expressed in Canadian dollars)

4. Property and equipment

December 31, 2012	Cost	Accumulated depreciation and impairment	Net book value
Lab equipment	$ 5,110,910	$ (4,763,611)	$ 347,299
Leasehold improvements	5,948,003	(5,016,316)	931,687
Computer and office equipment	1,641,223	(1,577,244)	63,979
Furniture and fixtures	421,132	(419,225)	1,907
	$13,121,268	$(11,776,396)	$1,344,872

December 31, 2011	Cost	Accumulated depreciation and impairment	Net book value
Lab equipment	$ 7,688,286	$ (6,984,194)	$ 704,092
Leasehold improvements	7,212,104	(5,976,916)	1,235,188
Computer and office equipment	3,120,072	(2,869,622)	250,450
Furniture and fixtures	664,029	(656,180)	7,849
	$18,684,491	$(16,486,912)	$2,197,579

In the year ended December 31, 2012, the Company identified certain property and equipment that is not currently in use. All of this property and equipment had been fully depreciated and had a net book value of zero. The cost and accumulated depreciation of this property and equipment of $5,574,219 was removed from the Company's balance sheet on December 31, 2012.

5. Borrowing facility

On December 21, 2011, the Company signed an agreement with Silicon Valley Bank ("SVB") for a term loan facility (the "loan") of up to $3,051,000 (US$3,000,000). On September 24, 2012 the loan was amended to extend the deadline for any draw down on the facility from September 30, 2012 to December 31, 2012. The loan would have matured on September 1, 2015 and would have carried fixed interest rate of 8% annually. The Company did not draw down on the loan and the facility has now expired.

In part payment for establishing the loan, the Company issued SVB 54,545 common share purchase warrants with an exercise price of $1.65 and an expiration date of December 21, 2018. On the date of issuance, the Black-Scholes aggregate value of the 54,545 warrants was $35,004 and is based on an assumed risk-free interest rate of 1.48%, volatility of 40%, a zero dividend yield and an expected life of 7 years. The fair value of the warrants at issuance was recorded as a liability.

At December 31, 2011, the Black-Scholes value of the warrants was $35,004, based on an assumed risk-free interest rate of 1.51%, volatility of 40%, a zero dividend yield and an expected life of 6.98 years.

The 54,545 warrants were exercised by SVB during the year ended December 31, 2012 (note 6 (d)).

The legal and professional costs of establishing the loan of $70,095 and the initial fair value of the warrants of $35,004 are included in general and administrative expenses in the year ended December 31, 2011.

6. Share capital

(a) Financing

On June 16, 2011, the Company completed a public offering of 1,789,900 units at a price of $2.85 each for total gross proceeds, before expenses, of $5,101,215. Each unit consists of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to acquire one common share at a price

(Expressed in Canadian dollars)

of $3.35. The warrants expire on June 15, 2016. After paying underwriter's commission and other unit issue costs, the offering generated net cash of $4,545,647. The total unit issuance cost of $555,568 has been allocated, on a pro-rata basis, as $475,568 to the shares and $80,000 to the warrants and recorded, respectively, to share capital and warrant issuance costs in the consolidated statement of operations and comprehensive income (loss).

On the date of issuance, the Black-Scholes aggregate value of the 894,950 warrants was $742,809 based on an assumed risk-free interest rate of 2.19%, volatility of 40%, a zero dividend yield and an expected life of 5 years. The fair value of the warrants at issuance was initially recorded as a liability with the residual amount of proceeds allocated to share capital.

On February 29, 2012, the Company completed a private placement offering of 1,848,601 units at a price of $2.20 each for total gross proceeds, before expenses, of $4,066,923. Each unit consists of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to acquire one common share at a price of $2.60. The warrants expire on February 28, 2017. After paying brokerage fees and other unit issue costs, the offering generated net cash of $3,841,516. The total unit issuance cost of $225,407 has been allocated, on a pro-rata basis, as $178,407 to the shares and $47,000 to the warrants and recorded, respectively, to share capital and warrant issuance costs in the consolidated statement of operations and comprehensive income (loss).

On the date of issuance, the Black-Scholes aggregate value of the 924,302 warrants was $850,358 based on an assumed risk-free interest rate of 1.44%, volatility of 40%, a zero dividend yield and an expected life of 5 years. The fair value of the warrants at issuance was initially recorded as a liability with the residual amount of proceeds from the private placement being allocated to share capital.

(b) Authorized share capital

The Company's authorized share capital consists of an unlimited number of common and preferred shares without par value.

(c) Consolidation of common shares

On November 4, 2010 the Company's common shares were consolidated on a basis of five current common shares for one new common share. All references to common stock, common shares outstanding, average number of common shares outstanding, per share amounts and options in these financial statements and notes thereto have been restated to reflect the common stock consolidation on a retroactive basis.

(d) Warrants to purchase common shares

During the year ended December 31, 2012, there were 230,841 warrants exercised for $631,874 in cash and 54,545 warrants exercised using the cashless exercise provision in return for 38,644 common shares (year ended December 31, 2011 – nil).

A following table summarizes the Company's warrant activity for the years ended December 31, 2011 and 2012:

	Common shares purchasable upon exercise of warrants	Weighted average exercise price	Range of exercise prices	Weighted average remaining contractual life (years)	Aggregate intrinsic value
Balance, December 31, 2010	—	—	—	—	
Issued	949,495	$ 3.25	$1.65 - $3.35		
Balance, December 31, 2011	949,495	$ 3.25	$1.65 - $3.35	4.6	—
Issued	924,302	$ 2.60	$ 2.60		
Exercised	(285,386)	$ 2.53	$1.65 - $3.35		
Balance, December 31, 2012	1,588,411	$ 3.00	$2.60 - $3.35	3.8	$3,140,893

The aggregate intrinsic value in the table above is calculated based on the difference between the exercise price of the warrants and the quoted price of the Company's common stock as of the reporting date.

(Expressed in Canadian dollars)

All of the Company's warrants were exercisable as of December 31, 2012.

The weighted average Black-Scholes option-pricing assumptions and the resultant fair values are as follows for warrants outstanding at December 31, 2012 and 2011 are as follows:

	Year ended December 31	
	2012	2011
Dividend yield	**0.00%**	0.00%
Expected volatility	**40.00%**	40.00%
Risk-free interest rate	**1.28%**	1.29%
Expected average term	**3.8 years**	4.6 years
Fair value of warrants outstanding	**$ 2.51**	$ 0.22
Aggregate fair value of warrants outstanding	**$3,994,449**	$ 205,044

The value of the Company's warrants are particularly sensitive to changes in the Company's share price and the estimated rate of share price volatility.

(e) Stock-based compensation

The Company has three share-based compensation plans; the "2007 Plan", the "2011 Plan" and the "Protiva Option Plan".

On June 22, 2011, the shareholders of the Company approved an omnibus stock-based compensation plan (the "2011 Plan") and a 273,889 increase in the number of stock-based compensation awards that the Company is permitted to issue. The Company's pre-existing 2007 Plan was limited to the granting of stock options as equity incentive awards whereas the 2011 Plan also allows for the issuance of tandem stock appreciation rights, restricted stock units and deferred stock units (collectively, and including options, referred to as "Awards"). The 2011 Plan replaces the 2007 Plan. The 2007 Plan will continue to govern the options granted thereunder. No further options will be granted under the Company's 2007 Plan.

Under the Company's 2007 Plan the Board of Directors granted options to employees, directors and consultants of the Company. The exercise price of the options was determined by the Company's Board of Directors but was always at least equal to the closing market price of the common shares on the day preceding the date of grant and the term of options granted did not exceed 10 years. The options granted generally vested over three years for employees and immediately for directors.

Under the Company's 2011 Plan the Board of Directors may grant options, and other types of Awards, to employees, directors and consultants of the Company. The exercise price of the options is determined by the Company's Board of Directors but will be at least equal to the closing market price of the common shares on the day preceding the date of grant and the term may not exceed 10 years. Options granted generally vest over three years for employees and immediately for directors.

Hereafter, information on options governed by the 2007 Plan and 2011 Plan is presented on a consolidated basis as the terms of the two plans are similar. Information on the Protiva Option Plan is presented separately.

On June 20, 2012, the shareholders of the Company approved a 550,726 increase in the number of stock-based compensation awards that the Company is permitted to issue.

(Expressed in Canadian dollars)

Stock option activity for the Company's 2007 Plan and 2011 Plan

	Number of optioned common shares	Weighted average exercise price	Aggregate intrinsic value
Balance, December 31, 2009	865,628	$ 10.10	$ 705,885
Options granted	275,225	$ 4.40	
Options exercised	(9,548)	$ 3.63	$ 29,320
Options forfeited, cancelled or expired	(47,873)	$ 27.38	
Balance, December 31, 2010	1,083,432	$ 7.95	$ 756,628
Options granted	403,100	$ 2.14	
Options exercised	(1,667)	$ 1.50	$ 1,330
Options forfeited, cancelled or expired	(71,547)	$ 27.42	
Balance, December 31, 2011	1,413,318	$ 5.32	$ 1,800
Options granted	326,300	$ 4.16	
Options exercised	(28,417)	$ 2.34	$ 81,545
Options forfeited, cancelled or expired	(62,355)	$ 21.27	
Balance, December 31, 2012	1,648,846	$ 4.54	$2,299,512

Options under the 2007 Plan and 2011 Plan expire at various dates from December 5, 2013 to December 9, 2022.

The following table summarizes information pertaining to stock options outstanding at December 31, 2012 under the Company's 2007 Plan and 2011 Plan:

	Options outstanding December 31, 2012			Options exercisable December 31, 2012	
Range of Exercise prices	Number of options outstanding	Weighted average remaining contractual life (years)	Weighted average exercise price	Number of options exercisable	Weighted average exercise price
$ 1.50 to $ 1.90	296,450	7.6	$ 1.71	232,950	$ 1.71
$ 2.10 to $ 2.60	316,000	8.8	2.30	241,375	2.37
$ 3.00 to $ 3.10	129,525	3.2	3.03	129,525	3.03
$ 3.73 to $ 3.85	176,550	7.1	3.85	142,688	3.85
$ 4.60 to $ 5.15	321,565	8.9	5.00	164,924	4.88
$ 5.35 to $ 5.60	270,041	4.8	5.56	270,040	5.56
$ 5.90 to $11.60	117,465	4.3	7.08	112,403	7.03
$49.20 to $69.00	21,250	0.9	58.00	21,250	58.00
$ 1.50 to $69.00	1,648,846	6.9	$ 4.54	1,315,155	$ 4.75

At December 31, 2012, there were 1,315,155 options exercisable (December 31, 2011 – 1,015,224; December 31, 2010 - 861,549) with a weighted average exercise price of $4.75. The weighted average remaining contractual life of exercisable options as at December 31, 2012 was 6.3 years. The aggregate intrinsic value of options exercisable at December 31, 2012 was $1,834,841.

(Expressed in Canadian dollars)

A summary of the Company's non-vested stock option activity and related information for the year ended December 31, 2012 is as follows:

	Number of optioned common shares	Weighted average fair value
Non-vested at December 31, 2011	398,094	$ 2.51
Options granted	326,300	4.16
Options vested	(372,128)	2.88
Non-vested options forfeited	(18,575)	2.72
Non-vested at December 31, 2012	333,691	$ 3.38

The weighted average remaining contractual life for options expected to vest at December 31, 2012 was 9.2 years and the weighted average exercise price for these options was $3.69 per share.

The aggregate intrinsic value of options expected to vest as at December 31, 2012 was $450,330 (December 31, 2011 - $nil; December 31, 2010 - $175,905).

The total fair value of options that vested during the year ended December 31, 2012 was $1,071,548 (2011 - $351,542; 2010 - $468,105).

Valuation assumptions for the Company's 2007 Plan and 2011 Plan

The fair value of stock options at date of grant, based on the following assumptions, was estimated using the Black-Scholes option-pricing model. Assumptions on the dividend yield are based on the fact that the Company has never paid cash dividends and has no present intention to pay cash dividends. Assumptions about the Company's expected stock-price volatility are based on the historical volatility of the Company's publicly traded stock. The risk-free interest rate used for each grant is equal to the zero coupon rate for instruments with a similar expected life. Expected life assumptions are based on the Company's historical data. The Company currently expects, based on an analysis of its historical forfeitures, that no options will be forfeited by senior employees and that approximately 94% of its options issued to non-senior employees will ultimately vest, and based on a three year vesting period has applied an annual forfeiture rate of 2.0% to all unvested options held by non-senior employees as of December 31, 2012. The Company will record additional expense if the actual forfeitures are lower than estimated and will record a recovery of prior expense if the actual forfeitures are higher than estimated. The weighted average option pricing assumptions and the resultant fair values are as follows:

	Year ended December 31		
	2012	2011	2010
Dividend yield	**0.00%**	0.00%	0.00%
Expected volatility	**120.40%**	116.26%	116.90%
Risk-free interest rate	**1.56%**	2.51%	2.60%
Expected average option term	**8.2 years**	9.6 years	6.6 years
Fair value of options granted	**$ 3.83**	$ 2.00	$ 3.82

(Expressed in Canadian dollars)

Stock-based compensation expense for the Company's 2007 Plan and 2011 Plan

An expense for stock-based compensation for options awarded to employees and calculated in accordance with the fair value method has been recorded in the consolidated statement of operations and comprehensive income (loss) as follows:

	Year ended December 31		
	2012	2011	2010
Research, development, collaborations and contracts expenses	**$771,869**	$494,634	$533,508
General and administrative expenses	**209,787**	131,485	117,112
Total	**$981,656**	$626,119	$650,620

At December 31, 2012, there remains $952,149 of unearned compensation expense related to unvested employee stock options to be recognized as expense over a weighted-average period of approximately 15 months.

Protiva Option Plan

On May 30, 2008, as a condition of the acquisition of Protiva Biotherapeutics Inc., a total of 350,457 common shares of the Company were reserved for the exercise of 519,073 Protiva share options ("Protiva Options"). The Protiva Options have an exercise price of $0.30, were fully vested and exercisable as of May 30, 2008, expire at various dates from January 22, 2013 to March 1, 2018 and upon exercise each option will be converted into approximately 0.6752 shares of the Company (the same ratio at which Protiva common shares were exchanged for Company common shares at completion of the acquisition of Protiva). The Protiva Options are not part of the Company's 2007 Plan or 2011 Plan and the Company is not permitted to grant any further Protiva Options.

The following table sets forth outstanding options under the Protiva Option Plan:

	Number of Protiva Options	Equivalent number of Company common shares	Weighted average exercise price
Balance, December 31, 2009	519,073	350,457	$ 0.30
Options exercised	(850)	(574)	0.30
Options forfeited, cancelled or expired	—	—	—
Balance, December 31, 2010	518,223	349,883	0.30
Options exercised	(27,202)	(18,366)	0.30
Options forfeited, cancelled or expired	—	—	—
Balance, December 31, 2011	491,020	331,517	0.30
Options exercised	(15,135)	(10,218)	0.30
Options forfeited, cancelled or expired	—	—	—
Balance, December 31, 2012	475,885	321,299	$ 0.30

The weighted average remaining contractual life of exercisable Protiva Options as at December 31, 2012 was 3.1 years.

The aggregate intrinsic value of Protiva Options outstanding at December 31, 2012 was $1,457,269. The intrinsic value of Protiva Options exercised in the year ended December 31, 2012 was $18,929 (2011 - $42,615; 2010 - $2,688).

(Expressed in Canadian dollars)

Awards outstanding and available for issuance

Combining all of the Company's share-based compensation plans, at December 31, 2012, the Company has 1,970,145 options outstanding and a further 422,688 Awards available for issuance.

7. Government grants and refundable investment tax credits

Government grants and refundable investment tax credits have been netted against research and development expenses.

Government grants for the year ended December 31, 2012 include $nil in funding from the US Army Medical Research Institute for Infectious Diseases (2011 - $nil; 2010 - $191,194).

The Company's estimated claim for refundable Scientific Research and Experimental Development investment tax credits for the year ended December 31, 2012 is $nil (2011 - $20,905; 2010 - $196,556).

8. Income taxes

Income tax (recovery) expense varies from the amounts that would be computed by applying the combined Canadian federal and provincial income tax rate of 17.5% (year ended December 31, 2011 – 26.5%; December 31, 2010 – 28.5%) to the loss before income taxes as shown in the following tables:

	Year ended December 31		
	2012	2011	2010
Computed taxes (recoveries) at Canadian federal and provincial tax rates	**$ 7,448,281**	$(2,633,285)	$(3,538,412)
Differences due to change in enacted tax rates	**777,000**	712,236	
Difference due to change in tax rate on opening deferred taxes	**2,623,000**	3,427,057	—
Permanent and other differences	**2,191,116**	143,992	1,409,918
Change in valuation allowance	**(2,503,000)**	(1,650,000)	2,880,000
Utilization of investment tax credits	**(10,536,397)**	—	—
Utilization of non-capital loss carryforwards	**—**	—	(751,506)
Income tax (recovery) expense	**$ —**	$ —	$ —

As at December 31, 2012, the Company has investment tax credits available to reduce Canadian federal income taxes of $5,861,202 (December 31, 2011 - $11,093,450) and provincial income taxes of $1,904,908 (December 31, 2011 - $5,500,315) and expiring between 2013 and 2032.

At December 31, 2012, the Company has scientific research and experimental development expenditures of $48,111,776 (December 31, 2011 - $50,575,034) available for indefinite carry-forward and $21,348,573 (December 31, 2011 - $19,037,156) of net operating losses due to expire between 2027 and 2032 and which can be used to offset future taxable income in Canada.

On November 23, 2011, the Company was registered as a corporation under the Business Activity Act in the province of British Columbia. Under this program, provincial corporation tax charged on foreign income earned from the Company's patents will be eligible for a 75% tax refund up to a maximum of $8,000,000.

(Expressed in Canadian dollars)

Significant components of the Company's deferred tax assets are shown below:

	Year ended December 31	
	2012	2011
Deferred tax assets:		
Non-capital loss carryforwards	**$ 4,538,000**	$ 4,438,000
Research and development deductions	**8,540,000**	9,295,000
Book amortization in excess of tax	**1,925,000**	2,779,000
Share issue costs	**(26,000)**	45,000
Warrant liability	**724,000**	65,000
Revenue recognized for tax purposes in excess of revenue recognized for accounting purposes	**—**	1,125,000
Tax value in excess of accounting value in lease inducements	**8,000**	49,000
Accounting value in excess of tax value in intangible assets	**371,000**	49,000
Provincial investment tax credits	**303,000**	973,000
Total deferred tax assets	**16,383,000**	18,818,000
Valuation allowance	**(16,383,000)**	(18,818,000)
Net deferred tax assets	**$ —**	$ —

9. Contingencies and commitments

Property lease

Effective July 29, 2009 the Company signed an amendment to the operating lease for its laboratory and office premises. The amended lease expires in July 2014 but the Company has the option to extend the lease to 2017 and then to 2022 and then to 2027. The amended lease included a signing incentive payment. In accordance with the Company's accounting policy the signing incentive payment is being amortized on a straight-line basis over the term of the amended lease.

Following the lease amendment the minimum commitment for rent and estimated operating costs, are as follows:

	Lease commitment
Year ended December 31, 2013	$1,285,000
Year ended December 31, 2014	750,000
	$2,035,000

The Company's lease expense, net of sub-lease income, for the year ended December 31, 2012 of $936,760 has been recorded in the consolidated statements of operations and comprehensive loss in research, development, collaborations and contracts and general and administrative expenses (2011 - $933,528; 2010 - $931,606).

The Company has netted $171,923 of sub-lease income against lease expense in the year ended December 31, 2012 (year ended December 31, 2011 - $194,281; 2010 - $194,281).

The Company's sub-lease agreement ended in December 2012.

Product development partnership with the Canadian Government

The Company entered into a Technology Partnerships Canada ("TPC") agreement with the Canadian Federal Government on November 12, 1999. Under this agreement, TPC agreed to fund 27% of the costs incurred by the Company, prior to March 31, 2004, in the development of certain oligonucleotide product candidates up to a

maximum contribution from TPC of $9,329,912. As at December 31, 2012, a cumulative contribution of $3,701,571 has been received and the Company does not expect any further funding under this agreement. In return for the funding provided by TPC, the Company agreed to pay royalties on the share of future licensing and product revenue, if any, that is received by the Company on certain non-siRNA oligonucleotide product candidates covered by the funding under the agreement. These royalties are payable until a certain cumulative payment amount is achieved or until a pre-specified date. In addition, until a cumulative amount equal to the funding actually received under the agreement has been paid to TPC, the Company agreed to pay low single digit percentage royalties on any royalties the Company receives for Marqibo. To December 31, 2012 the Company had not made any royalty payments to TPC.

Contingently payable promissory notes

On March 25, 2008, Protiva declared dividends totaling US$12,000,000. The dividends were paid by Protiva issuing promissory notes on May 23, 2008. Recourse against Protiva for payment of the promissory notes will be limited to Protiva's receipt, if any, of up to US$12,000,000 in license payments from Merck (see note 3(g)). Protiva will pay these funds if and when it receives them, to the former Protiva shareholders in satisfaction of the promissory notes. As contingent items the US$12,000,000 receivable and the related promissory notes payable are not recorded in the Company's consolidated balance sheet.

License and collaboration agreement with Halo-Bio RNAi Therapeutics, Inc. ("Halo-Bio")

On August 24, 2011, the Company entered into a license and collaboration agreement with Halo-Bio. Under the agreement, Halo-Bio granted the Company an exclusive license to its multivalent ribonucleic acid ("MV-RNA") technology. The agreement provides for the companies to work together to design and develop MV-RNA molecules to gene targets of interest to the Company and to combine MV-RNA molecules with the Company's LNP technology to develop therapeutic products.

The Company paid Halo-Bio an initial license fee of $97,940 (US$100,000) and recorded this amount as a research, development, collaborations and contracts expense in the year ended December 31, 2011.

The agreement was amended on August 8, 2012 to adjust the future license fees and other contingent payments. The Company recorded a further $447,780 (US$450,000) in license fees to research, development, collaborations and contracts expense in the year ended December 31, 2012, in respect of the agreement. Under the amended agreement, as at December 31, 2012, the maximum future license fees are US$1,300,000. The Company will pay up to US$12,700,000 in milestones on each product developed plus royalties.

License agreement with Marina Biotech, Inc. ("Marina")

On November 29, 2012 the Company announced a worldwide, non-exclusive license to a novel RNAi payload technology called Unlocked Nucleobase Analog ("UNA") from Marina for the development of RNAi therapeutics.

UNA technology can be used in the development of RNAi therapeutics, which treat disease by silencing specific disease causing genes. UNAs can be incorporated into RNAi drugs and have the potential to improve them by increasing their stability and reducing off-target effects.

Under the license agreement the Company paid Marina an upfront fee of $298,098 (US$300,000). A further license payment of US$200,000 is due in 2013 and the Company will make milestone payments of up to US$3,250,000 and royalties on each product developed by the Company that uses Marina's UNA technology. The upfront fee was recorded to research, development, collaborations and contracts expense in the year ended December 31, 2012.

10. Concentrations of business risk

Credit risk

Credit risk is defined by the Company as an unexpected loss in cash and earnings if a collaborative partner is unable to pay its obligations in due time. The Company's main source of credit risk is related to its accounts receivable balance which principally represents temporary financing provided to collaborative partners in the normal course of operations. Accounts receivable from the U.S. Government as at December 31, 2012 were $947,802 and represent 89% of total accounts receivable as at that date (December 31, 2011 - $747,720 and 85%).

The Company does not currently maintain a provision for bad debts as the majority of accounts receivable are from collaborative partners or government agencies and are considered low risk.

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at December 31, 2012 was the accounts receivable balance of $1,069,437 (December 31, 2011 - $880,693).

All accounts receivable balances were current as at December 31, 2012 and December 31, 2011.

Significant collaborators and customers risk

We depend on a small number of collaborators and customers for a significant portion of our revenues (see note 3).

Liquidity Risk

Liquidity risk results from the Company's potential inability to meet its financial liabilities, for example payments to suppliers. The Company ensures sufficient liquidity through the management of net working capital and cash balances.

The Company's liquidity risk is primarily attributable to its cash and cash equivalents. The Company limits exposure to liquidity risk on its liquid assets through maintaining its cash and cash equivalent deposits with high-credit quality financial institutions. Due to the nature of these investments, the funds are available on demand to provide optimal financial flexibility.

The Company believes that its current sources of liquidity are sufficient to cover its likely applicable short term cash obligations. The Company's financial obligations include accounts payable and accrued liabilities which generally fall due within 45 days.

The net liquidity of the Company is considered to be the cash and cash equivalents less accounts payable and accrued liabilities.

	December 31, 2012	December 31, 2011
Cash, cash equivalents and short term investments	**$ 46,785,518**	$ 9,184,134
Debt facility available (US$3,000,000)	**—**	3,051,000
Less: Debt facility repayments in first 12 months	**—**	(1,135,000)
Less: Accounts payable and accrued liabilities	**(3,776,287)**	(3,972,551)
	$ 43,009,231	$ 7,127,583

Foreign currency risk

The Company's revenues and operating expenses are denominated in both Canadian and US dollars so the results of the Company's operations are subject to currency transaction and translation risk.

The operating results and financial position of the Company are reported in Canadian dollars in the Company's financial statements. The fluctuation of the US dollar in relation to the Canadian dollar will consequently have an impact upon the Company's income or loss and may also affect the value of the Company's assets and the amount of shareholders' equity.

The Company manages its US dollar exchange rate risk by, whenever possible, using cash received from US dollar revenues to pay US dollar expenses and by limiting its holdings of US dollar cash and cash equivalent balances to working capital levels. The Company used a forward exchange contract to convert US$45,000,000 into Canadian dollars in November 2012. The Company has not entered into any other agreements or purchased any instruments to hedge possible currency risks.

The Company's exposure to US dollar currency expressed in Canadian dollars was as follows:

	December 31, 2012	December 31, 2011
Cash and cash equivalents	**$ 149,058**	$ 1,259,029
Accounts receivable	**1,025,306**	780,176
Accrued revenue	**2,361,836**	185,356
Accounts payable and accrued liabilities	**(2,969,454)**	(2,365,191)
	$ 566,746	$ (325,986)

An analysis of the Company's sensitivity to foreign currency exchange rate movements is not provided in these financial statements as a large proportion of the Company's foreign currency purchases are reimbursed by collaborators and customers which mitigates the Company's foreign currency risk; therefore, the impact on the Company is not material.

11. Supplementary information

Accounts payable and accrued liabilities is comprised of the following:

	December 31, 2012	December 31, 2011
Trade accounts payable	**$ 801,701**	$ 1,284,737
Research and development accruals	**308,917**	228,942
License fee accruals	**1,641,585**	—
Professional fee accruals	**599,058**	1,669,838
Restructuring cost accruals	**34,999**	36,134
Deferred lease inducements	**47,834**	196,966
Other accrued liabilities	**342,193**	555,934
	$ 3,776,287	$ 3,972,551

INDEX TO THE EXHIBITS

Exhibit Number	Description
1.1*	Notice of Articles and Articles of the Company (incorporated herein by reference to Exhibit 1.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
2.1*	Subscription Agreement, between the Company and Alnylam Pharmaceuticals, Inc., dated March 28, 2008 (incorporated herein by reference to Exhibit 2.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
2.2*	Subscription Agreement, between the Company and Roche Finance Ltd., dated March 31, 2008 (incorporated herein by reference to Exhibit 2.2 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.1†*	Amendment No. 1 to the Amended and Restated Agreement, between the Company (formerly Inex Pharmaceuticals Corporation) and Hana Biosciences, Inc., effective as of May 27, 2009 (incorporated herein by reference to Exhibit 4.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.2†*	Amended and Restated License Agreement, between Inex Pharmaceuticals Corporation and Hana Biosciences, Inc, dated April 30, 2007 (incorporated herein by reference to Exhibit 4.2 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.3†*	Sublicense Agreement, between Inex Pharmaceuticals Corporation and Alnylam Pharmaceuticals, Inc., dated January 8, 2007 (incorporated herein by reference to Exhibit 4.3 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.4†*	Amended and Restated License and Collaboration Agreement, between the Company and Alnylam Pharmaceuticals, Inc., effective as of May 30, 2008 (incorporated herein by reference to Exhibit 4.4 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.5†*	Amended and Restated Cross-License Agreement, between Alnylam Pharmaceuticals, Inc. and Protiva Biotherapeutics Inc., dated May 30, 2008 (incorporated herein by reference to Exhibit 4.5 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.6†*	License Agreement, between Inex Pharmaceuticals and Aradigm Corporation, dated December 8, 2004 (incorporated herein by reference to Exhibit 4.6 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.7†*	Settlement Agreement, between Sirna Therapeutics, Inc. and Merck & Co., Inc. and Protiva Biotherapeutics Inc. and Protiva Biotherapeutics (USA), Inc., effective as of October 9, 2007 (incorporated herein by reference to Exhibit 4.7 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.8†*	Development, Manufacturing and Supply Agreement, between the Company and Alnylam Pharmaceuticals, Inc., dated January 2, 2009 (incorporated herein by reference to Exhibit 4.8 to the Registrant's Amendment No. 1 to Form 20-F for the year ended December 31, 2010 filed with the SEC on January 31, 2012).
4.9†*	Executive Employment Agreement with Ian Mortimer, dated March 26, 2008 (incorporated herein by reference to Exhibit 4.9 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).

Exhibit Number	Description
4.10*	Executive Employment Agreement with Ian MacLachlan, dated May 30, 2008 (incorporated herein by reference to Exhibit 4.10 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.11*	Executive Employment Agreement with Mark Murray, dated May 30, 2008 (incorporated herein by reference to Exhibit 4.11 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.12*	Executive Employment Agreement with Peter Lutwyche, dated January 1, 2009 (incorporated herein by reference to Exhibit 4.12 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.13*	Share Option Plan amended through May 12, 2009 (including form stock option agreements) (incorporated herein by reference to Exhibit 4.13 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.14*	Lease Agreement with Canada Lands Company CLC Limited dated December 15, 1997, as amended (incorporated herein by reference to Exhibit 4.14 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.15*	Form of Indemnity Agreement (incorporated herein by reference to Exhibit 4.15 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.16*	Award Contract with USASMDC/ARSTRAT effective date July 14, 2010 (incorporated herein by reference to Exhibit 4.16 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.17†*	License Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation executed on July 30, 2001 (incorporated herein by reference to Exhibit 4.17 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.18†*	Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated July 11, 2006 (incorporated herein by reference to Exhibit 4.18 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.19†*	Second Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated January 8, 2007 (incorporated herein by reference to Exhibit 4.19 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.20†*	Consent Agreement of the University of British Columbia to Inex/Alnylam Sublicense Agreement dated January 8, 2007 (incorporated herein by reference to Exhibit 4.20 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.21†*	Amendment No. 2 to the Amended and Restated Agreement, between the Company (formerly Inex Pharmaceuticals Corporation) and Hana Biosciences, Inc., effective as of September 20, 2010 (incorporated herein by reference to Exhibit 4.21 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
4.22†*	License and Collaboration Agreement between the Company and Halo-Bio RNAi Therapeutics, Inc. as of August 24, 2011 (incorporated herein by reference to Exhibit 4.22 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).
4.23*	Loan Agreement with Silicon Valley Bank dated as of December 21, 2011 (incorporated herein by reference to Exhibit 4.23 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).
4.24*	Employment Agreement with Paul Brennan dated August 24, 2010 (incorporated herein by reference to Exhibit 4.24 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).
4.25*	Tekmira 2011 Omnibus Share Compensation Plan approved by shareholders on June 22, 2011 (incorporated herein by reference to Exhibit 4.25 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2011 filed with the SEC on March 27, 2012).

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Exhibit Number	Description
4.26††**	Settlement Agreement and General Release, by and among Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., Alnylam Pharmaceuticals, Inc., and AlCana Technologies, Inc., dated November 12, 2012
4.27††**	Cross-License Agreement by and among Alnylam Pharmaceuticals, Inc., Tekmira Pharmaceuticals Corporation and Protiva Biotherapeutics Inc., dated November 12, 2012
4.28††**	License Agreement by and among Protiva Biotherapeutics Inc. and Marina Biotech, Inc. dated November 28, 2012
4.29**	Employment Agreement with Diane Gardiner dated March 1, 2013
8.1*	List of Subsidiaries (incorporated herein by reference to Exhibit 8.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2010 filed with the SEC on June 3, 2011).
12.1**	Certification of Chief Executive Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2**	Certification of Chief Financial Officer pursuant to Rule 13a-14 or 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
13.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
15.1**	Consent of KPMG LLP
101	Interactive Data Files

* Previously filed.
** Filed herewith.
† Confidential treatment granted as to portions of this exhibit.
†† Confidential treatment has been requested as to portions of this exhibit.

Exhibit 4.26 as filed with 20-F

Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as [**]. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

EXHIBIT 4.26

SETTLEMENT AGREEMENT AND GENERAL RELEASE

This Settlement Agreement and General Release (the "Agreement") is entered into this 12th day of November 2012 (the "Effective Date") by and among Tekmira Pharmaceuticals Corporation, a British Columbia corporation with a principal place of business at 100-8900 Glenlyon Parkway, Burnaby, British Columbia, Canada V5J 5J8 ("TPC"), Protiva Biotherapeutics Inc., a wholly-owned subsidiary of TPC and a British Columbia corporation with a principal place of business at 100-8900 Glenlyon Parkway, Burnaby, British Columbia, Canada V5J 5J8 ("Protiva"), Alnylam Pharmaceuticals, Inc., a Delaware corporation with a principal place of business at 300 Third Street, Cambridge, MA 02142 ("Alnylam"), and AlCana Technologies, Inc., a British Columbia corporation with a principal place of business at 2714 West 31st Avenue, Vancouver, British Columbia, Canada V6L 2A1 ("AlCana"). Each of TPC, Protiva, Alnylam, and AlCana shall be considered a "Party," and collectively they shall be considered the "Parties."

WHEREAS, on or about January 8, 2007, Alnylam and Inex Pharmaceuticals Corp. ("Inex") entered into License and Collaboration Agreement (the "Original Inex-Alnylam LCA");

WHEREAS, on or about January 8, 2007, Inex sublicensed to Alnylam certain technology that Inex had licensed from the University of British Columbia ("UBC") (the agreement and all amendments are referred to as the "UBC Sublicense");

WHEREAS, on or about August 14, 2007, Alnylam and Protiva entered into a Cross-License Agreement (the "Original Alnylam-Protiva CLA");

WHEREAS, on or about May 28, 2008, Protiva and TPC, which had by then acquired Inex's assets including Inex's assignment of the Original Inex-Alnylam LCA, agreed to a Share Purchase Agreement pursuant to which TPC purchased all outstanding shares of Protiva, and Protiva became a wholly-owned subsidiary of TPC (the combined entity hereafter referred to as "Tekmira");

WHEREAS, on or about May 30, 2008, Tekmira and Alnylam agreed to new licensing and collaboration arrangements that superseded and replaced the Original TPC-Alnylam LCA and the Original Alnylam-Protiva CLA, specifically the Amended and Restated License and Collaboration between TPC and Alnylam (the "Amended TPC-Alnylam LCA") and the Amended and Restated Cross-License Agreement between Alnylam and Protiva (the "Amended Alnylam-Protiva CLA");

WHEREAS, on or about October 15, 2008, Tekmira terminated the employment of a number of employees, including, among others, Dr. Thomas Madden, Dr. Michael Hope, Dr. Barbara Mui, and Dr. Ying Tam;

WHEREAS, on or about January 2, 2009, Tekmira and Alnylam entered into the Development, Manufacturing and Supply Agreement (the "Manufacturing Agreement");

WHEREAS, on or about January 8, 2009, the Alnylam-TPC research collaboration expired;

WHEREAS, on or about January 26, 2009, Alnylam retained certain former Tekmira employees and/or contractors as Alnylam consultants, including Dr. Madden, Dr. Hope, Dr. Mui, Dr. Tam, Dr. Steven Ansell, and Dr. Jianxin Chen;

WHEREAS, on or about February 13, 2009, Dr. Madden, Dr. Hope, Dr. Mui, Dr. Tam, Dr. Ansell, Dr. Chen and others formed AlCana;

WHEREAS, on or about July 27, 2009, Alnylam, TPC, Protiva, AlCana, and UBC entered into a Supplemental Agreement (the "Supplemental Agreement") that, among other things, provided for (i) the termination of Alnylam's consulting arrangement with Dr. Madden, Dr. Hope, Dr. Mui, Dr. Tam, Dr. Ansell, and Dr. Chen, (ii) a collaborative research arrangement involving Alnylam, AlCana and UBC relating to, among other things, the discovery of novel lipids (the "Sponsored Research Agreement"), and (iii) licenses to TPC and Protiva permitting certain use of discoveries made during the consulting arrangements or the Alnylam-AlCana-UBC collaboration;

WHEREAS, on or about August 14, 2009, the Alnylam-Protiva research collaboration expired;

WHEREAS, on or about December 9, 2009, Alnylam and AlCana entered into the InterfeRx Option Agreement (the "Option Agreement");

WHEREAS, on or about February 28, 2011, the Unites States Board of Patent Appeals and Interferences declared an interference proceeding between Alnylam, which is the assignee of U.S. Patent No. 7,718,629, and Protiva, which is the assignee of U.S. Patent Application No. 11/807,872, captioned *Protiva Biotherapeutics, Inc. v. Alnylam Pharmaceuticals, Inc.*, Patent Interference No. 105792 (the "Interference Proceeding"), relating to Alnylam's and Protiva's separate patent claims to the same siRNA sequence;

WHEREAS, on or about March 16, 2011, TPC and Protiva filed a lawsuit in the Massachusetts Superior Court for Suffolk County, *Tekmira Pharmaceuticals Corp., et al. v. Alnylam Pharmaceuticals, Inc., et al.*, Civ. A. No. 11-1010-BLS2 (the "Massachusetts State Court Action"), alleging that, among other things, Alnylam had misappropriated certain claimed trade secrets and other confidential information that Tekmira provided to Alnylam in connection with the research collaborations in violation of common law and certain statutes including Mass. Gen. Laws ch. 93, § 42 (trade secrets), Mass. Gen. Laws ch. 266, § 91 (false advertising), and Mass. Gen. Laws ch. 93A (unfair and deceptive trade practices);

WHEREAS, on or about April 6, 2011, Alnylam answered Tekmira's complaint in the Massachusetts State Court Action, denying any and all wrongdoing or liability and asserting counterclaims for, among other things, breach of contract and violation of Mass. Gen. Laws ch. 93A;

WHEREAS, on or about June 3, 2011, Tekmira filed an amended complaint in the Massachusetts State Court Action which added AlCana as a defendant and asserted new claims, allegations and theories, including, among other things, breach of contract, misappropriation of trade secrets in violation of Mass. Gen. Laws ch. 93, § 42, civil conspiracy, tortious interference with contractual relationships, false advertising in violation of Mass. Gen. Laws ch. 266, § 91, and violation of Mass. Gen. Laws ch. 93A;

WHEREAS, on or about June 28, 2011, Alnylam answered the amended complaint in the Massachusetts State Court Action, denying any and all wrongdoing or liability and asserting counterclaims for, among others, breach of contract, misappropriation of trade secrets in violation of Mass. Gen. Laws ch. 93, § 42, and violation of Mass. Gen. Laws ch. 93A;

WHEREAS, on or about July 15, 2011, AlCana answered the amended complaint in the Massachusetts State Court Action, denying any and all wrongdoing or liability and asserting counterclaims for breach of the Supplemental Agreement and violation of Mass. Gen. Laws ch. 93A;

WHEREAS, on or about August 4, 2011, Tekmira answered AlCana's counterclaims in the Massachusetts State Court Action, denying any and all wrongdoing or liability;

WHEREAS, on or about October 11, 2011, Tekmira answered Alnylam's counterclaims in the Massachusetts State Court Action, denying any and all wrongdoing or liability;

WHEREAS, on or about November 16, 2011, TPC filed an action in the Supreme Court of British Columbia, Canada against Drs. Madden, Hope, and Mui individually, captioned *Tekmira Pharmaceuticals Corp. v. Michael Hope, et al*., No. S117660 (the "B.C. Action"), alleging that they had breached purported common law and contractual duties to TPC;

WHEREAS, on or about February 24, 2012, Dr. Madden, Dr. Hope, and Dr. Mui responded to TPC's complaint in the B.C. Action, denying any and all wrongdoing or liability;

WHEREAS, on or about January 17, 2012, Alnylam and Isis Pharmaceuticals, Inc. filed a lawsuit in the United States District Court for the District of Massachusetts, captioned *Alnylam Pharmaceuticals, Inc., et al. v. Tekmira Pharmaceuticals Corp.*, Civ. A. No. 1:12-CV-10087 (the "U.S. Infringement Action"), alleging that Tekmira has infringed U.S. Patent No. 7,695,902, U.S. Patent No. 6,858,225; U.S. Patent No. 6,815,432; U.S. Patent No. 6,534,484; U.S. Patent No. 6,586,410; and U.S. Patent No. 6,858,224;

WHEREAS, on or about September 25, 2012, Alnylam filed a lawsuit in the Federal Court of Canada, captioned *Alnylam Pharmaceuticals, Inc., et al. v. Tekmira Pharmaceuticals Corp*., Court File No. T-1783-12 (the "Canadian Infringement Action"), alleging that Tekmira infringed CA Patent No. 2,359,180;

WHEREAS, through the aforementioned litigation matters, the Parties have obtained voluminous information about the claims and defenses in these matters;

WHEREAS, having consulted with competent counsel of their own choosing, each Party wishes to resolve the aforementioned disputes amicably and without the need for further litigation;

WHEREAS, concurrent with this Agreement, Alnylam and Tekmira have agreed to a Cross-License Agreement dated November 12, 2012 (the "2012 Cross-License Agreement"), which supersedes and replaces the Amended TPC-Alnylam LCA, the Amended Alnylam-Protiva CLA, and the Supplemental Agreement as it relates to Alnylam and Tekmira.

WHEREAS, concurrent with this Agreement, AlCana and Tekmira have agreed to a binding term sheet, attached hereto as Exhibit A (the "Binding Term Sheet");

NOW AND THEREFORE, in consideration of the promises and conditions set forth herein and in the 2012 Cross-License Agreement, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Dismissal of All Disputes with Prejudice: Simultaneously with the complete execution of this Agreement, the Parties shall direct their respective counsel to execute Stipulations of Dismissal with Prejudice dismissing all claims and counterclaims that were or could have been asserted in the Massachusetts State Court Action, U.S. Infringement Action, Canadian Infringement Action, and B.C. Action, and in the case of the Interference Proceeding, a Request for Adverse Judgment providing that Alnylam concedes priority to Protiva with respect to all claims that correspond to Counts 1-5, *i.e.*, claims 34, 36, 38, and 40-43 of Protiva U.S. Application 11/807,872; claims 1-6, 8, 10, 12-18, 21-22, and 32-33 of Alnylam U.S. Patent 7,718,629; and claims 32-38 of Alnylam U.S. Application 13/165,568, and requesting that an adverse judgment be entered against Alnylam as to these claims and priority be awarded to Protiva for U.S. Application 11/807,872. The plaintiffs in each matter, or in the case of the Interference Proceeding, Alnylam, shall file the relevant stipulation in the appropriate matter no later than one business day after the Effective Date. All Parties will bear their own attorneys' fees and costs, and waive all rights of appeal.

2. Assignment of Protiva Patent Application in Interference Proceeding: Simultaneously with the complete execution of this Agreement and the 2012 Cross-License Agreement, Protiva hereby assigns to Alnylam all of Protiva's right, title and interest in and to U.S. Patent Application No. 11/807,872, with no additional payment due to Tekmira and will record such assignment with the U.S. Patent and Trademark Office within [**] business days of the Effective Date.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

3. Mutual General Releases: The Parties hereby exchange the following general releases, which they intend to be construed as broadly and inclusively as legally permissible:

a. Tekmira's Release of Alnylam: Tekmira, including both TPC and Protiva, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, both together and individually, release and forever discharge Alnylam and each of its past and present parents, subsidiaries, departments and divisions, and the predecessors and successors in interest, and each of the current and former employees, officers, directors, attorneys, and insurers or any of the foregoing (collectively, the "Alnylam Released Parties"), and each of them, jointly and severally, from any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements, of whatever kind or nature, anywhere in the world, whether at law, equity, statutory, administrative, arbitration or otherwise, whether known or unknown, foreseen or unforeseen, accrued or unaccrued, suspected or unsuspected, which Tekmira, TPC and/or Protiva, may now have, have ever had, or in the future may have against any and each of the Alnylam Released Parties that are based on any material fact, known or unknown, in existence at any time prior to the Effective Date as well as all claims and counterclaims that were or could have been brought in the Massachusetts Superior Court Action, the U.S. Infringement Action, the Canadian Infringement Action, the Interference Proceeding, and/or the B.C. Action.

b. Alnylam's Release of Tekmira: Alnylam, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, releases and forever discharges Tekmira, including both TPC and Protiva, and each of their past and present parents, subsidiaries, departments and divisions, and the predecessors and successors in interest, and each

of the current and former employees, officers, directors, attorneys, and insurers, of any of the foregoing (collectively, the "Tekmira Released Parties"), and each of them, jointly and severally, from any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements, of whatever kind or nature, anywhere in the world, whether at law, equity, statutory, administrative, arbitration or otherwise, whether known or unknown, foreseen or unforeseen, accrued or unaccrued, suspected or unsuspected, which Alnylam may now have, have ever had, or in the future may have against any and each of the Tekmira Released Parties that are based on any material fact, known or unknown, in existence at any time prior to the Effective Date as well as all claims and counterclaims that were or could have been brought in the Massachusetts Superior Court Action, the U.S. Infringement Action, the Canadian Infringement Action, the Interference Proceeding, and/or the B.C. Action.

c. Tekmira's Release of AlCana: Tekmira, including both TPC and Protiva, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, both together and individually, release and forever discharge AlCana and each of its past and present parents, subsidiaries, departments and divisions, and the predecessors, and successors in interest, and each of the current and former employees, officers, directors, attorneys, and insurers of any of the foregoing (collectively, the "AlCana Released Parties"), and each of them, jointly and severally, from any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements, of whatever kind or nature, anywhere in the world, whether at law, equity, statutory, administrative, arbitration or otherwise, whether known or unknown, foreseen or unforeseen, accrued or unaccrued, suspected

or unsuspected, which Tekmira, TPC and/or Protiva, may now have, have ever had, or in the future may have against any and each of the AlCana Released Parties that are based on any material fact, known or unknown, in existence at any time prior to the Effective Date as well as all claims and counterclaims that were or could have been brought in the Massachusetts Superior Court Action and/or the B.C. Action.

d. AlCana's Release of Tekmira: AlCana, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, releases and forever discharges the Tekmira Released Parties, and each of them, jointly and severally, from any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements, of whatever kind or nature, anywhere in the world, whether at law, equity, statutory, administrative, arbitration or otherwise, whether known or unknown, foreseen or unforeseen, accrued or unaccrued, suspected or unsuspected, which AlCana may now have, have ever had, or in the future may have against any and each of the Tekmira Released Parties that are based on any material fact, known or unknown, in existence at any time prior to the Effective Date of the Agreement as well as all claims and counterclaims that were or could have been brought in the Massachusetts Superior Court Action and/or the B.C. Action.

e. Notwithstanding anything herein to the contrary,

i. even if based on any material, known or unknown fact in existence at any time prior to the Effective Date, the general releases and covenants not to sue set forth in this Agreement are not intended to and do not release the Parties from any of their obligations under this Agreement and are not intended to and do not prohibit claims for breach of this Agreement;

ii. even if based on any material, known or unknown fact in existence at any time prior to the Effective Date, the general releases and covenants not to sue set forth in this Agreement are not intended to and do not release the Parties from any of their obligations under the 2012 Cross-License Agreement or the Binding Term Sheet, as the case may be, and do not prohibit claims for breach of those agreements provided the breach arises after the Effective Date; further provided, however, that no Party may assert that any conduct, act, or omission by or on behalf of any released Party prior to the Effective Date constitutes a breach of any of the released Party's obligations or duties under 2012 Cross-License Agreement or the Binding Term Sheet; and

iii. even if based on any material, known or unknown fact in existence at any time prior to the Effective Date, the general releases and covenants not to sue set forth in this Agreement are not intended to and do not prohibit claims for patent infringement on patents filed on or after April 15, 2010 and which are not entitled to claim priority to any patent prior to April 15, 2010, whether or not the patents claim such priority, but solely for alleged infringing activities that occur after the Effective Date. To each Party's Knowledge (as defined herein), no activities conducted by any other Party or any of their affiliates, licensees or sublicensees, *including without limitation* any Identified Sublicensee (as defined in section 4), prior to the Effective Date, will, if continued after the Effective Date, constitute infringement of any patent controlled by the Party making this representation, which patent was filed on or after April 15, 2010 and which is not entitled to claim priority to any patent prior to April 15, 2010. For purposes of this section 3.e.iii., "Knowledge" with respect to Tekmira means the actual

knowledge as of the Effective Date of Mark Murray, Paul Brennan, Barry McGurl and/or Elizabeth Howard; with respect to Alnylam means the actual knowledge as of the Effective Date of Barry Greene, Laurence Reid and/or Steve Bossone; and with respect to AlCana means the actual knowledge as of the Effective Date of Tom Madden.

4. Specific Release of Third Party Sublicensees: Each Party acknowledges that the other Parties have sublicensed to the third parties identified on Exhibit B (the "Identified Sublicensees") certain technology licensed from another Party under the Original TPC-Alnylam LCA, the Amended TPC-Alnylam LCA, the Original Alnylam-Protiva CLA, the Amended Alnylam-Protiva CLA, the Manufacturing Agreement, the Supplemental Agreement, and/or the UBC Sublicense Agreement (collectively, the "Original Agreements").

a. To the extent that the Parties have sublicensed or granted options to license such technology to third parties in accordance with the Parties' Original Agreements, the rights of those third parties shall not be affected by this Agreement, the 2012 Cross-License Agreement or the Binding Term Sheet.

b. For each of Alnylam's and AlCana's Identified Sublicensees respectively, Tekmira, for good and valuable consideration from Alnylam and AlCana, the receipt and sufficiency of which is hereby acknowledged, releases that sublicensee from any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements anywhere in the world, whether at law, equity, statutory, administrative, arbitration or otherwise, whether known or unknown, foreseen or unforeseen, accrued or unaccrued, suspected or unsuspected, based on that sublicensee's acquisition or use of Tekmira's

alleged confidential information and trade secrets at issue in the Massachusetts Superior Court Action or the B.C. Action that the sublicensee received from Alnylam or AlCana prior to [**], with the exception of claims for patent infringement.

c. For each of Tekmira's Identified Sublicensees, Alnylam and AlCana, for good and valuable consideration from Tekmira, the receipt and sufficiency of which is hereby acknowledged, release that sublicensee from any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements anywhere in the world, whether at law, equity, statutory, administrative, arbitration or otherwise, whether known or unknown, foreseen or unforeseen, accrued or unaccrued, suspected or unsuspected, based on that sublicensee's acquisition or use of Alnylam's or AlCana's alleged confidential information and trade secrets at issue in the Massachusetts Superior Court Action that the sublicensee received from Tekmira prior to [**], with the exception of claims for patent infringement, other than claims subject to the release provided in section 4.d. below.

d. Alnylam, for good and valuable consideration from Tekmira, the receipt and sufficiency of which is hereby acknowledged, further releases Tekmira's Identified Sublicensees from any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements anywhere in the world, whether at law, equity, statutory, administrative, arbitration or otherwise, whether known or unknown, foreseen or unforeseen, accrued or unaccrued, suspected or unsuspected, for infringement of patent claims at issue in the U.S. Infringement Action and Canadian Infringement Action.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

e. For the avoidance of doubt, nothing in this section 4 shall operate to release any claims the Parties may have pursuant to their own respective agreements with an Identified Sublicensee.

5. Covenant Not to Sue:

a. Each Party hereby covenants not to file or assert in any lawsuit, arbitration, or other proceeding of any nature, anywhere in the world, any and all claims or counterclaims, causes, causes of action, counts, remedies, promises, damages, liabilities, obligations, judgments, suits, demands, actions, costs, expenses, fees, covenants, controversies, and agreements that are within the scope of the releases set forth in sections 3 and 4 above. For avoidance of doubt, this covenant shall not prohibit the filing or assertion of any claims for breach of this Agreement, the 2012 Cross-License Agreement, the Binding Term Sheet, or patent infringement, as set forth in sections 3.e.i., ii and iii above.

b. If any Party is found by any court, arbitrator or other tribunal to have breached this covenant not to sue, that Party shall pay each released Party against whom a released claim has been asserted sixty-five million dollars in United States funds ($65,000,000.00) as a liquidated damage, not as a penalty. This liquidated damages provision shall not apply to or be enforceable by the Identified Sublicensees referenced in section 4 above.

6. Termination or Amendment of Prior Agreements:

a. The Parties agree that the terms of this Agreement, the 2012 Cross-License Agreement and the Binding Term Sheet shall extinguish, supersede, and replace their rights and obligations under the Supplemental Agreement and Sponsored Research Agreement solely as between and among each other; provided, however, Alnylam's payment obligations to UBC (for the benefit of UBC and AlCana, as referenced in section 7.b., below) under the Supplemental Agreement and Sponsored Research Agreement shall survive the execution of this Agreement, the 2012 Cross-License Agreement and the Binding Term Sheet, and shall also survive any termination of the Supplemental Agreement or Sponsored Research Agreement, in each case for the duration of the applicable Royalty Term (as defined in the Sponsored Research Agreement).

b. In addition:

i. Any and all other prior agreements between Alnylam and Tekmira, TPC, and/or Protiva, whether oral or written, are hereby terminated as of the Effective Date with the sole exceptions of the (i) UBC Sublicense (under which Alnylam shall continue to have sublicenses to all patent rights that were sublicensed to Alnylam under the terms of the UBC Sublicense immediately prior to the Effective Date, including such patent rights sublicensed to Alnylam under the terms of the UBC Sublicense as provided in the Supplemental Agreement); and (ii) Mutual Confidential Disclosure Agreement made as of April 9, 2012. Alnylam and Tekmira acknowledge and agree that simultaneously with the complete execution of this Agreement they have entered into the 2012 Cross-License Agreement that shall survive.

ii. Tekmira and AlCana agree that any and all prior agreements between them, whether oral or written, are hereby terminated. AlCana and Tekmira acknowledge and agree that simultaneously with the complete execution of this Agreement they have entered into the Binding Term Sheet that shall survive.

iii. Alnylam and AlCana agree that the Option Agreement between them is hereby terminated and that the three InterfeRx options granted thereunder will be granted by Alnylam to Tekmira under to the 2012 Cross-License Agreement in exchange for the consideration provided by Tekmira to AlCana pursuant to the Binding Term Sheet.

c. Alnylam and Tekmira acknowledge and agree that an amendment to the UBC Sublicense is desirable in order to harmonize the UBC Sublicense with certain agreements of the Parties reflected in this Agreement and the 2012 Cross-License Agreement, such that the UBC Patents are included in Tekmira Patents (as such terms are defined in the 2012 Cross-License Agreement). Accordingly, Alnylam and Tekmira agree that they shall work in good faith to negotiate and enter into an appropriate amendment to the UBC Sublicense as soon as practicable following the Effective Date. Tekmira and Alnylam hereby agree that until and unless the UBC Sublicense is amended, Tekmira retains its rights to milestones and royalties with respect to the UBC Patents, as such rights have been amended in the 2012 Cross-License Agreement, and that until and unless the UBC Sublicense is amended, the licenses under the Patent(s) (as defined in the UBC Sublicense) granted back to Tekmira by Alnylam pursuant to Section 3.2(b) of the UBC Sublicense shall be limited to such Patent(s) that were filed, or that claim priority to such a Patent that was filed, before April 15, 2010.

d. For the period from the Effective Date until the such time as the amendment to the UBC Sublicense contemplated in paragraph (c) above becomes effective, the licenses under the Patent(s) granted back to Tekmira by Alnylam pursuant to Section 3.2(b) of

the UBC Sublicense shall be expanded to grant Tekmira such licenses with respect to all Tekmira Products (as defined in the 2012 Cross-License Agreement); provided that, such expanded license back to Tekmira shall be a non-exclusive license with respect to Tekmira Products directed to Tekmira Non-Exclusive Targets (as defined in the 2012 Cross-License Agreement).

e. Alnylam hereby covenants that it and its Existing Affiliates will not initiate any legal suit against Tekmira or any of its Existing Affiliates asserting that:

i. any internal Research performed solely by Tekmira or its Existing Affiliates (and not with any Third Party) and solely for the purpose of identifying a Target for selection as a Tekmira Additional Target during the period starting on the Effective Date and continuing until the earlier of (A) the [**] anniversary of the Effective Date and (B) such date that Tekmira completes its selection of the Tekmira Additional Targets pursuant to Article III of the 2012 Cross-License Agreement; or

ii. the formulating in LNP Formulations by Tekmira or any of its Existing Affiliates of oligonucleotides controlled by any bona fide Third Party pharmaceutical collaborator on behalf of such Third Party and solely for Research (but not Development or Commercialization);

constitutes infringement and/or misappropriation of the UBC Patents. For clarity, the Parties agree that the covenants set forth in this section 6.e do not extend to any Third Party.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Capitalized terms used in this section 6.e. and not otherwise defined in this Agreement shall have the meanings ascribed to them in the 2012 Cross-License Agreement.

7. AlCana Assignment of Milestone and Royalty Payments to Tekmira:

a. Tekmira, Protiva and AlCana agree to the terms of the Binding Term Sheet attached hereto as Exhibit A. Alnylam agrees to the terms of the Binding Term Sheet to the extent that its rights are implicated therein.

b. For avoidance of doubt, Alnylam and AlCana represent and warrant that after the execution of this Agreement and the 2012 Cross-License Agreement, Alnylam will continue to be obligated under the Sponsored Research Agreement to pay UBC (for the benefit of UBC and AlCana) milestone payments (as set forth in the Sponsored Research Agreement) and royalties on Net Sales (as defined in the Sponsored Research Agreement) of any Alnylam Product containing the MC3 lipid at a royalty rate of [**]% (subject to reduction pursuant to Section 8.4.2.(b) of the Sponsored Research Agreement) for the duration of the applicable Royalty Term (as defined in the Sponsored Research Agreement). AlCana represents and warrants that, as of the Effective Date, UBC, in turn, is obligated to pay to AlCana [**]% of such milestone and royalty payments UBC receives from Alnylam for the ALN-TTR02 product and that, as of the Effective Date, AlCana is not aware of any claim by UBC that would reduce such percentage of milestone and royalty payments for the ALN-TTR02 product due to AlCana in future. Pursuant to the Binding Term Sheet, AlCana agrees to provide Tekmira with [**]% of such milestone and royalty payments AlCana receives from UBC.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

c. Alnylam consents to AlCana's assignment of its milestone and royalty payments to Tekmira as set forth herein, pursuant to the terms of the Binding Term Sheet. Alnylam and AlCana covenant that they will not terminate, amend, or otherwise modify the contractual rights and obligations between and among themselves and UBC in a manner that would impair Tekmira's right to receive the milestone and royalty payments AlCana is assigning to Tekmira under this Agreement and the Binding Term Sheet.

d. Alnylam and AlCana represent and warrant that they have no contractual rights and/or obligations between and/or among themselves and UBC that are inconsistent with the terms of this Agreement and the 2012 Cross-License and their obligations thereunder.

8. Public Statements: Following the complete execution of this Agreement and at a date and time that agreed to by the Parties in writing, or otherwise if required by law, the Parties will issue the mutually agreed upon press-releases attached hereto as Exhibits C-1 and C-2. They will thereafter make no further public statement about the Massachusetts State Court Action, the Interference Proceeding, the U.S. Infringement Action, the Canadian Infringement Action, or the B.C. Action, or with respect to the subject matter of any of those disputes that is substantially inconsistent with the press-release in Exhibits C-1 and C-2 or the content set forth within the mutually acceptable questions and answers document attached as Exhibit C-3.

9. Confidentiality:

a. All negotiations, communications, documents, drafts, and other materials and information relating to and in connection with this Agreement, including all of its terms, shall be treated as strictly private and confidential by the Parties and shall not be disclosed to any

third party, disseminated to the public, or released to the press; *except that:* (i) the Parties may disclose the terms reflected in a redacted copy of this Agreement, to be agreed upon among the Parties promptly following the Effective Date, but only to the extent reasonably necessary to comply with a regulatory requirement, including the rules and regulations of the United States Securities and Exchange Commission or similar regulatory agency in a country other than the United States; (ii) disclosure of the terms reflected in the redacted copy of this Agreement, as agreed upon among the Parties, is permitted if reasonably required in order for a Party to obtain financing or conduct discussions with actual or prospective development or commercialization partners provided that the recipient is bound by an obligation of confidentiality; and (iii) any Party may disclose the terms reflected in the redacted copy of this Agreement, as agreed upon among the Parties, to an affiliate, actual or prospective collaborator, financial advisor, auditor, lender, rating agency, legal counsel, or consultant with a legitimate business need to be informed provided that such person or entity first agrees in writing to protect the confidentiality of the information.

b. If a Party is required by judicial or administrative process to disclose any information subject to the preceding paragraph, such Party shall promptly inform each other Party of the disclosure that is being sought in order to provide the each other Party an opportunity to challenge or limit the disclosure obligations. If any Party intends to challenge or limit disclosure, it shall notify the other Party and promptly take commercially reasonable steps to ask an appropriate judicial or administrative body to preclude or limit disclosure. No Party may disclose any information about the Agreement until any such motion or challenge is resolved. Any such information that is disclosed in a judicial or administrative process shall remain otherwise subject to the confidentiality provisions in the preceding paragraph, and the

Party disclosing such information shall take all steps reasonably practical, including without limitation seeking an order of confidentiality, to ensure the continued confidential treatment of such information.

10. Future Disputes: The Parties agree that any disputes that arise between them during the period ending on the third anniversary of the Effective Date, including without limitation, claims relating to the enforcement of this Agreement, shall be resolved by binding arbitration conducted in accordance with the Commercial Arbitration Rules and Supplementary Procedures for Large Complex Disputes of the American Arbitration Association ("AAA"). The arbitration shall be conducted by a panel of three persons experienced in large commercial disputes who are independent of the arbitrating Parties and neutral with respect to the dispute presented for arbitration. Within [**] days after initiation of arbitration, each arbitrating Party shall select one person to act as an arbitrator and the Party-selected arbitrators shall select an additional arbitrator within [**] days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree on the third arbitrator, the additional arbitrator shall be appointed by the AAA. The place of the arbitration shall be in Chicago, Illinois, USA, and all proceedings and communications shall be in English.

11. Agreement Regarding AlCana: Tekmira agrees not to acquire, whether itself or through a third party, a controlling interest in AlCana for a period of [**] years after the Effective Date.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

12. General Provisions:

a. Knowing and Voluntary Entry into this Agreement: Each Party agrees that no other Party has made any representation to it of any kind whatsoever, whether oral or in writing, upon which that Party has relied in entering into this Agreement. Each Party further agrees that in entering into this Agreement, it has received independent legal advice from competent counsel of its choosing. Each Party enters into this Agreement of its own volition, without compulsion of any kind, and after a full and fair opportunity to consider this matter with its own legal advisor.

b. No Admissions or Concessions by Virtue of this Agreement: Each Party to this Agreement acknowledges and agrees that this Agreement is a compromise of claims which the Parties have entered into solely for the purpose of avoiding the burdens, inconvenience, and expense of continuing disputes and litigation. Nothing in this Agreement, or the negotiations that preceded the Agreement, shall be construed to be or deemed an admission or concession by any Party of any liability or wrongdoing, or as an infirmity of any claim or defense. Nor shall it be construed as an admission or concession as to the amount that any Party could or would have recovered at trial. Neither this Agreement nor anything related to the negotiations that preceded it may be offered against the Alnylam Released Parties, the AlCana Released Parties, or the Tekmira Released Parties in any proceeding with the sole exception of a proceeding to enforce the terms of this Agreement.

c. No Prior Assignment of Claims: Each Party represents and warrants that it has not voluntarily or involuntarily assigned, pledged, liened or otherwise sold or transferred in any manner whatsoever to any other person or entity, either by instrument, in writing or

otherwise, any right, action, claim or counterclaim, cause, cause of action, action, count, remedy, promise, damage, liability, debt, due, sums of money, account, reckoning, obligation, judgment, writ of execution, lien, levy, attachment, suit, demand, cost, expense, fee, bond, bill, specialty, covenant, controversy, agreement, set-off, third party action or proceeding of whatever kind or nature, or any portion thereof, to be released under sections 3 and 4 above.

d. Third Party Beneficiaries: The Parties acknowledge and agree that this Agreement is made solely for the benefit of the Parties hereto, as well as the non-parties identified in the releases set forth in sections 3 and 4 and the covenant not to sue set forth in section 5, each of whom are intended third-party beneficiaries to this Agreement (the "Third Party Beneficiaries"). The Parties further acknowledge and agree that the Third Party Beneficiaries have the right to enforce the provisions in this Agreement to the extent necessary to protect any rights granted to them in this Agreement. Except as provided in the preceding two sentences, this Agreement does not create any other rights, claims or benefits inuring to any person or entity that is not a party to this Agreement, nor does it create any other third party beneficiary hereto.

e. Applicable Law: This Agreement shall be governed, interpreted and enforced according to the laws of the State of Delaware, without regard to any conflict of law provisions.

f. Invalidity: With the exception of the releases set forth in sections 3 and 4 above and the covenant not to sue set forth in section 5 above, if any provision, or portion thereof, of this Agreement is held invalid, void or unenforceable under any applicable statute or rule of law, only that provision, or portion thereof, shall be deemed omitted from this

Agreement, and only to the extent to which it is held invalid, and the remainder of the Agreement shall remain in full force and effect. If any portion of the releases set forth in sections 3 and 4 or the covenant not to sue set forth in section 5 is deemed invalid, it shall be rewritten to conform to the provisions written in this Agreement to the maximum extent permitted by law.

g. Entire Agreement: This Agreement (including the Binding Term Sheet) and the 2012 Cross-License Agreement constitute the entire agreement and understanding between the Parties relating to the subject matter of this Agreement (including the Binding Term Sheet) and the 2012 Cross-License Agreement, and supersede all previous written or oral representations, agreements, drafts and understandings between the Parties. Each Party warrants and represents that no representation or statement of any kind whatsoever, other than in the terms and provisions in this Agreement (including the Binding Term Sheet) and the 2012 Cross-License Agreement, was made to it that in any way whatsoever induced it to enter this Agreement.

h. Written Modification: This Agreement may only be varied or modified by a written agreement signed by duly authorized representatives of all of the Parties hereto; provided, however, that the material terms of the Binding Term Sheet shall be confirmed by a subsequent written agreement signed by duly authorized representatives of Tekmira and AlCana.

i. Execution in Counterparts: This Agreement may be executed in counterparts and transmitted by email or facsimile, each of which shall be deemed an original and any set of which, when taken together, shall constitute one and the same instrument and be sufficient proof of the instrument so constituted.

j. Binding Agreement between the Parties: This Agreement shall be binding on and inure to the benefit of the Parties, their legal representatives, and their successors.

k. Paragraph Headings: The paragraph headings form no part of this Agreement and may not be used to construe the provisions of this Agreement.

l. Construction of Agreement: Each Party and its counsel have participated in the drafting of this Agreement. The Agreement shall not be construed for or against any Party as the draftsperson hereof. In addition, as used in this Agreement, (a) words of any gender include all genders; (b) words using the singular or plural number also include the plural or singular number, respectively; and (c) the word “including” shall mean “including, but not limited to.”

m. Authority: The Parties represent that each person signing this Agreement on behalf of a Party has the full power and authority to enter into the Agreement.

n. Additional Documents: Each Party agrees to execute any additional documents and to take further action which reasonably may be required to consummate this Agreement and/or otherwise fulfill the intent of the Parties.

[*Signature Page Follows.*]

IN WITNESS WHEREOF, duly authorized representatives of the Parties have executed this Agreement as of the Effective Date.

ALNYLAM PHARMACEUTICALS, INC.

By: /s/ Barry Greene

Print Name: Barry Greene

Title: President & Chief Operating Officer

ALCANA TECHNOLOGIES, INC.

By: /s/ T.D. Madden

Print Name: Thomas Madden

Title: President & CEO

TEKMIRA PHARMACEUTICALS CORPORATION

By: /s/ Mark J. Murray

Print Name: Mark J. Murray

Title: President & CEO

PROTIVA BIOTHERAPEUTICS INC.

By: /s/ Mark J. Murray

Print Name: Mark J. Murray

Title: President & CEO

TEKMIRA – ALCANA SETTLEMENT BINDING TERM SHEET

This is a confidential, binding summary of settlement terms between Tekmira Pharmaceuticals Corp. and Protiva Biotherapeutics, Inc. (collectively "Tekmira"), on one hand, and AlCana Technologies, Inc. ("AlCana") on the other hand. This document is intended to and does create expectancies and legally binding rights and obligations. The parties expect to enter into a further agreement implementing these terms in more detail.

Definitions:

"Effective Date" has the same meaning as in the accompanying Settlement Agreement to which this Binding Term Sheet is attached.

"**Field of Use**" means the delivery of an RNAi Product for any and all purposes.

"**Intellectual Property**" means any and all discoveries, inventions, information, knowledge, know-how, trade secrets, designs, practices, methods, uses, compositions of matter, articles of manufacture, protocols, formulas, processes, assays, skills, experience, techniques, data, reports, and results of experimentation and testing and other scientific or technical information, patentable or otherwise, controlled by a party after the Effective Date.

"**Licensed Product**" means any product, good, or service covered by a claim of the Tekmira controlled Intellectual Property or AlCana controlled Intellectual Property.

"**siRNA**" means a double-stranded ribonucleic acid (RNA) composition designed to act primarily through an RNA interference mechanism that consists of either (a) two separate oligomers of native or chemically modified RNA that are hybridized to one another along a substantial portion of their lengths, or (b) a single oligomer of native or chemically modified RNA that is hybridized to itself by self-complementary base-pairing along a substantial portion of its length to form a hairpin.

"**RNAi Product**" means a product containing, comprised of or based on siRNA, Dicer Substrates, Multivalent RNA, or any derivatives thereof, which are effective in gene function modulation and designed to modulate the function of particular genes or gene products by causing degradation through RNA interference of a Target mRNA to which such siRNAs or siRNA derivatives or moieties are complementary. For greater clarity, an RNAi Product shall not include Antisense.

"**Sublicensable Product**" means a Supplemental Field Product that has been developed by AlCana and for which AlCana has shown a pharmacological effect of that product against the Target in *in vivo* studies in a small animal species.

"**Supplemental Field**" means the delivery of (i) single-stranded oligonucleotides, either chemically modified or unmodified, acting through the RNase H mechanism or by or other mechanisms of translational arrest but excluding RNA interference involving RISC ("Antisense") and (ii) DNA plasmids or messenger RNA (mRNA) either chemically modified or unmodified that are transcribed and/or translated into protein and wherein the pharmacological activity is dependent on expression of the protein ("Gene Therapy").

"**Supplemental Field Product**" means a product containing, comprised of, or based on Antisense or Gene Therapy.

"**Target**" means: (a) a polypeptide or entity comprising a combination of at least one polypeptide and other macromolecules, that is a site or potential site of therapeutic intervention by a therapeutic agent; or a nucleic acid which is required for expression of such polypeptide or other macromolecule if said macromolecule is itself a polypeptide; (b) variants of a polypeptide (including any splice variant or fusions thereof), entity or nucleic acid described in clause (a); or (c) a defined non-peptide entity, including a microorganism, virus, fungi, bacterium or single cell parasite; provided that the entire genome of a virus shall be regarded as a single Target.

A. LICENSE TO TEKMIRA'S LNP TECHNOLOGY

- Tekmira will grant to AlCana a non-exclusive right to use the Tekmira Combined Licensed Technology and the Category 1 Patents (each as defined in the 2012 Cross-License Agreement between Tekmira and Alnylam referenced in the Settlement Agreement) for use in developing and commercializing Supplemental Field Products. The license granted to AlCana supersedes and replaces the licenses granted to AlCana by Alnylam and Tekmira in the current Supplemental Agreement
- AlCana's right to sub-license will be on a Sublicensable Product-by-Sublicensable Product basis.
- In consideration for this license, AlCana will pay the following to Tekmira for a Supplemental Field Product (covered by Tekmira Intellectual Property)

Milestones

Milestone	Amount (U.S. Dollars)
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Royalties

Annual Net Sales (per product)	Royalty*
[**]	[**]%
[**]	[**]%
[**]	[**]%

* Royalty to be reduced by [**]% if covered only by a pending claim (to be defined), standard royalty offsets of [**]% will be included.

B. ALCANA'S LICENSE TO TEKMIRA

- AlCana waives any milestone or royalty payments owed to AlCana by Tekmira under the Supplemental Agreement or Sponsored Research Agreement.
- AlCana will grant to Tekmira a non-exclusive license to any AlCana Intellectual Property for use in RNAi Products.
- In consideration for this license, Tekmira will pay the following to AlCana for an RNAi Product (covered by AlCana Intellectual Property).

Milestones

Milestone	Amount (U.S. Dollars)
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

Royalties

Annual Net Sales (per product)	Royalty*
[**]	[**]%
[**]	[**]%
[**]	[**]%

* Royalty to be reduced by [**]% if covered only by a pending claim (to be defined), standard royalty offsets of [**]% will be included

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

C. INTERFERX OPTION RIGHTS

- AlCana agrees to terminate the InterfeRx Option Agreement with Alnylam dated as of December 9, 2009 ("Option Agreement") and Alnylam will provide the three (3) InterfeRx options to Tekmira, provided that the options will be extended to a period of [**] years from the Effective Date, and will be subject to the terms and conditions of the 2012 Cross-License Agreement.
- In consideration for the termination of the Option Agreement and the transfer of the options to Tekmira, Tekmira will pay to AlCana the following sums:
  - [**] US within [**] days of the Effective Date.
  - [**] US within [**] days of Tekmira successfully exercising each InterfeRx Option (it being understood that Tekmira will exercise its 4 previously negotiated options first)

D. SETTLEMENT AGREEMENT

- Tekmira, Alnylam and AlCana will dismiss with prejudice and with each party bearing its own costs all claims and counterclaims commenced in the Massachusetts and British Columbia actions. The parties will execute full and final releases in favour of each other and instruct their counsel to file the appropriate documents with the court registries in each jurisdiction to cause the dismissal of the actions.

E. NON-COMPETITION

- AlCana will not undertake any activities by itself or with a third party specifically directed to research and development of a RNAi Product (except as allowed under Section H below) for a period of five (5) years after the Effective Date ("AlCana Non-Competition Period").

F. REVENUE SHARING FROM SPONSORED RESEARCH AGREEMENT

- In exchange for a payment of [**] US by Tekmira within [**] business days of execution of the further detailed agreement implementing this Binding Term Sheet, AlCana hereby agrees to provide Tekmira with [**]% of the milestone and royalty payments it receives from the University of British Columbia or Alnylam (directly or indirectly) as set forth in the Sponsored Research Agreement dated July 27th 2009, but solely with respect to Licensed Products covered by an Outstanding Claim of the UBC Controlled Patent Right (each as defined in the Sponsored Research Agreement) that was filed, or claims priority to a patent that was filed, before April 15, 2010. For the avoidance of doubt, AlCana and Alnylam represent and warrant that such Licensed Products include Alnylam products that include the MC3 lipid.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

G. AUDITS

At any given point in time, each Party will have on file complete and accurate records for the last [**] years of all net sales of products for which it is the paying Party, and AlCana shall have on file complete and accurate records for the last [**] years of all payments received from UBC and Alnylam. The other Party to this Agreement will have the right, [**] during each twelve (12) month period, to retain at its own expense an independent qualified certified public accountant reasonably acceptable to such Party to review such records solely for accuracy and for no other purpose upon reasonable notice and under a written obligation of confidentiality, during regular business hours. If the audit demonstrates that the payments owed under this Agreement have been understated, the audited Party will pay the balance to such other Party together with interest on such amounts from the date on which such payment obligation accrued at a rate equal to the then current [**] day United States dollar LIBOR rate plus [**] percent per annum. If the underpayment is greater than five percent of the amount owed, then the audited Party will reimburse such other Party for its reasonable out-of-pocket costs of the audit. If the audit demonstrates that the payments owed under this Agreement have been overstated, such other Party to this Agreement will credit the balance against the next payment due from the audited Party (without interest).

H. CHARITABLE FOUNDATION

AlCana is currently concluding an agreement with a charitable foundation ("Foundation") covering a research and development program. The name of the Foundation will be disclosed in the detailed agreement. The planned research is directed at development of potential therapeutics for the treatment of a specific chronic and currently untreatable disease ("Foundation Disease") [**]. The research program will include studies involving potential RNAi therapeutics. Tekmira agrees that AlCana will undertake this program under the following conditions:

i. Any Intellectual Property that is generated in the collaboration will be called "Foundation IP"

ii. All Foundation IP will be held and prosecuted by AlCana

iii. AlCana will grant to Tekmira an exclusive license to the Foundation IP in the Field of Use, subject to the rights granted to the Foundation below

iv. AlCana will grant to the Foundation exclusive rights to the Foundation IP related specifically to the Foundation Disease

The Foundation will pay to AlCana a [**]% royalty (less offsets) on Net Sales. AlCana will pass through [**]% of any royalty it obtains from the Foundation to Tekmira

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Alnylam Identified Sublicensees:

AlCana Technologies, Inc.

Ascletis Pharmaceuticals (Hangzhou) Co., Ltd.

Genzyme Corporation

Monsanto Company

Novartis Institutes for BioMedical Research, Inc.

Regulus Therapeutics Inc. (formerly Regulus Therapeutics LLC)

F. Hoffmann-La Roche Ltd, Hoffman-La Roche Inc. (and its assignee, Arrowhead Research Corporation)

Takeda Pharmaceutical Company Limited

University of British Columbia

Tekmira Identified Sublicensees

AlCana Technologies, Inc.

Bristol-Myers Squibb Co.

Merck & Co., Inc. (and Sirna Therapeutics, Inc.)

F. Hoffmann-La Roche Ltd, Hoffman-La Roche Inc. (and its assignee, Arrowhead Research Corporation)

AlCana Identified Sublicensees

Alnylam Pharamaceuticals, Inc.

University of British Columbia

EXHIBIT C

Confidential

Contacts:
Alnylam Pharmaceuticals, Inc.
Cynthia Clayton
Vice President, Investor Relations and
Corporate Communications
617-551-8207

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Spectrum
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Alnylam and Tekmira Restructure Relationship and Settle All Litigation

Cambridge, Mass., November 12, 2012 – Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY) announced today that they and Tekmira Pharmaceuticals Corporation have restructured their relationship with a new licensing agreement and have resolved all litigation between the parties in a settlement agreement. The new license agreement consolidates and clarifies certain intellectual property (IP) elements related to lipid nanoparticle (LNP) technology for RNAi therapeutics. Further, Alnylam has elected to independently manufacture its LNP-based RNAi therapeutic products and to buy-down certain future potential milestone payments and a significant portion of future potential royalties for its ALN-VSP, ALN-PCS, and ALN-TTR02 programs. The settlement of all ongoing litigation between the two companies allows Alnylam to continue to focus its efforts on advancing innovative medicines to patients.

“With this restructuring of our Tekmira relationship, we are gaining independence in our LNP manufacturing and decreasing the milestone and royalty burdens on several of our LNP-based products. Further, the companies have created clarity around the overall patent estate for LNP-based products, while ensuring Alnylam’s full access to use this technology for our products in the future. Of course, we are also pleased to put this legal matter behind us and continue our focus on advancing RNAi therapeutics through clinical trials with the goal of bringing them to the market where we can make an impact in the lives of patients and their caregivers,” said Barry Greene, President and Chief Operating Officer of Alnylam. “Alnylam plans to continue to advance RNAi therapeutic products as part of its ‘Alnylam 5x15’ product strategy with LNP delivery technologies - as employed with ALN-TTR02, ALN-PCS, and ALN-VSP, in addition to the use of the company’s proprietary conjugate-based delivery technology - as employed with ALN-TTRsc, ALN-AT3, and other undisclosed programs.”

Under a new license agreement, Alnylam and Tekmira have agreed to consolidate certain IP elements related to LNP technology for the systemic delivery of RNAi therapeutic products. Specifically, certain patents and patent applications, including the MC3 lipid family, will be assigned by Alnylam to Tekmira. Alnylam retains full rights to use this IP for advancing RNAi therapeutic products to the market, including the rights to sublicense IP on a product-by-product basis. Alnylam has also agreed to grant five additional non-exclusive therapeutic licenses to Tekmira.

In addition, Alnylam has elected to buy out its manufacturing obligations to Tekmira with respect to its LNP-based pipeline programs. Alnylam will make a one-time payment of $30 million to Tekmira in order to have the rights to manufacture its own LNP-based products going forward, either itself or through a third-party contractor. Alnylam has established its own Good Manufacturing Practice (GMP) capabilities and process for its LNP-based products. Alnylam will employ this manufacturing capability for the advancement of ALN-TTR02 into Phase III clinical trials, which the company expects to start by the end of 2013.

Further, Alnylam has elected to buy-down certain future potential milestone and royalty payments due to Tekmira for its ALN-VSP, ALN-PCS, and ALN-TTR02 LNP-based products. Specifically, Alnylam will make a one-time payment of $35 million to Tekmira in association with the termination of the prior license agreements between the companies and the significant reduction in milestone and royalty payments for its ALN-VSP, ALN-PCS, and ALN-TTR02 products. Tekmira will also be eligible to receive an additional $10 million in aggregate in contingent milestone payments related to advancement of ALN-VSP and ALN-TTR02 products, which now represent the only potential milestones for ALN-VSP, ALN-PCS and ALN-TTR02 products. Alnylam will otherwise continue to be obligated to pay Tekmira potential milestones and royalties on all other future LNP-based products on terms identical to its original license agreements. Tekmira will continue to be obligated to pay Alnylam potential milestones and royalties on certain RNAi therapeutic products developed under its licenses from Alnylam on terms identical to its original license agreements.

Finally, Alnylam and Tekmira have agreed to settle all ongoing litigation between the parties. The parties have also agreed to a resolution of the interference proceeding related to Alnylam-owned US Patent No. 7,718,629 directed to an siRNA component in ALN-VSP. In addition, Tekmira and AlCana Technologies, Inc. have agreed to drop their claims and counterclaims in both the Massachusetts and British Columbia lawsuits. Finally, the parties have agreed to a covenant not to sue on matters related to the current dispute in the future, which includes liquidated damages to be paid if the covenant is breached, and have also agreed to resolve any future disputes that might arise over the next three years with binding arbitration.

Alnylam will incur a $65 million charge to operating expenses during the fourth quarter of 2012 related to the restructuring of its license agreements with Tekmira. As a result of the payments being made in connection with this restructuring, Alnylam is revising its financial guidance to end 2012 with greater than $215 million in cash.

About RNA Interference (RNAi)

RNAi (RNA interference) is a revolution in biology, representing a breakthrough in understanding how genes are turned on and off in cells, and a completely new approach to drug discovery and development. Its discovery has been heralded as “a major scientific breakthrough that happens once every decade or so,” and represents one of the most promising and rapidly advancing frontiers in biology and drug discovery today which was awarded the 2006 Nobel Prize for Physiology or Medicine. RNAi is a natural process of gene silencing that occurs in

organisms ranging from plants to mammals. By harnessing the natural biological process of RNAi occurring in our cells, the creation of a major new class of medicines, known as RNAi therapeutics, is on the horizon. Small interfering RNA (siRNA), the molecules that mediate RNAi and comprise Alnylam's RNAi therapeutic platform, target the cause of diseases by potently silencing specific mRNAs, thereby preventing disease-causing proteins from being made. RNAi therapeutics have the potential to treat disease and help patients in a fundamentally new way.

About Alnylam Pharmaceuticals

Alnylam is a biopharmaceutical company developing novel therapeutics based on RNA interference, or RNAi. The company is leading the translation of RNAi as a new class of innovative medicines with a core focus on RNAi therapeutics for the treatment of genetically defined diseases, including ALN-TTR for the treatment of transthyretin-mediated amyloidosis (ATTR), ALN-AT3 for the treatment of hemophilia, ALN-PCS for the treatment of severe hypercholesterolemia, ALN-HPN for the treatment of refractory anemia, and ALN-TMP for the treatment of hemoglobinopathies. As part of its "Alnylam 5x15TM" strategy, the company expects to have five RNAi therapeutic products for genetically defined diseases in clinical development, including programs in advanced stages, on its own or with a partner by the end of 2015. Alnylam has additional partnered programs in clinical or development stages, including ALN-RSV01 for the treatment of respiratory syncytial virus (RSV) infection, ALN-VSP for the treatment of liver cancers, and ALN-HTT for the treatment of Huntington's disease. The company's leadership position on RNAi therapeutics and intellectual property have enabled it to form major alliances with leading companies including Merck, Medtronic, Novartis, Biogen Idec, Roche, Takeda, Kyowa Hakko Kirin, Cubist, Ascletis, Monsanto, and Genzyme. In addition, Alnylam and Isis co-founded Regulus Therapeutics Inc., a company focused on discovery, development, and commercialization of microRNA therapeutics; Regulus has formed partnerships with GlaxoSmithKline, Sanofi, AstraZeneca and Biogen Idec. Alnylam has also formed Alnylam Biotherapeutics, a division of the company focused on the development of RNAi technologies for applications in biologics manufacturing, including recombinant proteins and monoclonal antibodies. Alnylam's VaxiRNA™ platform applies RNAi technology to improve the manufacturing processes for vaccines; GlaxoSmithKline is a collaborator in this effort. Alnylam scientists and collaborators have published their research on RNAi therapeutics in over 100 peer-reviewed papers, including many in the world's top scientific journals such as Nature, Nature Medicine, Nature Biotechnology, and Cell. Founded in 2002, Alnylam maintains headquarters in Cambridge, Massachusetts. For more information, please visit www.alnylam.com.

About LNP Technology

Alnylam has licenses to Tekmira LNP intellectual property for use in RNAi therapeutic products using LNP technology.

Alnylam Forward-Looking Statements

Various statements in this release concerning Alnylam's future expectations, plans and prospects, including without limitation, statements regarding Alnylam's views with respect to the outcome of this settlement and the restructuring of its relationship with Tekmira, its expectations

regarding the payment to and receipt from Tekmira of future milestones and royalties, its plans with respect to the manufacture of LNP-based RNAi therapeutics, its expected cash position as of December 31, 2012, and Alnylam's expectations regarding its "Alnylam 5x15" product strategy, constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including, without limitation, Alnylam's ability to successfully advance RNAi therapeutics, in particular ALN-VSP, ALN-PCS and ALN-TTR, resulting in the potential achievement of milestone and royalty events and thus the benefit to Alnylam of the buy-down of such payments, Alnylam's ability to manufacture or have manufactured its LNP-based RNAi therapeutics for clinical and commercial use, obtaining, maintaining and protecting intellectual property and Alnylam's dependence on Tekmira for the protection of and access to certain LNP IP, obtaining regulatory approval for products, competition from others using technology similar to Alnylam's and others developing products for similar uses, Alnylam's ability to raise additional capital, and Alnylam's ability to establish and maintain strategic business alliances and new business initiatives, as well as those risks more fully discussed in the "Risk Factors" section of its most recent quarterly report on Form 10-Q on file with the Securities and Exchange Commission. In addition, any forward-looking statements represent Alnylam's views only as of today and should not be relied upon as representing its views as of any subsequent date. Alnylam does not assume any obligation to update any forward-looking statements.

Confidential

Tekmira and Alnylam Restructure Relationship and Settle All Litigation

FOR IMMEDIATE RELEASE: **November 12, 2012**

Vancouver, BC — Tekmira Pharmaceuticals Corporation (Nasdaq: TKMR, TSX: TKM) today announced that it has entered into a settlement agreement with Alnylam Pharmaceuticals, Inc. that resolves all litigation between the companies, and has signed a new licensing agreement that restructures the relationship and provides clarity on all intellectual property and licensing issues between the companies. As a result of the restructuring and new agreements, Tekmira will receive $65 million within 10 days and is eligible to receive $10 million in near-term milestone payments expected to be received in 2013.

“Today’s announcement provides assurances for our stakeholders that we accomplished what we set out to do when we initiated this litigation. We now have clarity around the intellectual property that protects our lipid nanoparticle (LNP) technology and a cash payment that will enable us to continue the execution of our business plan into 2015,” said Dr. Mark J. Murray, Tekmira’s President and CEO.

“Tekmira is entering an exciting new era of growth and development. Clarity of rights and ownership around our LNP intellectual property – the leading technology for the systemic delivery of RNAi therapeutics – combined with a strong balance sheet should strengthen our ability to invest in, advance and expand our own product pipeline. We also look forward to establishing new business relationships with pharmaceutical partners driven by intellectual property certainty and recent promising clinical data validating the therapeutic utility of LNP-enabled products,” added Dr. Murray.

As part of this settlement and restructuring, all previous agreements between the companies are terminated and a new license agreement has been established that provides clear terms outlining Tekmira’s LNP intellectual property. Under the terms of the new license agreement:

- Alnylam will transfer all agreed-upon patents and patent applications related to LNP technology for the systemic delivery of RNAi therapeutic products, including the MC3 lipid family, to Tekmira, who will own and control prosecution of this intellectual property portfolio. Tekmira is the only company able to sublicense LNP intellectual property in future platform-type relationships.
- Tekmira will receive a total of $65 million in cash payments within 10 days. This includes $30 million associated with the termination of the manufacturing agreement and $35 million associated with the termination of the previous license agreements, as well as a modification of the milestone and royalty schedules associated with Alnylam’s ALN-VSP, ALN-PCS, and ALN-TTR02 programs.

- Tekmira is also eligible to receive an additional $10 million in near-term milestones, comprised of a $5 million payment upon ALN-TTR02 entering a pivotal trial and a $5 million payment related to initiation of clinical trials for ALN-VSP in China. Both near-term milestones are expected to occur in 2013.
- Alnylam no longer has “opt-in” rights to Tekmira’s lead oncology product, TKM-PLK1; Tekmira now holds all development and commercialization rights related TKM-PLK1, which is expected to enter Phase 2 clinical trials in 2013.
- In addition to its eight existing InterfeRx licenses, Tekmira will receive five additional non-exclusive licenses to develop and commercialize RNAi therapeutics based on Alnylam’s siRNA payload technology. Tekmira will pay Alnylam milestones and royalties for these products.
- Alnylam has a license to use Tekmira’s intellectual property to develop and commercialize products, including ALN-TTR02, ALN-VSP, ALN-PCS, and other LNP-enabled products. Alnylam has rights to sublicense Tekmira’s LNP technology if it is part of a product sublicense. Tekmira remains eligible for milestone and royalty payments as Alnylam’s LNP-enabled products are developed and commercialized.

Alnylam and Tekmira have agreed to settle all ongoing litigation between the parties. The parties have also agreed to a resolution of the interference proceeding related to Alnylam-owned US Patent No. 7,718,629 directed to an siRNA component in ALN-VSP. Finally, the parties have agreed to a covenant not to sue on matters related to the current dispute in the future, which includes liquidated damages to be paid if the covenant is breached, and have also agreed to resolve any future disputes that might arise over the next three years with binding arbitration.

Tekmira and AlCana Technologies, Inc. have also agreed to settle all ongoing litigation between the parties. Tekmira expects to enter into a cross license agreement with AlCana which will include milestone and royalty payments, and AlCana has agreed not to compete in the RNAi field for five years.

About RNAi and Tekmira’s LNP Technology

RNAi therapeutics have the potential to treat a broad number of human diseases by “silencing” disease causing genes. The discoverers of RNAi, a gene silencing mechanism used by all cells, were awarded the 2006 Nobel Prize for Physiology or Medicine. RNAi therapeutics, such as “siRNAs,” require delivery technology to be effective systemically. Tekmira believes its LNP technology represents the most widely adopted delivery technology for the systemic delivery of RNAi therapeutics. Tekmira’s LNP platform is being utilized in multiple clinical trials by both Tekmira and its partners. Tekmira’s LNP technology (formerly referred to as stable nucleic acid-lipid particles or SNALP) encapsulates siRNAs with high efficiency in uniform lipid nanoparticles that are effective in delivering RNAi therapeutics to disease sites in numerous

preclinical models. Tekmira's LNP formulations are manufactured by a proprietary method which is robust, scalable and highly reproducible and LNP-based products have been reviewed by multiple FDA divisions for use in clinical trials. LNP formulations comprise several lipid components that can be adjusted to suit the specific application.

About Alnylam RNAi Technology

Tekmira has licenses to Alnylam RNAi intellectual property for certain siRNA programs.

About Tekmira

Tekmira Pharmaceuticals Corporation is a biopharmaceutical company focused on advancing novel RNAi therapeutics and providing its leading lipid nanoparticle delivery technology to pharmaceutical partners. Tekmira has been working in the field of nucleic acid delivery for over a decade and has broad intellectual property covering LNPs. Further information about Tekmira can be found at www.tekmirapharm.com. Tekmira is based in Vancouver, B.C.

Forward-Looking Statements and Information

This news release contains "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws (collectively, "forward-looking statements"). Forward-looking statements are generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "budgets," "could," "estimates," "expects," "forecasts," "projects" and similar expressions, and the negative of such expressions. Forward-looking statements in this news release include statements about the settlement to resolve all litigation between Tekmira and Alnylam Pharmaceuticals, Inc. and AlCana Technologies, Inc., including the patent infringement lawsuit; statements about the quantum and timing of Tekmira's expected payments related to the settlement agreement and new licensing agreement with Alnylam; statements about Tekmira's expected payments funding the continued execution of its business plan into 2015; Tekmira's ability to invest in, advance and expand its product pipeline; the establishment of new business relationships with pharmaceutical partners; clinical data validating the therapeutic utility of LNP-enabled products; expected timing of Phase 2 clinical trials for TKM-PLK1; milestones and royalty payments from Alnylam's LNP-enabled products; the additional five non-exclusive InterfeRx licenses; future disputes and mechanisms for resolution of disputes with Alnylam; Tekmira's expectations of entering into a cross license agreement with AlCana, which includes anticipated milestone and royalty payments and an expected agreement for AlCana not to compete in the RNAi field for five years; and Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi (ribonucleic acid interference) product development programs; the future royalty payments expected from the ALN-TTR, ALN-VSP, ALN-PCS and other LNP-enabled product development programs of Alnylam; and Tekmira's expectations with respect to existing and future agreements with third parties.

With respect to the forward-looking statements contained in this news release, Tekmira has made numerous assumptions regarding, among other things: LNP's status as a leading RNAi delivery technology; the timing and results of clinical data releases and use of LNP technology by Tekmira's development partners and licensees; the time required to complete research and product development activities; the timing and quantum of payments to be received under contracts with Tekmira's partners including Alnylam and others; the timing of receipt of an immediate payment of $65 million and $10 million in additional milestone payments from Alnylam expected in 2013; Tekmira's receipt of five additional non-exclusive InterfeRx licenses; Tekmira's financial position and its ability to execute on its business strategy; and Tekmira's ability to protect its intellectual property rights and not to infringe on the intellectual property rights of others. While Tekmira considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Additionally, there are known and unknown risk factors which could cause Tekmira's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, among others: expected payments related to the licensing agreement between Tekmira and Alnylam may not be received in the quantum and on the timing currently anticipated, or at all; payments received from the settlement may not be sufficient to fund Tekmira's continued business plan as currently anticipated; Tekmira may never invest in, advance or expand its product pipeline; Tekmira may not be able to establish new business relationships with pharmaceutical partners; LNP-enabled products may have no therapeutic utility; TKM-PLK1 may never enter into Phase 2 clinical trials; Tekmira may never receive milestones or royalty payments from Alnylam; Tekmira may not receive any additional non-exclusive InterfeRx licenses; the possibility that Tekmira does not enter into a cross license agreement with AlCana on the terms currently anticipated, or all; the possibility that other organizations have made advancements in RNAi delivery technology that Tekmira is not aware of; difficulties or delays in the progress, timing and results of clinical trials; future operating results are uncertain and likely to fluctuate; economic and capital market conditions; Tekmira's ability to obtain and protect intellectual property rights, and operate without infringing on the intellectual property rights of others; Tekmira's research and development capabilities and resources will not meet current or expected demand; Tekmira's development partners and licensees conducting clinical trial, development programs and joint venture strategic alliances will not result in expected results on a timely basis, or at all; anticipated payments under contracts with Tekmira's collaborative partners may not be received by Tekmira on a timely basis, or at all, or in the quantum expected by Tekmira; Tekmira's products may not prove to be effective in the treatment of cancer and infectious disease; and the possibility that Tekmira has not sufficiently budgeted for expenditures necessary to carry out planned activities.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's annual report on Form 20-F for the year ended December 31, 2011 (Annual Report), which is available at www.sedar.com or at www.sec.gov/edgar.shtml. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

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[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 4.27 as filed with 20-F

Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as [**]. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

EXHIBIT 4.27

CROSS-LICENSE AGREEMENT

By and Among

ALNYLAM PHARMACEUTICALS, INC.

TEKMIRA PHARMACEUTICALS CORPORATION

And

PROTIVA BIOTHERAPEUTICS INC.

Dated: November 12, 2012

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CROSS-LICENSE AGREEMENT

This Cross-License Agreement (this "Agreement") is entered into as of November 12, 2012 (the "Effective Date"), by and among ALNYLAM PHARMACEUTICALS, INC., a corporation organized under the laws of the State of Delaware having a principal office at 300 Third Street, Cambridge, MA 02142, U.S.A. ("Alnylam"), TEKMIRA PHARMACEUTICALS CORPORATION, a Canadian corporation having a principal office at 100-8900 Glenlyon Parkway, Burnaby, B.C., Canada V5J 5J8 ("Tekmira"), and, solely with respect to Section 10.12, PROTIVA BIOTHERAPEUTICS INC., a wholly-owned subsidiary of Tekmira and a British Columbia corporation with a principal place of business at 100-8900 Glenlyon Parkway, Burnaby, B.C., Canada V5J 5J8 ("Protiva").

RECITALS

WHEREAS, Tekmira owns or controls certain intellectual property covering certain nucleic acid delivery technology known as Lipid Nanoparticle or SNALP ("LNP") technology (the "LNP/SNALP Technology") that is useful for the delivery of a variety of therapeutic products, including those that function through RNA interference ("RNAi") or the modulation of microRNAs ("miRNAs"), and is also engaged in the business of discovering, developing, manufacturing and commercializing human therapeutic products;

WHEREAS, Alnylam owns or controls certain intellectual property covering fundamental aspects of the structure and uses of therapeutic products that function through RNAi or the modulation of miRNA and certain intellectual property covering LNP/SNALP Technology; and Alnylam is developing capabilities to develop and commercialize such therapeutic products;

WHEREAS, Alnylam and Tekmira are parties to several existing agreements relating to RNAi, miRNA and SNALP/LNP Technology, including an Amended and Restated License and Collaboration Agreement dated May 30, 2008 (the "Alnylam-Tekmira LCA"); an Amended and Restated Cross-License Agreement dated May 30, 2008, between Alnylam and Protiva, now a wholly owned subsidiary of Tekmira (as amended, the "Alnylam-Protiva CLA" and collectively with the Alnylam-Tekmira LCA, the "Prior Cross-License Agreements"); a Development, Manufacturing and Supply Agreement dated January 2, 2009, as amended, and a Quality Assurance Agreement dated January 29, 2009 (collectively, the "Manufacturing Agreements"); a Supplemental Agreement dated July 27, 2009, among Tekmira, Protiva, Alnylam, AlCana Technologies, Inc. ("AlCana") and the University of British Columbia ("UBC") (the "Supplemental Agreement") and a related Sponsored Research Agreement dated July 26, 2009, among Alnylam, UBC and AlCana (the "Sponsored Research Agreement"); and a Sublicense Agreement dated January 8, 2007, between Alnylam and Inex Pharmaceuticals Corporation (to which Tekmira is the successor in interest) (the "UBC Sublicense");

WHEREAS, the Parties have entered into a Settlement Agreement concurrently with the execution of this Agreement (the "Settlement Agreement") pursuant to which they have agreed to settle certain disputes between them;

WHEREAS, in connection with the Settlement Agreement, the Parties have agreed to replace the Prior Cross-License Agreements with this Agreement, supersede rights and obligations under the Supplemental Agreement as between themselves with the rights and obligations set forth in this Agreement, and terminate the Manufacturing Agreements; and

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt of which is hereby acknowledged, Alnylam and Tekmira enter into this Agreement effective as of the Effective Date:

ARTICLE I- DEFINITIONS

General. When used in this Agreement, each of the following terms, whether used in the singular or plural, will have the meanings set forth in this Article I.

1.1 Act means the United States Federal Food, Drug, and Cosmetic Act of 1938, 21 U.S.C. §§321 et seq., as such may be amended from time to time, and its implementing regulations.

1.2 Active Internal Development Program means, with respect to a particular siRNA Product or miRNA Product, that, as of the time of Target selection under Section 3.3(a), there is an active program of Research, Development or Commercialization with respect to such siRNA Product or miRNA Product at such Party or any of its Affiliates.

1.3 Affiliate means, with respect to a Person, any corporation, company, partnership, joint venture and/or firm which controls, is controlled by, or is under common control with such Person. For purposes of the foregoing sentence, "control" means (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares having the right to vote for the election of directors, or (b) in the case of non-corporate entities, direct or indirect ownership of at least fifty percent (50%) of the equity interest with the power to direct the management and policies of such non-corporate entities.

1.4 Aggregate Annual Net Sales means, for each calendar year starting with the calendar year in which the First Commercial Sale occurs for a Product, the total Net Sales of such Product during such calendar year.

1.5 ALN-TTR means Alnylam's siRNA Product in an LNP Formulation that is designed to target the human TTR gene product.

1.6 ALN-VSP means Alnylam's siRNA Product in an LNP Formulation that is designed to target the human VEGF and KSP gene products.

1.7 Alnylam Exclusive Target means any of the Alnylam Existing Exclusive Targets or any of the Alnylam Additional Exclusive Targets.

1.8 Alnylam Existing Exclusive Target means any of the following Targets: VSP (VEGF and KSP used in combination), TTR and PCSK9.

1.9 Alnylam Existing In-License means any of the agreements set forth on Schedule 1.9, pursuant to which Alnylam has a license from any Third Party under any Alnylam Licensed Technology.

1.10 Alnylam Existing Sublicense means any of the agreements set forth on Schedule 1.10, pursuant to which Alnylam has granted a sublicense to any Third Party under any Tekmira Combined Licensed Technology and/or Category 1 Patent.

1.11 Alnylam Field means the use of siRNA Products or miRNA Products directed to an Alnylam Target for the prevention, treatment or palliation of human disease, and related Research, Development and Commercialization activities.

1.12 Alnylam Know-How means all Know-How Controlled by Alnylam as of the Effective Date and that, prior to the Effective Date, was (a) disclosed by Alnylam to Tekmira or (b) otherwise learned by Tekmira; provided, that Alnylam Know-How shall not include Know-How learned by Tekmira solely as a result of the litigation settled pursuant to the Settlement Agreement.

1.13 Alnylam Licensed Technology means, collectively, the Alnylam Patents and the Alnylam Know-How.

1.14 Alnylam Non-Exclusive Target means any Target that is not an Alnylam Exclusive Target or a Tekmira Exclusive Target.

1.15 Alnylam Patent means any Patent Controlled by Alnylam as of the Effective Date that was filed, or claims priority to a Patent that was filed, before April 15, 2010, or any foreign counterpart of any of the foregoing Patents, and that either:

(a) is listed on Schedule 1.15; or

(b) is related to general siRNA structures or modifications (excluding conjugated siRNAs); or

(c) has claims relating to a lipid or an LNP Formulation or its manufacture; or

(d) has claims relating to non-conjugated siRNAs directed to a Tekmira Target.

Alnylam Patents shall not include any Patent that (i) is a UBC Patent; or (ii) is Controlled by Alnylam pursuant to an in-license that is not an Alnylam Existing In-License.

Notwithstanding the foregoing, the licenses granted to Tekmira under Section 2.1 with respect to the Patents in Section 1.15(c) above will only include Researching, Developing and Commercializing Tekmira Products in an LNP Formulation.

1.16 Alnylam Product means an siRNA Product or miRNA Product Researched, Developed or Commercialized by Alnylam, its Affiliates or Sublicensees that is directed to an Alnylam Target.

1.17 Alnylam Sublicensable Product means an Alnylam Product that has been developed by Alnylam or its Affiliates [**]. Any such Alnylam Product described in clause (a) may also include existing or future back up or improvement oligonucleotide products directed to the same Target as such Product in LNP Formulations or other lipid-based formulations.

1.18 Alnylam Target means any of the Alnylam Exclusive Targets or Alnylam Non-Exclusive Targets.

1.19 Biodefense Target means (a) a Target within the genome of one or more Category A, B and C pathogens, as defined by the National Institute of Allergy and Infectious Diseases, including without limitation, pathogens set forth on Schedule 1.19, but specifically excluding influenza virus, or (b) an endogenous cellular Target against which Alnylam Develops and/or Commercializes an Alnylam Product for commercial supply to one or more Funding Authorities.

1.20 Bona Fide Collaboration means a collaboration between Alnylam and one or more Third Parties involving Research, Development, Manufacture and/or Commercialization of one or more Alnylam Products and established under a written agreement in which (a) the scope of the licenses granted, and financial or other commitments of value, are of material value to Alnylam, and (b) Alnylam undertakes and performs substantial, mutual research, development and/or commercialization activity with the Third Party. For purposes of clarity, it is understood and agreed that no collaboration in which all or substantially all of Alnylam's contributions or anticipated contributions are or will be in the form of the grant by Alnylam of licenses or sublicenses to one or more intellectual property rights will be considered a Bona Fide Collaboration.

1.21 Business Day means a day on which banking institutions in Boston, Massachusetts and Vancouver, British Columbia, Canada, are open for business.

1.22 Category 1 Patent means any Patent set forth on Schedule 1.22, any Patent Controlled by Tekmira after the Effective Date that claims priority to any of the Patents set forth on Schedule 1.22, or any foreign counterpart of any of the foregoing Patents.

1.23 Category 2 Patent means any Patent set forth on Schedule 1.23, any Patent Controlled by Alnylam after the Effective Date that claims priority to any of the Patents set forth on Schedule 1.23, or any foreign counterpart of any of the foregoing Patents.

1.24 Category 3 Patent means any Patent set forth on Schedule 1.24, any Patent Controlled by Alnylam after the Effective Date that claims priority to any of the Patents set forth on Schedule 1.24, or any foreign counterpart of any of the foregoing Patents.

1.25 Combination Product means a product that incorporates in a combination one or more pharmacologically active ingredients in addition to the active pharmaceutical ingredient in the Alnylam Product or Tekmira Product, as applicable.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

1.26 Commercialize or Commercialization means any and all activities directed to Manufacturing (including, without limitation, by means of contract manufacturers), marketing, promoting, distributing, importing, exporting and selling a Product, in each case for commercial purposes, and activities directed to obtaining pricing and reimbursement approvals, as applicable.

1.27 Confidential Information means all proprietary or confidential information and materials, patentable or otherwise, of a Party disclosed by or on behalf of such Party to the other Party before, on or after the Effective Date, including, without limitation, chemical substances, formulations, techniques, methodology, equipment, data, reports, Know-How, sources of supply, patent positioning, business plans, and also including without limitation proprietary and confidential information of Third Parties in possession of such Party under an obligation of confidentiality, whether or not related to making, using or selling Products.

1.28 Control, Controls or Controlled by means, with respect to any Know-How or Patent, the possession of (whether by ownership or license, other than pursuant to this Agreement), or the ability of a Party or any of its Existing Affiliates to grant access to, or a license or sublicense of, such Know-How or Patent as provided for herein without violating the terms of any agreement or other arrangement with any Third Party existing at the time such Party would be required hereunder to grant the other Party such access or license or sublicense.

1.29 Cover, Covers or Covered by means, with respect to a product and a Patent, that, but for ownership of or a license or sublicense under such Patent, the making, using, selling, offering for sale or importing of, or other stated action with respect to, such product would infringe such Patent (or, if such Patent is a patent application, would infringe a patent issued from such patent application).

1.30 Develop, Developing or Development means with respect to a Product, preclinical and clinical drug development activities, including without limitation: test method development and stability testing, toxicology, formulations, manufacturing scale-up, preclinical and clinical Manufacture, quality assurance/quality control development, statistical analysis and report writing; clinical studies and regulatory affairs; Regulatory Approval and registration.

1.31 Existing Affiliate means, with respect to a Party, an Affiliate of such Party as of the Effective Date.

1.32 FDA means the United States Food and Drug Administration or any successor agency thereto.

1.33 First Commercial Sale means, with respect to each Product, the first commercial sale in a country as part of a nationwide introduction after receipt by a Product Seller of Regulatory Approval in such country, excluding de minimis named patient and compassionate use sales.

1.34 Follow-On Product means a Product directed towards a Target that is the same Target that is targeted by a Successful Tekmira Milestone Product, a Successful Alnylam Product or a Successful Biodefense Product, as applicable, but that contains a different chemical structure for the siRNA and/or a different cationic lipid component for the LNP Formulation.

1.35 Funding Authority means the United States Department of Health and Human Services or other United States or foreign government or international agencies responsible for requesting, approving and/or funding the development and manufacture of products for biodefense purposes.

1.36 GAAP means United States generally accepted accounting principles applied on a consistent basis.

1.37 IND means a United States investigational new drug application or its equivalent or any corresponding foreign application.

1.38 Institutional Collaborator means any academic or non-profit institution or Person employed by or otherwise affiliated with such an institution that does not meet the definition of Permitted Contractor.

1.39 Know-How means biological materials and other tangible materials, information, data, inventions, practices, methods, protocols, formulas, formulations, knowledge, know-how, trade secrets, processes, assays, skills, experience, techniques and results of experimentation and testing, including without limitation pharmacological, toxicological and preclinical and clinical test data and analytical and quality control data, patentable or otherwise.

1.40 LNP Formulation means an LNP formulation, characterized by its components and its unique ratios among components.

1.41 Major Market means, individually and collectively, the United States, the European Union, Canada, the United Kingdom, France, Germany, Italy, Spain, China and Japan.

1.42 Manufacturing or Manufacture means, with respect to a Product, all activities associated with the production, manufacture and processing of such Product, and the filling, finishing, packaging, labeling, shipping, and storage of such Product, including without limitation formulation process scale-up for toxicology and clinical study use, aseptic fill and finish, stability testing, analytical development, quality assurance and quality control, and the production of the bulk finished dosage form of such Product from the siRNA and miRNA.

1.43 miRNA Product means a product containing, comprised of or based on native or chemically modified RNA oligomers designed to either (a) modulate, inhibit or interfere with a particular miRNA transcript; or (b) provide the function and/or mimic the activity of an miRNA.

1.44 Necessary Third Party IP means, with respect to any country in the Territory, on a country-by-country basis, any Patent in such country owned or controlled by a Third Party that Covers Alnylam Products and/or Tekmira Products.

1.45 Net Sales means the gross amount invoiced by Alnylam, its Affiliates or Sublicensees for Alnylam Products, or by Tekmira, its Affiliates or Sublicensees for Tekmira Products (in each case, such invoicing entity, a “Product Seller”), on sales or other dispositions in the Territory of such Products during the applicable Royalty Term to Third Parties which are not Affiliates or Sublicensees of the Product Seller, less (a) to the extent allowed and taken, sales returns and allowances, granted or accrued, including trade, quantity and cash discounts and any

other adjustments, including those granted on account of price adjustments, billing errors, rejected goods, damaged or defective goods, recalls, returns, rebates, chargebacks, reimbursements or similar payments granted or given to wholesalers or other distributors, buying groups, health care insurance carriers or other institutions; (b) adjustments arising from consumer discount programs or similar programs; (c) customs or excise duties, sales tax, consumption tax, value added tax, and other similar taxes (except income taxes) measured by the production, sale, or delivery of goods; (d) duties relating to sales and any payments in respect of sales to the United States government, any State government or any foreign government, or to any governmental authority, or with respect to any government subsidized program or managed care organization; and (e) charges for freight and insurance related to the return of Products and not otherwise paid by the customer.

In the event that a Product is sold in any country in the form of a Combination Product in any year, Net Sales of such Combination Product will be adjusted by multiplying actual Net Sales of such Combination Product in such country by the fraction A/(A+B), where A is the average Net Sales price per daily dose during such year of the Product in such country, if sold separately in such country, and B is the average Net Sales price per daily dose of any product containing the other pharmacologically active ingredients in the Combination Product in such country, if sold separately in such country. If, in a specific country, the product containing the other pharmacologically active ingredients in the Combination Product are not sold separately in such country, Net Sales will be calculated by multiplying actual Net Sales of such Combination Product by the fraction A/C, where A is the average Net Sales price per daily dose of the Product in such country and C is the average Net Sales price per daily dose of the Combination Product in such country. If, in a specific country, the Product is not sold separately in such country, Net Sales will be calculated by multiplying actual Net Sales of such Combination Product by the fraction (C-B)/C, where B is the average Net Sales price per daily dose of the product containing the other pharmacologically active ingredients in the Combination Product in such country and C is the average Net Sales price per daily dose of the Combination Product in such country. If, in a specific country, both the Product and the product containing the other pharmacologically active ingredients in the Combination Product are not sold separately in such country, the Net Sales price for the Product and the product containing the other pharmacologically active ingredients in the Combination Product will be negotiated by the Parties in good faith based upon the costs, overhead and profit as are then incurred for the Product and all similar substances then being made and marketed by the selling Party and having an ascertainable market price.

Net Sales shall be determined from books and records maintained in accordance with GAAP, consistently applied throughout the organization and across all products of the entity whose sales of Product are giving rise to Net Sales.

1.46 Party means either Alnylam or Tekmira or, solely with respect to Section 10.12, Protiva; Parties means Alnylam and Tekmira and, solely with respect to Section 10.12, Protiva.

1.47 Patent means any patent (including any reissue, extension, substitution, confirmation, re-registrations, re-examination, invalidation, supplementary protection certificate or patents of addition) or patent application (including any provisional application, continuation, continuation-in-part or divisional).

1.48 Permitted Contractor means a Third Party that performs activities (*e.g.*, as a contractor or consultant) under a *bona fide* contract services arrangement on behalf of a Party or its Affiliates.

1.49 Person means any person or entity.

1.50 Phase I Clinical Trial means the first study of a Product in humans the primary purpose of which is the determination of safety and which may include the determination of pharmacokinetic and/or pharmacodynamic profiles in healthy individuals or patients.

1.51 Phase II Clinical Trial means (a) a study of dose exploration, dose response, duration of effect, kinetics or preliminary efficacy and safety study of a Product in the target patient population, (b) a controlled dose-ranging clinical trial to evaluate further the efficacy and safety of such Product in the target population and to define the optimal dosing regimen or (c) a clinical trial that the sponsoring Party or its Affiliate refers to in a press release as a Phase II Clinical Trial or Study.

1.52 Phase III Clinical Trial or Pivotal Trial means (a) a controlled study of a Product in patients of the efficacy and safety of such Product which is prospectively designed to demonstrate statistically whether such Product is effective and safe for use in a particular indication in a manner sufficient to obtain Regulatory Approval to market such Product or (b) a clinical trial that the sponsoring Party or its Affiliate refers to in a press release as a Phase III Clinical Trial or Study.

1.53 Product means a Tekmira Product or an Alnylam Product.

1.54 Protiva Patent means any Patent Controlled by Protiva on or after the Effective Date that was filed, or that claims priority to a Patent that was filed before April 15, 2010, but excluding Patent claims that Cover Tekmira Products, which excluded Patent claims are solely directed to PLK1, APOB, Ebola, WEE1, ALDH2 or CSN5.

1.55 Protiva Know-How means all Know-How Controlled by Protiva as of the Effective Date and that, prior to the Effective Date, was (a) disclosed to Alnylam by Protiva or (b) otherwise learned by Alnylam; provided, that Protiva Know-How shall not include Know-How learned by Alnylam solely as a result of the litigation settled pursuant to the Settlement Agreement.

1.56 Qualifying Patent means an Alnylam Patent or, if there is no Valid Claim of an Alnylam Patent remaining in the applicable sublicensed territory, any Patent Controlled by Alnylam that claims the composition of matter or method of use of a product.

1.57 Regulatory Approval means, with respect to each Product Developed and Commercialized, the receipt of sufficient authorization from the appropriate regulatory authority on a country-by-country basis to market and sell such Product in a country, including (where necessary in a particular country prior to marketing a Product) all separate pricing and/or reimbursement approvals that may be required for marketing.

1.58 Research or Researching means identifying, evaluating, validating and optimizing Products prior to pre-IND GLP toxicology studies.

1.59 Royalty Quarter means each of the four (4) calendar quarters that begin January 1, April 1, July 1 and October 1 of each year.

1.60 siRNA means a double-stranded ribonucleic acid (RNA) composition designed to act primarily through an RNA interference mechanism that consists of either (a) two separate oligomers of native or chemically modified RNA that are hybridized to one another along a substantial portion of their lengths, or (b) a single oligomer of native or chemically modified RNA that is hybridized to itself by self-complementary base-pairing along a substantial portion of its length to form a hairpin.

1.61 siRNA Product means a product containing, comprised of or based on siRNAs or other double-stranded moieties effective in gene function modulation and designed to modulate the function of particular genes or gene products by causing degradation through RNA interference of a Target mRNA to which such siRNAs or other double-stranded moieties are complementary.

1.62 Sublicensee means (a) a Third Party to whom Alnylam has granted (or to whom another permitted sublicensee under an Alnylam Existing Sublicense grants) a sublicense pursuant to any of the Alnylam Existing Sublicenses, or (b) a Third Party to whom a Party (or another permitted sublicensee of such Party under this Agreement) grants a sublicense of all or a portion of the rights licensed to it hereunder as permitted herein.

1.63 Sublicensable Product means an Alnylam Sublicensable Product or a Tekmira Sublicensable Product.

1.64 Target means (a) a nucleic acid that encodes or is required for expression of a polypeptide (including without limitation messenger RNA and miRNA), together with all variants of such polypeptide; (b) the set of nucleic acids that encode a defined non-peptide entity, including a microorganism, virus, bacterium or single cell parasite; provided that the entire genome of a microorganism, virus, bacterium, or single cell parasite shall be regarded as a single Target; or (c) a naturally occurring interfering RNA or miRNA or precursor thereof.

1.65 Tekmira Additional Target means a Tekmira Additional Exclusive Target or a Tekmira Additional Non-Exclusive Target.

1.66 Tekmira Combined Licensed Technology means, collectively, the Protiva Patents, the Protiva Know-How, the Tekmira Patents and the Tekmira Know-How.

1.67 Tekmira Exclusive Target means ALDH2 or any of the Tekmira Additional Exclusive Targets.

1.68 Tekmira Field means the use of siRNA Products directed to a Tekmira Target for the prevention, treatment or palliation of human disease, and related Research, Development and Commercialization activities.

1.69 Tekmira Know-How means all Know-How, other than Protiva Know-How, Controlled by Tekmira as of the Effective Date and that, prior to the Effective Date, was (a) disclosed by Tekmira to Alnylam or (b) otherwise learned by Alnylam; provided, that Tekmira Know-How shall not include Know-How learned by Alnylam solely as a result of the litigation settled pursuant to the Settlement Agreement.

1.70 Tekmira Manufacturing Documents means the documents identified in Schedule 1.70.

1.71 Tekmira Milestone Product means any Tekmira Product Covered by a Valid Claim within the Alnylam Patents and that is directed to a Tekmira Non-Exclusive Target other than Ebola.

1.72 Tekmira Non-Exclusive Target means any of the following Targets: PLK1, APOB, Ebola, WEE1, CSN5, or any of the Tekmira Additional Non-Exclusive Targets.

1.73 Tekmira Patent means any Patent, other than a Protiva Patent, UBC Patent or Category 1 Patent, that is Controlled by Tekmira on or after the Effective Date and that was filed, or that claims priority to a Patent that was filed, before April 15, 2010.

1.74 Tekmira Product means an siRNA Product Researched, Developed or Commercialized by Tekmira, its Affiliates or Sublicensees that is directed to a Tekmira Target.

1.75 Tekmira Royalty-Bearing Patent means any Patent within the Tekmira Combined Licensed Technology, any Category 1 Patent, any Category 2 Patent as to which a Tekmira employee is listed as an inventor, any Category 3 Patent as to which a Tekmira employee is listed as an inventor, and any UBC Patent.

1.76 Tekmira Sublicensable Product means a Product that has been developed by Tekmira or its Affiliates for which (a) a Target has been identified, and a potential therapeutic intervention described, and (b) one (1) or more oligonucleotide(s) have been screened in *in vitro* studies and (c) non-GLP rodent pharmacology data has been generated.

1.77 Tekmira Target means a Tekmira Exclusive Target or a Tekmira Non-Exclusive Target.

1.78 Tekmira-UBC License Agreement means that certain license agreement between Tekmira and UBC, dated effective July 1, 1998, as amended by Amendment Agreement between Tekmira and UBC dated effective July 11, 2006, and Second Amendment Agreement dated effective August 14, 2007.

1.79 Territory means worldwide.

1.80 Third Party means any Person other than Tekmira, Alnylam or any of their respective Affiliates.

1.81 UBC Patent means a Patent sublicensed to Alnylam pursuant to the UBC Sublicense and that was filed, or that claims priority to a Patent that was filed, before April 15, 2010.

1.82 Valid Claim means (a) any claim in an issued and unexpired patent within the Alnylam Patents or the Tekmira Royalty-Bearing Patents, as applicable, that has not been held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction, which decision is unappealable or unappealed within the time allowed for appeal, and which has not been admitted by the holder of the patent to be invalid or unenforceable through reissue, re-examination, or disclaimer or otherwise and (b) a patent application within the Alnylam Patents or the Tekmira Royalty-Bearing Patents, as applicable, a claim of which has been pending less than [**] years and which claim has not been cancelled, withdrawn or abandoned or finally rejected by an administrative agency action from which no appeal can be taken.

Additional Defined Terms	Section Reference
AAA	10.2
Agreement	PREAMBLE
AlCana	RECITALS
Alnylam	PREAMBLE
Alnylam Additional Exclusive Target	3.2
Alnylam Indemnitee	7.1
Alnylam-Protiva CLA	RECITALS
Alnylam-Tekmira LCA	RECITALS
Ascletis	4.6
Code	2.7
Competitive Infringement	5.4(a)
Effective Date	PREAMBLE
IP Management Terms	5.1
Lead Development Candidate	1.17
LNP	RECITALS
LNP Improvements	2.2(d)
LNP/SNALP Technology	RECITALS
Losses	7.1
miRNA	RECITALS
Manufacturing Agreements	RECITALS
Prior Cross-License Agreements	RECITALS
Product Seller	1.45
Protiva	PREAMBLE
RNAi	RECITALS
Royalty Term	4.7
Settlement Agreement	RECITALS
Sponsored Research Agreement	RECITALS

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Additional Defined Terms	Section Reference
Successful Alnylam Product	4.5
Successful Biodefense Product	4.4
Successful Tekmira Milestone Product	4.1
Supplemental Agreement	RECITALS
Tekmira	PREAMBLE
Tekmira Additional Exclusive Target	3.1
Tekmira Additional Non-Exclusive Target	3.1
Tekmira Indemnitee	7.2
UBC	RECITALS
UBC Sublicense	RECITALS

ARTICLE II- LICENSE GRANTS AND RELATED RIGHTS

2.1 License Grants to Tekmira.

(a) Subject to the terms and conditions of this Agreement and the Alnylam Existing In-Licenses, Alnylam hereby grants to Tekmira and its Affiliates an exclusive right and license under the Alnylam Licensed Technology to Research, Develop and Commercialize Tekmira Products directed to any Tekmira Exclusive Target in the Tekmira Field in the Territory.

(b) Subject to the terms and conditions of this Agreement and the Alnylam Existing In-Licenses, Alnylam hereby grants to Tekmira and its Affiliates a non-exclusive right and license under the Alnylam Licensed Technology to Research, Develop and Commercialize Tekmira Products directed to any Tekmira Non-Exclusive Target in the Tekmira Field in the Territory.

(c) The licenses set forth in this Section 2.1 include the right to grant sublicenses as provided in, and subject to, Section 2.3 below.

2.2 License Grants to Alnylam.

(a) Subject to the terms and conditions of this Agreement, Tekmira hereby grants to Alnylam and its Affiliates an exclusive right and license under the Tekmira Combined Licensed Technology and the Category 1 Patents to Research, Develop and Commercialize Alnylam Products directed to any Alnylam Exclusive Target in the Alnylam Field in the Territory.

(b) Subject to the terms and conditions of this Agreement, Tekmira grants to Alnylam and its Affiliates a non-exclusive right and license under the Tekmira Combined Licensed Technology and the Category 1 Patents to Research, Develop and Commercialize Alnylam Products directed to any Alnylam Non-Exclusive Target in the Alnylam Field in the Territory.

(c) Subject to the terms and conditions of this Agreement, Tekmira grants to Alnylam and its Affiliates a non-exclusive right and license (without the right to grant sublicenses outside of the Alnylam Field) under the Category 1 Patents for any and all purposes, both in the Alnylam Field and outside of the Alnylam Field, in the Territory. The license granted pursuant to this Section 2.2(c) shall be fully paid-up and royalty-free outside the Alnylam Field.

(d) Subject to the terms and conditions of this Agreement, Tekmira grants to Alnylam and its Affiliates a non-exclusive, non-sublicensable, fully paid-up, royalty-free right and license under the Tekmira Combined Licensed Technology and the Category 1 Patents to research, develop, make, have made and use improvements to such technology and inventions claimed or covered by such Patents ("LNP Improvements") and to research, develop, make, have made, use and commercialize LNP Improvements. As between the Parties, Alnylam shall own all LNP Improvements made by Alnylam and its Affiliates pursuant to the license granted under this Section 2.2(d); provided, however, that such ownership of LNP Improvements shall not extinguish or alter any of Alnylam's obligations to Tekmira for any products that are Alnylam Products.

(e) The licenses set forth in subsections (a), (b) and (c) of this Section 2.2 include the right to grant sublicenses as provided in, and subject to, Section 2.3 below.

2.3 Sublicensing.

(a) The licenses granted to Tekmira in Section 2.1 include the right for Tekmira to grant sublicenses, but only on a Tekmira Sublicensable Product-by-Tekmira Sublicensable Product basis, to Third Parties to Research, Develop and/or Commercialize Tekmira Products that are Tekmira Sublicensable Products. Tekmira shall require that the terms of any sublicense under its rights in this Agreement are fully in compliance with the terms and conditions of this Agreement and of the Alnylam Existing In-Licenses governing Alnylam's rights under the Alnylam Licensed Technology.

(b) The licenses granted to Alnylam in Section 2.2(a), Section 2.2(b) and Section 2.2(c) include the right for Alnylam to grant sublicenses in the Alnylam Field, but only on a Alnylam Sublicensable Product-by-Alnylam Sublicensable Product basis, to Third Parties to Research, Develop and/or Commercialize Alnylam Products that are Alnylam Sublicensable Products. Alnylam shall require that the terms of any sublicense under its rights in this Agreement are fully in compliance with the terms and conditions of this Agreement.

(c) Any sublicense granted by a Party hereunder shall be subject and subordinate to the terms and conditions of this Agreement and shall contain terms and conditions consistent with those in this Agreement. The sublicensing Party shall assume full responsibility for the performance of all obligations and observance of all terms herein under the licenses granted to it and will itself pay and account to the other Party for all payments due under such licenses by reason of any such sublicense. If a sublicensing Party becomes aware of a material breach of any sublicense by a Sublicensee, the sublicensing Party shall promptly notify the other Party of the particulars of same and take all reasonable efforts to enforce the terms of such sublicense.

(d) Unless otherwise provided in this Agreement, the sublicensing Party will notify the other Party within [**] days after execution of a sublicense entered into hereunder and provide a copy of the fully executed sublicense agreement to the other Party within the same time frame (with such reasonable redactions as the sublicensing Party may make, provided that

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such redactions do not include provisions necessary to demonstrate compliance with the requirements of this Agreement), which shall be treated as Confidential Information of the sublicensing Party under Article VI; and provided further that the other Party may disclose such agreement(s) to Third Parties under confidence if and to the extent required in order to comply with such other Party's contractual obligations under both this Agreement and Third Party agreements.

(e) Tekmira hereby waives the foregoing sublicensing restrictions and requirements of Section 2.2(c), Section 2.2(d) and this Section 2.3 with respect to the Alnylam Existing Sublicenses. In addition, to the extent that Alnylam as of the Effective Date has licensed or sublicensed any Patent or Know-How Controlled by Tekmira as of the Effective Date to any Third Party pursuant to any Alnylam Existing Sublicense, or granted any Third Party pursuant to any Alnylam Existing Sublicense any option to obtain a license or sublicense under any Patent or Know-How Controlled by Tekmira, the rights of the applicable Third Party shall not be affected by this Agreement, and if such Third Party Develops or Commercializes Alnylam Products, then Tekmira will be entitled to milestone payments and royalties with respect thereto as set forth in this Agreement. Alnylam agrees that it will not grant any additional options, licenses or sublicenses under Alnylam Patents, Tekmira Combined Licensed Technology, UBC Patents or Category 1 Patents to AlCana to Research, Develop or Commercialize siRNA Products without the prior written consent of Tekmira or enter into any additional contractual obligations to indemnify AlCana as to AlCana's practice of the Alnylam Patents, Tekmira Combined Licensed Technology, UBC Patents or Category 1 Patents to Research, Develop or Commercialize siRNA Products.

(f) Notwithstanding Sections 2.3(a) and 2.3(b), either Party may utilize Permitted Contractors and Institutional Collaborators to Research and/or Develop their respective Products, whether or not such Products have become Sublicensable Products; provided that (i) such Party does not grant any such Permitted Contractor or Institutional Collaborator any license to Commercialize Products that are not Sublicensable Products and (ii) no Party shall share any of the other Party's Confidential Information with such Permitted Contractor or Institutional Collaborator unless such Third Party shall have executed a binding confidentiality agreement containing reasonably customary terms and conditions.

2.4 Coordination with Supplemental Agreement. Tekmira and Alnylam hereby agree that the terms of this Agreement and the Settlement Agreement (and the Binding Term Sheet attached thereto) extinguish, supersede, and replace the rights and obligations of Tekmira, Alnylam, and AlCana under the Supplemental Agreement solely as between and among Tekmira, Alnylam, and AlCana; provided, however, Alnylam's payment obligations to UBC and AlCana under the Supplemental Agreement and Sponsored Research Agreement shall survive the execution of this Agreement and the Settlement Agreement (and the Binding Term Sheet attached thereto), and shall also survive any termination of the Supplemental Agreement or Sponsored Research Agreement, in each case for the duration of the applicable Royalty Term (as defined in the Sponsored Research Agreement). Subject to the terms and conditions of the Settlement Agreement and any subsequent agreement(s) among Alnylam, Tekmira, UBC and AlCana, the rights and obligations of UBC under the Supplemental Agreement and Sponsored Research Agreement shall be maintained. Notwithstanding any of the foregoing, nothing in this section 2.4 shall operate to relieve Alnylam of its obligation to comply with its payment or royalty obligations to UBC or AlCana, either directly or indirectly, under the Supplemental Agreement or Sponsored Research Agreement.

2.5 Covenants Not to Sue. Alnylam hereby covenants that it and its Existing Affiliates will not initiate any legal suit against Tekmira or any of its Existing Affiliates asserting that:

(a) any internal Research performed solely by Tekmira or its Existing Affiliates (and not with any Third Party) and solely for the purpose of identifying a Target for selection as a Tekmira Additional Target hereunder during the period starting on the Effective Date and continuing until the earlier of (i) the [**] anniversary of the Effective Date and (ii) such date that Tekmira completes its selection of the Tekmira Additional Targets pursuant to Article III; or

(b) the formulating in LNP Formulations by Tekmira or any of its Existing Affiliates of oligonucleotides controlled by any *bona fide* Third Party pharmaceutical collaborator on behalf of such Third Party and solely for Research (but not Development or Commercialization);

constitutes infringement and/or misappropriation of the Alnylam Licensed Technology. For clarity, the Parties agree that the covenants set forth in this Section 2.5 do not extend to any Third Party.

2.6 Retained Rights. Each Party expressly retains any rights not expressly granted to the other Party under this Article II (or otherwise under this Agreement).

2.7 Rights in Bankruptcy. All licenses and rights to licenses granted under or pursuant to this Agreement by a Party to other Party are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the United States Bankruptcy Code (the "Code"), licenses of rights to "intellectual property" as defined under Section 101(35A) of the Code. The Parties agree that each Party, as a licensee of such rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the Code, and that upon commencement of a bankruptcy proceeding by or against the other Party under the Code, such Party shall be entitled to a complete duplicate of, or complete access to (as such Party deems appropriate), any such intellectual property and all embodiments of such intellectual property. Such intellectual property and all embodiments thereof shall be promptly delivered to such Party (a) upon any such commencement of a bankruptcy proceeding upon written request therefor by such Party, unless such other Party elects to continue to perform all of its obligations under this Agreement or (b) if not delivered under (a) above, upon the rejection of this Agreement by or on behalf of such other Party upon written request therefor by such Party. The foregoing provisions are without prejudice to any rights such Party may have arising under the Code or other applicable law.

ARTICLE III- SELECTION OF ADDITIONAL TARGETS

3.1 Tekmira Additional Targets. Subject to Section 3.3, during the period beginning on the Effective Date and ending on the [**] anniversary thereof, Tekmira may select (i) up to

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two (2) Targets (other than the Alnylam Exclusive Targets) that shall each become a "Tekmira Additional Exclusive Target" and (ii) up to five (5) Targets (other than the Alnylam Exclusive Targets) that shall each become a "Tekmira Additional Non-Exclusive Target". For clarity, the Parties acknowledge that such seven (7) Tekmira Additional Targets shall be in addition to the one (1) Tekmira Exclusive Target and the five (5) Tekmira Non-Exclusive Targets selected as of the Effective Date.

3.2 Alnylam Additional Exclusive Targets. Subject to Section 3.3, during the period beginning on the Effective Date and ending on the [**] anniversary thereof, Alnylam may select up to five (5) Targets (other than the Tekmira Targets) that shall each become an "Alnylam Additional Exclusive Target". For clarity, the Parties acknowledge that the five (5) Alnylam Exclusive Additional Targets shall be in addition to the Alnylam Existing Exclusive Targets.

3.3 Selection Process. The following process shall apply to the selection of Tekmira Additional Targets and Alnylam Additional Exclusive Targets.

(a) As to Targets that are peptide entities, the selecting Party shall initially notify the other Party in writing of the NCBI Gene ID number (or, if a NCBI Gene ID number is not available, the specific sequence of the proposed Target) of each Target nominated by the selecting Party for selection as an additional Target. As to Targets that are non-peptide entities, the selecting Party shall initially notify the other Party in writing of the non-peptide entity. Within [**] Business Days following the other Party's receipt of a notice nominating a Target, such other Party shall notify the selecting Party in writing whether such Target is either: (i) subject to a binding contractual obligation to a Third Party that would be breached by the inclusion of such Target as an additional Target under these terms, or (ii) the subject of an Active Internal Development Program at such other Party and such Active Internal Development Program was in existence as such prior to the receipt of such notice from the selecting Party and such other Party determines in good faith that it intends to continue such Active Internal Development Program, and so notifies the selecting Party. If neither of these criteria applies, the Target shall be considered to have been successfully nominated as a Tekmira Additional Non-Exclusive Target, Tekmira Additional Exclusive Target, or Alnylam Additional Exclusive Target, as applicable.

(b) If a Target submitted to Alnylam is not available for license as a Tekmira Additional Target pursuant to subsection (a) above, then Tekmira may nominate an additional Target as a Tekmira Additional Target, until two (2) Tekmira Additional Exclusive Targets and five (5) Tekmira Additional Non-Exclusive Targets have been identified and successfully nominated pursuant to the foregoing procedure. Any Target successfully nominated pursuant to the foregoing procedure shall be a Tekmira Additional Target.

(c) If a Target submitted to Tekmira is not available for license as an Alnylam Additional Exclusive Target pursuant to subsection (a) above, then Alnylam may nominate an additional Target as an Alnylam Additional Exclusive Target, until five (5) Alnylam Additional Exclusive Targets have been identified and successfully nominated pursuant to the foregoing procedure. Any Target successfully nominated pursuant to the foregoing procedure shall be an Alnylam Exclusive Additional Target.

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ARTICLE IV- FINANCIAL PROVISIONS

4.1 Manufacturing Opt-Out Payment. Within ten (10) Business Days after the Effective Date, Alnylam shall pay Tekmira a fee of thirty million U.S. dollars ($30,000,000), which amount shall constitute full consideration for the termination of and release of Alnylam from all of Alnylam's obligations under the Manufacturing Agreements, including without limitation the obligations to obtain materials and/or services from Tekmira, and the rights to Manufacture and have Manufactured Alnylam Products included in the Development and Commercialization rights granted to Alnylam pursuant to Sections 2.2(a) and 2.2(b). Based on Tekmira's provision to Alnylam of a completed Form W-8BEN, Alnylam agrees that it will not withhold taxes from the payment under this Section 4.1.

4.2 Restructuring Payment. Within ten (10) Business Days after the Effective Date, Alnylam shall pay Tekmira a fee of thirty-five million U.S. dollars ($35,000,000), which amount shall constitute payment for the termination of the Prior Cross-License Agreements and the Parties' rights and obligations thereunder, as well as the restructuring of certain milestone payments and royalty rates for certain Alnylam Products as set forth in Sections 4.6 and 4.9(d). Based on Tekmira's provision to Alnylam of a completed Form W-8BEN, Alnylam agrees that it will not withhold taxes from the payment under this Section 4.2.

4.3 Milestones with Respect to Tekmira Milestone Products. On a Tekmira Milestone Product-by-Tekmira Milestone Product basis, payments will be payable by Tekmira to Alnylam based upon the achievement of certain milestone events as set forth in the table below (all references are to U.S. dollars). Tekmira will provide written notice to Alnylam of the occurrence of a milestone event within [**] Business Days, and pay the indicated milestone fee to Alnylam within [**] days, after the occurrence of the relevant event.

Capitalized terms in the chart below shall be read in context to apply to Tekmira Milestone Products; provided, however, that each milestone payment will be payable no more than once in respect of any given Tekmira Milestone Product.

Milestone Event	Milestone Fee
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

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If one or more milestone events set out above are skipped for any reason, the payment for such skipped milestone event(s) will be due at the same time as the payment for the next achieved milestone event. The milestone payments described above shall be payable only once in relation to each Tekmira Milestone Product that achieves Regulatory Approval in a Major Market (each, a "Successful Tekmira Milestone Product"). Therefore, unless and until there is a Successful Tekmira Milestone Product directed to a particular Target, any of the milestone payments made by Tekmira under this Section in connection with a Tekmira Milestone Product directed to such Target shall be fully creditable against the repeated achievement of such milestone event by any other Tekmira Milestone Product directed to such Target. However, in the event that there is a Successful Tekmira Milestone Product directed to a Target and Tekmira subsequently begins to Develop or continues to develop a Follow-On Product then, if and when any of the milestone events set out above is thereafter achieved for such Follow-On Product, in addition to the milestone payment for such milestone event, there will also be due and payable all of the milestone payment(s) for any such milestones that were achieved but not paid for such Follow-On Product prior to the achievement of Regulatory Approval in a Major Market of a Successful Tekmira Milestone Product with respect to such Target.

4.4 Milestones with Respect to Biodefense Targets. The milestone fees payable by Alnylam to Tekmira with respect to Alnylam Products directed to Biodefense Targets that are not intended for sale, directly or indirectly, to a Funding Authority shall be as set forth in Section 4.4. The milestone fees payable by Alnylam to Tekmira with respect to Alnylam Products Covered by a Valid Claim within the Tekmira Royalty-Bearing Patents that are directed to Biodefense Targets which are intended for sale, directly or indirectly, to a Funding Authority shall be payable on an Alnylam Product-by-Alnylam Product basis as follows, subject to Section 4.6:

Milestone Event	Milestone Fee
[**]	[**]
[**]	[**]
[**]	[**]

In the event one or more milestone events set out above are skipped for any reason, the payment for such skipped milestone event(s) will be due at the same time as the payment for the next achieved milestone event. The milestone payments described above shall be payable only once

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in relation to each Alnylam Royalty Product directed to a Biodefense Target that achieves First Commercial Sale in a Major Market (each, a "Successful Biodefense Product"). Therefore, unless and until there is a Successful Biodefense Product directed to a particular Biodefense Target, any of the milestone payments made by Alnylam under this Section in connection with an Alnylam Product directed to such Biodefense Target shall be fully creditable against the repeated achievement of such milestone event by any other Alnylam Product directed to such Biodefense Target. However, in the event that there is a Successful Biodefense Product directed to a Biodefense Target and Alnylam subsequently begins to Develop or continues to Develop a Follow-On Product, then, if and when any of the milestone events set out above is thereafter achieved for such Follow-On Product directed to such Biodefense Target, in addition to the milestone payment for such milestone event, there will also be due and payable all of the milestone payment(s) for any such milestones that were achieved but not paid for such Follow-On Product prior to the achievement of Approval in a Major Market of a Successful Biodefense Product with respect to such Biodefense Target.

4.5 Milestones with Respect to Alnylam Products. On an Alnylam Product-by-Alnylam Product basis, and except as otherwise set forth in Sections 4.4 and 4.6, payments will be payable by Alnylam to Tekmira based on the achievement of certain milestone events as set forth in the table below (all references are to U.S. dollars) with respect to any Alnylam Product that is Covered by a Valid Claim within the Tekmira Royalty-Bearing Patents. Alnylam will provide written notice to Tekmira of the occurrence of a milestone event within [**] Business Days, and pay the indicated milestone fee to Tekmira within [**] days, after the occurrence of the relevant event.

Capitalized terms in the chart below shall be read in context to apply to Alnylam Products; provided, however, that each milestone payment will be payable no more than once in respect of any given Alnylam Product.

Milestone Event	Milestone Fee
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

If one or more milestone events set out above are skipped for any reason, the payment for such skipped milestone event(s) will be due at the same time as the payment for the next achieved

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milestone event. The milestone payments described above shall be payable only once in relation to each Alnylam Product that achieves Regulatory Approval in a Major Market (each, a "Successful Alnylam Product"). Therefore, unless and until there is a Successful Alnylam Product directed to a particular Target, any of the milestone payments made by Alnylam under this Section in connection with an Alnylam Product directed to such Target shall be fully creditable against the repeated achievement of such milestone event by any other Alnylam Product directed to such Target. However, in the event that there is a Successful Alnylam Product directed to a Target and Alnylam subsequently begins to Develop or continues to Develop a Follow-On Product, if and when any of the milestone events set out above is thereafter achieved for such Follow-On Product directed to such Target, in addition to the milestone payment for such milestone event, there will also be due and payable all of the milestone payment(s) for any such milestones that were achieved but not paid for such Follow-On Product prior to the achievement of Regulatory Approval in a Major Market of a Successful Alnylam Product directed to such Target.

4.6 Milestones for Certain Alnylam Existing Exclusive Targets. In lieu of any milestone payments under Sections 4.4 and 4.5 with respect to all Alnylam Products that are directed to any of the Alnylam Existing Exclusive Targets, a milestone payment will be due by Alnylam to Tekmira solely for the first achievement of each of the corresponding milestone events set forth in the table below (all references are to U.S. dollars) by the applicable Alnylam Product identified below. Alnylam will provide written notice to Tekmira of the occurrence of a milestone event within [**] Business Days, and pay the indicated milestone fee to Tekmira within [**] days, after the occurrence of the relevant milestone event. For the avoidance of doubt, each milestone fee set forth below will be payable no more than once.

Milestone Event	Milestone Fee
Dosing of first patient in a Phase III Clinical Trial for ALN-TTR; provided that such ALN-TTR is Covered by a Valid Claim within the Tekmira Royalty-Bearing Patents	$5,000,000
Tekmira has [**] for clinical development of ALN-VSP in China either by (i) provision of direct Manufacturing services, including but not limited to the clinical trial drug product material and associated manufacturing and regulatory information necessary and sufficient for the initiation of a clinical trial in China or Korea, or (ii) the transfer of necessary Manufacturing process technology used to produce batch [**] of ALN-VSP for Alnylam clinical trials and sufficient to produce at least one (1) batch of ALN-VSP suitable for clinical trials in China or Korea.	$5,000,000

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In addition to the corresponding milestone fee, all expenses actually incurred by Tekmira for the activities set forth in clauses (i) and (ii) in the second milestone listed in the above table shall be paid by [**].

4.7 Royalty Term. Royalties shall be payable hereunder on a Product-by-Product and country-by-country basis commencing on the First Commercial Sale of a Product in a country and continuing during any period in which (a) in the case of Alnylam Products, a Valid Claim within the Tekmira Royalty-Bearing Patents Covers the applicable Alnylam Product in such country of sale, or (b) in the case of Tekmira Products, a Valid Claim within the Alnylam Patents Covers the applicable Tekmira Product in such country of sale (such period, as applicable, the "Royalty Term"). Upon the expiration of the Royalty Term applicable to a given Product and country, the license granted under Section 2.1(a), Section 2.1(b), Section 2.2(a) or Section 2.2(b), as applicable, shall become fully paid-up, royalty-free, non-exclusive, perpetual and irrevocable with respect to such Product in such country.

4.8 Royalties Payable by Tekmira. During the applicable Royalty Term, Tekmira shall pay running royalties on Net Sales of Tekmira Products Covered by one or more Valid Claims of any Alnylam Patent in the applicable country of sale in accordance with the applicable running royalty rates set out in the table below (all references are to U.S. dollars):

Aggregate Annual Net Sales	Royalty Rate
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

No royalties will be payable more than once by Tekmira with respect to any single unit of Tekmira Product.

4.9 Royalties on Alnylam Products. During the applicable Royalty Term, Alnylam shall pay running royalties on Net Sales of Alnylam Products Covered by one or more Valid

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Claims of the Tekmira Royalty-Bearing Patents in the applicable country of sale, as follows (all references are to U.S. dollars), whether or not such Alnylam Products are directed to Biodefense Targets, subject to Section 4.9(d):

(a) Where the Net Sales are those of, and are invoiced by, any one of the following:

(i) Alnylam or its Affiliate;

(ii) Roche;

(iii) Regulus Therapeutics under a sub-license granted by Alnylam; or

(iv) another sub-licensee under a sub-license granted by Alnylam in connection with, and solely for the purpose of, a Bona Fide Collaboration;

the applicable running royalty rates shall be as set out in the table below:

Aggregate Annual Net Sales	Royalty Rate
[**]	[**]
[**]	[**]
[**]	[**]

(b) In all other cases, the applicable running royalty rates shall be set out in the table below:

Aggregate Annual Net Sales	Royalty Rate
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

(c) No royalties will be payable more than once by Alnylam with respect to any single unit of Alnylam Product.

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(d) The royalty rate payable on Net Sales of Alnylam Products Covered by one or more Valid Claims of the Tekmira Royalty-Bearing Patents in the applicable country of sale that are directed to any of the Alnylam Existing Exclusive Targets shall be reduced by [**] of Aggregate Annual Net Sales at all tiers set forth in the tables in subsections (a) and (b) above (*e.g.*, where such a table indicates a royalty rate of [**]%, the royalty rate that would apply instead with respect to Net Sales of Alnylam Products directed to any of the Alnylam Existing Exclusive Targets shall be [**]%).

4.10 Royalty Reduction. The royalties due under Section 4.8 or 4.9 above, as applicable, may be reduced on a country-by-country basis in the Territory by the amount of royalties paid or payable with respect to Necessary Third Party IP; provided, however, that royalties due under Section 4.8 or 4.9 above, as applicable, may not be reduced by more than [**] of the royalties otherwise due (and will not in any case be reduced below [**] of the amount of royalties that would otherwise be due, *e.g.*, for Net Sales of a Tekmira Product up to and including [**], the minimum effective royalty rate would be [**]%). For purposes of illustration only, if Aggregate Annual Net Sales of a Tekmira Product are [**] and royalties due to Third Parties in respect of the sale of such product total [**] of Net Sales (or [**]), royalties due to Alnylam may be reduced only by [**] which is determined as follows: maximum reduction is [**] of the royalty due on Net Sales of [**], calculated by [**]. For the avoidance of doubt, royalties paid or payable by Alnylam pursuant to the Supplemental Agreement or the Sponsored Research Agreement shall constitute royalties paid or payable to Third Parties with respect to Necessary Third Party IP for purposes of this Section 4.10, notwithstanding any assignment or transfer of the rights to receive such payments to Tekmira or any of its Affiliates; provided, however, that royalties paid or payable pursuant to the Supplemental Agreement or the Sponsored Research Agreement on Aggregate Annual Net Sales greater than [**] of any Alnylam Product, where such royalties are paid or payable only because such Alnylam Product is Covered by a Valid Claim within the Category 1 Patents (*i.e.*, where such royalties would not be paid or payable based on other patent rights in the absence of such Category 1 Patents), shall not result in a reduction to royalties under this Agreement pursuant to this Section 4.10 of more than [**]% of such Aggregate Annual Net Sales greater than [**] in respect of any such Alnylam Product.

4.11 Third Party License Payments. Tekmira shall pay 100% of all royalties, license fees, milestones and similar payments (if any) payable to any Third Party under its existing in-licenses, if any, for the rights to Tekmira Combined Licensed Technology licensed to Alnylam under this Agreement. In addition, notwithstanding the differences between the milestones and royalties payable by Alnylam under this Agreement and the milestones and royalties that were payable under the Alnylam-Tekmira LCA, Tekmira remains solely responsible for, and agrees to pay to UBC, any and all amounts payable to UBC pursuant to the Tekmira-UBC License Agreement, including, without limitation, any and all amounts payable to UBC in connection with Alnylam's exercise of its rights under the UBC Sublicense and any and all amounts paid by Alnylam to Tekmira under this Agreement or the UBC Sublicense. Alnylam shall pay 100% of all royalties, license fees, milestones and similar payments (if any) payable to any Third Party under any Alnylam Existing In-License for the rights to Alnylam Licensed Technology licensed to Tekmira under this Agreement.

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4.12 Reports. As to each Royalty Quarter commencing with the Royalty Quarter during which the First Commercial Sale occurs with respect to a Tekmira Product, in the case of Tekmira as the reporting Party, or with respect to an Alnylam Product, in the case of Alnylam as the reporting Party, within [**] days after the end of such Royalty Quarter (if the reporting Party has not entered into an agreement with a Sublicensee) and within [**] days after the receipt by the reporting Party from a Sublicensee of such Sublicensee's report, as required by such Sublicensee's sublicense for each Royalty Quarter (if the applicable Party has entered into an agreement with a Sublicensee), each reporting Party will deliver to the other Party to this Agreement a written report showing, on a country-by-country basis, the Net Sales of Products calculated under GAAP and its royalty obligation for such quarter with respect to such Net Sales under this Agreement together with wire transfer of an amount equal to such royalty obligation. All Net Sales will be segmented in each such report according to sales by the selling Party and each of its Affiliates and Sublicensees, as well as on a product-by-product basis, including the rates of exchange used to convert Net Sales to United States Dollars from the currency in which such sales were made. For the purposes of this Agreement, the rates of exchange to be used for converting Net Sales to United States Dollars will be the simple average of the selling and buying rates of U.S. dollars published in *The Wall Street Journal East Coast Edition* for the last Business Day of the Royalty Quarter covered by the report.

4.13 Tax Withholding. Each paying Party will use all reasonable and legal efforts to reduce tax withholding with respect to payments to be made to the other Party under this Agreement. Notwithstanding such efforts, subject to Sections 4.1 and 4.2, if the paying Party concludes that tax withholdings under the laws of any country are required with respect to payments, the paying Party will make the full amount of the required payment to such other Party after any tax withholding. In any such case, the paying Party shall provide such other Party with a written explanation of such withholding and original receipts or other evidence reasonably desirable and sufficient to allow it to document such tax withholdings for purposes of claiming foreign tax credits and similar benefits.

4.14 Payments. Unless otherwise agreed by the Parties, all payments required to be made under this Agreement will be made in United States Dollars via wire transfer to an account designated in advance by the receiving Party.

4.15 Audits. At any given point in time, each Party will have on file and will require its Affiliates and Sublicensees to have on file complete and accurate records for the last [**] years of all Net Sales of Products for which it is the paying Party. The other Party to this Agreement will have the right, [**] during each twelve (12) month period, to retain at its own expense an independent qualified certified public accountant reasonably acceptable to such Party to review such records solely for accuracy and for no other purpose upon reasonable notice and under a written obligation of confidentiality, during regular business hours. If the audit demonstrates that the payments owed under this Agreement have been understated, the audited Party will pay the balance to such other Party together with interest on such amounts from the

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date on which such payment obligation accrued at a rate equal to the then current [**] United States dollar LIBOR rate plus [**] percent per annum. If the underpayment is greater than five percent of the amount owed, then the audited Party will reimburse such other Party for its reasonable out-of-pocket costs of the audit. If the audit demonstrates that the payments owed under this Agreement have been overstated, such other Party to this Agreement will credit the balance against the next payment due from the audited Party (without interest).

ARTICLE V- INTELLECTUAL PROPERTY

5.1 Category 1, 2 and 3 Patents. Subject to the terms and conditions set forth in the Exhibit A attached hereto (the "IP Management Terms"):

(a) Alnylam hereby assigns to Tekmira all of Alnylam's right, title and interest in and to the Category 1 Patents, subject to any existing rights granted by Alnylam to Third Parties under the Category 1 Patents, including but not limited to such rights granted by Alnylam to UBC and AlCana under the Supplemental Agreement and rights granted under the Alnylam Existing Sublicenses; provided, however, that such assignment shall exclude any right to enforce the Category 1 Patents with respect to any alleged infringing activities by Alnylam and/or any of its licensees that occurred prior to the Effective Date.

(b) In the event that Tekmira obtains any ownership interest in any Category 2 Patent or Category 3 Patent pursuant to the inventorship determination made under Sections 5 and 6 of the IP Management Terms, Tekmira shall and hereby does assign to Alnylam all of Tekmira's right, title and interest in and to such Category 2 Patent or Category 3 Patent, as applicable.

(c) Each Party agrees to execute such further documents and take such further actions as the other Party may reasonably request in order to give effect to the assignments contemplated under subsections (a) and (b) above.

(d) The filing, prosecution and maintenance of Category 1 Patents, Category 2 Patents and Category 3 Patents shall be governed by the applicable provisions of the IP Management Terms.

5.2 Prosecution and Maintenance of Other Patents. Subject to the IP Management Terms, Alnylam will have the sole right and responsibility, at Alnylam's discretion and at its expense, to file, prosecute and maintain patent protection in the Territory for all Patents (other than Category 2 Patents, and Category 3 Patents) within the Alnylam Licensed Technology. Tekmira will have the sole right and responsibility, at Tekmira's discretion and at its expense, to file, prosecute and maintain patent protection in the Territory for all Patents (other than Category 1 Patents) within the Tekmira Combined Licensed Technology.

5.3 Third Party Infringement of Alnylam's Patents.

(a) Each Party will promptly report in writing to the other Party during the Term any known or suspected infringement by a Third Party of any of the Alnylam Patents of which such

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Party becomes aware, as such infringement relates to Research, Development or Commercialization of Products directed at any Tekmira Target, or any Tekmira Product, and will provide the other Party with all available evidence supporting such infringement.

(b) Alnylam will have the sole and exclusive right to initiate an infringement or other appropriate suit in the Territory with respect to infringements or suspected infringements of any of the Alnylam Patents and to any and all recoveries obtained in connection therewith.

(c) Alnylam will have the sole and exclusive right to select counsel for any suit referred to in subsection 5.3(b) above initiated by it and will pay all expenses of the suit, including without limitation attorneys' fees and court costs.

5.4 Competitive Infringement of Category 1 Patents.

(a) Each Party will promptly report in writing to the other Party during the Term any known or suspected infringement by a Third Party of any of the Category 1 Patents of which such Party becomes aware. If any such infringement relates to the development, making, using, selling, offering for sale or importing of a product that is directed against an Alnylam Exclusive Target ("Competitive Infringement"), then Alnylam will have the first right to initiate an infringement or other appropriate suit in the Territory with respect to such Competitive Infringement; provided, that if Alnylam fails to initiate a suit or take other appropriate action with respect to such Competitive Infringement within [**] days after becoming aware of the basis for such suit or action, then Tekmira may, in its discretion, provide Alnylam with written notice of Tekmira's intent to initiate a suit or take other appropriate action with respect to such Competitive Infringement. If Tekmira provides such notice and Alnylam fails to initiate a suit or take such other appropriate action within [**] days after receipt of such notice from Tekmira, then Tekmira shall have the right to initiate a suit or take other appropriate action that it believes is reasonably required to protect its interests with respect to such Competitive Infringement.

(b) The Party bringing the enforcement action with respect to such Competitive Infringement shall have the right to defend against any claim arising during such action asserting that the Category 1 Patent that is subject of such Competitive Infringement is invalid or unenforceable.

(c) Regardless of which Party brings such the enforcement action with respect to such Competitive Infringement, the Party not bringing the enforcement action shall (i) provide all reasonable assistance to the Party bringing the action, at the expense of the Party bringing the action, and (ii) have the right to join and participate in such action at its own expense with its own counsel and to share equally all expenses of such suit if it so elects. If required under applicable law in order for the initiating Party to initiate and/or maintain such suit, or if the initiating Party is unable to initiate or prosecute such suit solely in its own name or it is otherwise advisable to obtain an effective legal remedy, in each case, the other Party shall, at the expense of the initiating Party, join as a party to the suit and will execute all documents necessary for the initiating Party to initiate litigation to prosecute and maintain such action.

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(d) Any damages or other recovery, whether by settlement or otherwise, from an action under this Section 5.4 to enforce the Category 1 Patent against Competitive Infringement shall first be applied *pro rata* to reimburse the Parties for the costs and expenses of litigation in such action, and [**] of any remaining amount shall be paid to or retained by the Party conducting the litigation and [**] of such remaining amount shall be paid to or retained by the other Party.

5.5 Third Party Infringement of Tekmira's Patents.

(a) Each Party will promptly report in writing to the other Party during the Term any known or suspected infringement by a Third Party of any Patents within the Tekmira Combined Licensed Technology of which such Party becomes aware, as such infringement relates to the Research, Development or Commercialization of Products directed at any Alnylam Target, or any Alnylam Product, and will provide the other Party with all available evidence supporting such infringement.

(b) Tekmira will have the sole and exclusive right to initiate an infringement or other appropriate suit in the Territory with respect to infringements or suspected infringements of any of the Patents within the Tekmira Combined Licensed Technology, and of any of the Category 1 Patents that does not constitute Competitive Infringement and to any and all recoveries obtained in connection therewith.

(c) Tekmira will have the sole and exclusive right to select counsel for any suit referred to in subsection 5.5(b) above initiated by it and will pay all expenses of the suit, including without limitation attorneys' fees and court costs.

5.6 Patent Certification. To the extent required by law or permitted by law, the Parties shall use reasonable efforts to maintain with the applicable regulatory authorities during the Term correct and complete listings of applicable Patents for Alnylam Products or Tekmira Products, as the case may be, being Commercialized, including but not limited to all so-called "Orange Book" listings required under the Hatch-Waxman Act.

ARTICLE VI- CONFIDENTIAL INFORMATION AND PUBLICITY

6.1 Non-Disclosure of Confidential Information. Each Party agrees that all Confidential Information of a Party that is disclosed by a Party to the other Party (a) will not be used by the receiving Party except in connection with the activities contemplated by this Agreement, (b) will be maintained in confidence by the receiving Party, and (c) will not be disclosed by the receiving Party to any Third Party without the prior written consent of the disclosing Party. Notwithstanding the foregoing, the receiving Party will be entitled to use and disclose Confidential Information of the disclosing Party that (i) was known by the receiving Party or its Affiliates prior to its date of disclosure by the disclosing Party to the receiving Party as demonstrated by legally admissible evidence available to the receiving Party, (ii) either before or after the date of the disclosure such Confidential Information is lawfully disclosed to the receiving Party or its Affiliates by sources other than the disclosing Party, (iii) either before or

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after the date of the disclosure by the disclosing Party or its Affiliates to the receiving Party such Confidential Information becomes published or otherwise part of the public domain through no fault, act or omission on the part of the receiving Party or its Affiliates, (iv) is independently developed by or for the receiving Party or its Affiliates without reference to or in reliance upon the Confidential Information as demonstrated by legally admissible evidence available to the receiving Party or its Affiliates, (v) is reasonably necessary to conduct clinical trials or to obtain regulatory approval of Products, or for the prosecution and maintenance of Patents, and such Patents shall include without limitation claims to the nucleic acid component of the Products, the Products as formulated with an LNP including excipients, as well as methods of use and manufacture of the foregoing, along with any other claims that are usual and customary to obtain maximum protection for a pharmaceutical, (vi) is reasonably required in order for a Party to obtain financing or conduct discussions with existing or potential Development and/or Commercialization partners so long as such Third Party recipients are bound by an obligation of confidentiality, or (vii) in the reasonable judgment of the receiving Party is required to be disclosed by the receiving Party to comply with applicable laws or regulations or legal process, including without limitation by the rules or regulations of the United States Securities and Exchange Commission or similar regulatory agency in a country other than the United States or of any stock exchange or NASDAQ, provided that the receiving Party provides prior written notice of such disclosure to the disclosing Party and takes reasonable and lawful actions to avoid or minimize the extent of such disclosure, or (viii) solely with respect to Confidential Information comprising Alnylam Know-How, Tekmira Know-How or Protiva Know-How, is otherwise reasonably necessary to disclose in connection with the Research, Development or Commercialization of Products hereunder.

Alnylam and its Affiliates shall not provide the Tekmira Manufacturing Documents or copies thereof to any Third Party, and shall not reproduce such Tekmira Manufacturing Documents in any patent application, publication or other public disclosure; provided, however, that Alnylam and its Affiliates shall be permitted to provide such Tekmira Manufacturing Documents to (1) on a need-to-know basis, Third Party contract manufacturers and other Permitted Contractors that are engaged to manufacture Alnylam Products or to provide services in connection with Development, Manufacturing or regulatory matters for Alnylam Products and/or (2) Sublicensees (who shall also be permitted to provide such Tekmira Manufacturing Documents on a need-to-know basis to Third Party contract manufacturers and other Permitted Contractors that are engaged to manufacture Alnylam Products or to provide services in connection with Development, Manufacturing or regulatory matters for Alnylam Products), in each of the foregoing clauses (1) or (2), that are subject to binding confidentiality agreements containing reasonably customary terms and conditions and, in the case of Third Party contract manufacturers and other Permitted Contractors, restricting such Third Parties from providing the Tekmira Manufacturing Documents to further Third Parties other than in accordance with clause (3) below, and/or (3) regulatory authorities to the extent reasonably necessary to obtain Regulatory Approval for, or comply with regulatory requirements applicable to the Development or Commercialization of, any Alnylam Product.

Notwithstanding anything to the contrary in this Agreement, the confidentiality and non-use obligations under this Agreement and the restrictions set forth in the immediately preceding paragraph shall not apply to Confidential Information consisting of Alnylam Know-How, Tekmira Know-How or Protiva Know-How, including such Confidential Information comprised by the Tekmira Manufacturing Documents, that is mentally retained in the unaided memories of the receiving Party's and its Affiliates' employees, consultants and advisors.

For the avoidance of doubt, information received by a Party solely as a result of the litigation settled pursuant to the Settlement Agreement shall not be governed by this Agreement and therefore shall not be subject to the exceptions set forth in the immediately preceding paragraphs permitting the use and disclosure of Confidential Information hereunder (i.e., nothing in this Agreement shall lessen any restrictions on the use and disclosure of such information imposed in such litigation proceedings).

If a Party is required by judicial or administrative process to disclose Confidential Information that is subject to the non-disclosure provisions of this Section 6.1, such Party shall promptly inform the other Party of the disclosure that is being sought in order to provide the other Party an opportunity to challenge or limit the disclosure obligations. Confidential Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Section 6.1, and the Party disclosing Confidential Information pursuant to law or court order shall take all steps reasonably practical, including without limitation seeking an order of confidentiality, to ensure the continued confidential treatment of such Confidential Information. In addition to the foregoing restrictions on public disclosure, if either Party concludes that a copy of this Agreement must be filed with the United States Securities and Exchange Commission or similar regulatory agency in a country other than the United States, such Party shall seek the maximum confidential treatment available under applicable law, provide the other Party with a copy of this Agreement showing any sections as to which the Party proposes to request confidential treatment, provide the other Party with an opportunity to comment on any such proposal and to suggest additional portions of this Agreement for confidential treatment, and take such Party's reasonable comments into consideration before filing this Agreement.

6.2 Limitation on Disclosures. Each Party agrees that it will provide Confidential Information received from the other Party solely to its employees, consultants and advisors, and the employees, consultants and advisors of its or its Affiliates or existing or potential Sublicensees, as applicable, who have a legitimate business need to know and an obligation to maintain in confidence the Confidential Information of the disclosing Party. The receiving Party is liable for any breach of the non-disclosure obligation of, as applicable, (a) its and its Affiliates' employees, consultants and advisors, (b) existing or potential Sublicensees and (c) the employees, consultants and advisors of any existing or potential Sublicensees.

6.3 Publicity.

(a) No disclosure of the existence of, or the terms of, this Agreement may be made by either Party or its Affiliates, and no Party or its Affiliates shall use the name, trademark, trade name or logo of the other Party or its employees in any publicity, news release or disclosure relating to this Agreement or its subject matter, without the prior express written permission of the other Party, except as may be required by law or as set forth in this Section 6.3. Either Party may issue press releases or otherwise make public statements or disclosures (such as in annual reports to stockholders or filings with the Securities and Exchange Commission) as it determines, based on advice of counsel, are reasonably necessary to comply with applicable laws and

regulations. In addition, following any press release(s) announcing this Agreement or any other public disclosure by the Parties, either Party shall be free to disclose, without the other Party's prior written consent, the existence of this Agreement, the identity of the other Party and those terms of the Agreement which have already been publicly disclosed in accordance herewith.

Any reference made by Alnylam in a press release to LNP technology shall include the following statement:

"About LNP Technology

Alnylam has licenses to Tekmira LNP intellectual property for use in RNAi therapeutic products."

Any reference made by Tekmira in a press release to siRNA programs shall include the following statement:

"About Alnylam RNAi Technology

Tekmira has licenses to Alnylam RNAi intellectual property for certain RNAi programs."

ARTICLE VII- INDEMNIFICATION AND INSURANCE

7.1 Tekmira Indemnification. Tekmira agrees to indemnify and hold harmless Alnylam and its Affiliates, and their respective agents, directors, officers and employees and their respective successors and permitted assigns (the "Alnylam Indemnitees") from and against any and all losses, costs, damages, fees or expenses ("Losses") incurred by an Alnylam Indemnitee arising out of or in connection with any claim, suit, demand, investigation or proceeding brought by a Third Party based on (a) any claim made against Alnylam by Third Parties regardless of the form or forum in which any such claim is made alleging (i) infringement or misappropriation of Third Party intellectual property, or (ii) personal injury, or death occurring to any person claimed to result, directly or indirectly, from the possession, use or consumption of, or treatment with, any Tekmira Product Covered by an Alnylam Patent, whether claimed by reason of breach of warranty, negligence or product defect, and (b) any breach of any representation, warranty or covenant of Tekmira in this Agreement.

The above indemnification shall not apply to the extent that any Losses are due to a breach of any of Alnylam's representations, warranties, covenants and/or obligations under this Agreement.

7.2 Alnylam Indemnification. Alnylam agrees to indemnify and hold harmless Tekmira, its Affiliates, and their respective agents, directors, officers and employees and their respective successors and permitted assigns (the "Tekmira Indemnitees") from and against any and all Losses incurred by a Tekmira Indemnitee arising out of or in connection with any claim, suit, demand, investigation or proceeding brought by a Third Party based on (a) any claim made against Tekmira by Third Parties regardless of the form or forum in which any such claim is made alleging (i) infringement or misappropriation of Third Party intellectual property, or (ii) personal injury, or death occurring to any person claimed to result, directly or indirectly, from the possession, use or consumption of, or treatment with, any Alnylam Product Covered by a Tekmira Patent, whether claimed by reason of breach of warranty, negligence or product defect, and (b) any breach of any representation, warranty or covenant of Alnylam in this Agreement.

The above indemnification shall not apply to the extent that any Losses are due to a breach of any of Tekmira's representations, warranties, covenants and/or obligations under this Agreement.

7.3 Tender of Defense; Counsel. The obligation to indemnify pursuant to this Article shall be contingent upon timely notification by the indemnitee to the indemnitor of any claims, suits or service of process; the tender by the indemnitee to the indemnitor of full control over the conduct and disposition of any claim, demand or suit; and reasonable cooperation by the indemnitee in the defense of the claim, demand or suit. No indemnitor will be bound by or liable with respect to any settlement or admission entered or made by any indemnitee without the prior written consent of the indemnitor. The indemnitee will have the right to retain its own counsel to participate in its defense in any proceeding hereunder. The indemnitee shall pay for its own counsel except to the extent it is determined that (a) one or more legal defenses may be available to it which are different from or additional to those available to the indemnitor, or (b) representation of both Parties by the same counsel would be inappropriate due to actual or potential differing interests between them. In any such case and to such extent, the indemnitor shall be responsible to pay for the reasonable costs and expenses of one separate counsel retained to participate in the defense of the indemnitee, provided that such expenses are otherwise among those covered by the indemnitor's indemnity obligations under this Article VII. Notwithstanding the foregoing, if the indemnitor reasonably believes that any of the exceptions to its obligation of indemnification of the indemnitee set forth in Sections 7.1 or 7.2 may apply, the indemnitor shall promptly notify the indemnitee, which shall then have the right to be represented in any such action or proceeding by separate counsel at the indemnitee's expense; provided, that the indemnitor shall be responsible for payment of such expenses if the indemnitee is ultimately determined to be entitled to indemnification from the indemnitor.

7.4 Tekmira Insurance. With respect to its activities under this Agreement, Tekmira will secure and maintain in full force and effect throughout the term of the licenses set out in Section 2.1 (and for at least [**] years thereafter for claims-made coverage), the following types and amounts of insurance coverage with carriers having a minimum AM Best rating of A, with per claim deductibles that do not exceed [**]:

Comprehensive General Liability and Personal Injury, including coverage for contractual liability assumed by Tekmira and coverage for Tekmira independent contractor(s), with limits of at least [**] per occurrence and a general aggregate limit of [**].

Prior to, at, and following the dosing of the first patient in a Phase I Clinical Trial of any Tekmira Product by Tekmira, its Affiliates or Sublicensees, Umbrella Liability, exclusive of the coverage provided by the policies listed above, with a limit of at least [**].

Prior to, at, and following the First Commercial Sale of any Tekmira Product by Tekmira, its Affiliates or Sublicensees, Products/Clinical/Professional Liability, exclusive of the coverage

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provided by the Comprehensive General Liability policy, with limits of at least [**] per occurrence and an aggregate limit of at least [**], with Alnylam to be named as an additional insured party with respect to each Tekmira Product under such coverage.

7.5 Alnylam Insurance. With respect to its activities under this Agreement, Alnylam will secure and maintain in full force and effect throughout the term of the licenses set out in Sections 2.2(a) and 2.2(b) (and for at least [**] years thereafter for claims-made coverage), the following types and amounts of insurance coverage with carriers having a minimum AM Best rating of A, with per claim deductibles that do not exceed [**]:

Comprehensive General Liability and Personal Injury, including coverage for contractual liability assumed by Alnylam and coverage for Alnylam independent contractor(s), with limits of at least [**] per occurrence and a general aggregate limit of [**].

Prior to, at, and following the dosing of the first patient in a Phase I Clinical Trial of any Alnylam Product by Alnylam, its Affiliates or Sublicensees, Umbrella Liability, exclusive of the coverage provided by the policies listed above, with a limit of at least [**].

Prior to, at, and following the First Commercial Sale of any Alnylam Product by Alnylam, its Affiliates or Sublicensees, Products/Clinical Liability, exclusive of the coverage provided by the Comprehensive General Liability policy, with limits of at least [**] per occurrence and an aggregate limit of at least [**], with Tekmira to be named as an additional insured party with respect to each Alnylam Product under such coverage.

ARTICLE VIII- EXPORT

8.1 General. The Parties acknowledge that the exportation from the United States of materials, products and related technical data (and the re-export from elsewhere of United States origin items) may be subject to compliance with United States export laws, including without limitation the United States Bureau of Export Administration's Export Administration Regulations, the Act and regulations of the FDA issued thereunder, and the United States Department of State's International Traffic and Arms Regulations which restrict export, re-export, and release of materials, products and their related technical data, and the direct products of such technical data. The Parties agree, under this Agreement, to comply with all applicable exports laws and to commit no act that, directly or indirectly, would violate any United States law, regulation, or treaty, or any other international treaty or agreement, relating to the export, re-export, or release of any materials, products or their related technical data to which the United States adheres or with which the United States complies.

8.2 Delays. The Parties acknowledge that they cannot be responsible for any delays attributable to export controls which are beyond the reasonable control of either Party.

8.3 Assistance. The Parties agree to provide reasonable assistance to one another in connection with each Party's efforts to fulfill its obligations under this Article VIII.

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ARTICLE IX- TERM AND TERMINATION

9.1 Term; Expiration. The term of this Agreement shall begin on the Effective Date and, unless terminated earlier as provided herein, the licenses granted under Sections 2.1(a), 2.1(b), 2.2(a), 2.2(b) and 2.2(c) of this Agreement will become fully paid-up, perpetual, non-exclusive and irrevocable at the end of the period set forth in Section 4.7, as applicable to each of such licenses. The term of this Agreement shall expire upon the expiration of the last-to-expire Royalty Term.

9.2 Material Breach.

(a) Alnylam, as the licensor under Section 2.1, will have the right to terminate the licenses granted thereunder, upon written notice to Tekmira, on a Tekmira Product-by-Tekmira Product basis in the event Tekmira materially breaches its obligations under this Agreement related to the licenses granted under Section 2.1 with respect to a particular Tekmira Product(s), or such licenses in their entirety if such breach is not specific to particular Tekmira Product(s), and Tekmira does not remedy such breach within ninety (90) days after receipt of written notice from Alnylam specifically identifying the breach and stating that Alnylam intends to terminate such licenses if Tekmira fails to remedy the breach within the ninety (90)-day time period; provided, however, that if Tekmira disputes in good faith that the claimed breach exists, such 90-day period will not start to run until such dispute has been resolved or can no longer be maintained in good faith.

(b) Tekmira, as the licensor under Section 2.2, will have the right to terminate the licenses granted thereunder, upon written notice to Alnylam, on an Alnylam Product-by-Alnylam Product or technology-by-technology basis in the event Alnylam materially breaches its obligations under this Agreement related to the licenses granted under Section 2.2 with respect to a particular Alnylam Product(s) or technology(-ies), or such licenses in their entirety if such breach is not specific to particular Alnylam Product(s) or technology(-ies), and does not remedy such breach within ninety (90) after receipt of written notice from Tekmira specifically identifying the breach and stating that Tekmira intends to terminate such licenses if Alnylam fails to remedy the breach within the ninety (90) time period; provided, however, that if Alnylam disputes in good faith that the claimed breach exists, such 90-day period will not start to run until such dispute has been resolved or can no longer be maintained in good faith.

9.3 Challenges of Alnylam's Patents. In the event that Tekmira or any of its Affiliates shall (a) commence or participate in any action or proceeding (including, without limitation, any patent opposition or re-examination proceeding), or otherwise assert in writing any claim, challenging or denying the validity of any of the Alnylam Patents or any claim thereof or (b) actively assist any other Person in bringing or prosecuting any action or proceeding (including, without limitation, any patent opposition or re-examination proceeding) challenging or denying the validity of the Alnylam Patents or any claim thereof, Alnylam will have the right to give notice to Tekmira (which notice must be given, if at all, within sixty (60) after Alnylam first learns of the foregoing) that the licenses granted by Alnylam to such Patent will terminate in thirty (30) following such notice, and, unless Tekmira withdraws or causes to be withdrawn all such challenge(s) within such thirty-day period, such licenses will so terminate.

9.4 Challenges of Tekmira Patents. In the event that Alnylam or any of its Affiliates shall (a) commence or participate in any action or proceeding (including, without limitation, any patent opposition or re-examination proceeding), or otherwise assert in writing any claim, challenging or denying the validity of any of the Category 1 Patents or Patents within the Tekmira Combined Licensed Technology, or any claim thereof or (b) actively assist any other Person in bringing or prosecuting any action or proceeding (including, without limitation, any patent opposition or re-examination proceeding) challenging or denying the validity of any of the Category 1 Patents or Patents within the Tekmira Combined Licensed Technology, or any claim thereof, Tekmira will have the right to give notice to Alnylam (which notice must be given, if at all, within sixty (60) after Tekmira first learns of the foregoing) that Alnylam's license under such Patent will terminate in thirty (30) following such notice, and, unless Alnylam withdraws or causes to be withdrawn all such challenge(s) within such thirty-day period, such licenses will so terminate.

9.5 Consequences of Termination; Survival.

(a) In the event of termination by Alnylam under Section 9.2(a) above, all licenses and rights granted by Alnylam to Tekmira under Section 2.1 of this Agreement will terminate with respect to the particular Tekmira Product(s), or in their entirety, as provided in Section 9.2(a); provided, however, that to the extent such licenses and rights are required in respect of clinical trials that are ongoing and cannot reasonably be terminated promptly due to health or safety reasons or the requirements of applicable law, such licenses and rights will continue in effect until such clinical trials are properly terminated; provided, further, that any license that has become fully paid-up and perpetual pursuant to Section 9.1 shall survive.

(b) In the event of termination by Tekmira under Section 9.2(b) above, all licenses and rights granted by Tekmira to Alnylam under Section 2.2 of this Agreement will terminate with respect to the particular Alnylam Product(s) and/or technology(-ies), or in their entirety, as provided in Section 9.2(b); provided, however, that to the extent such licenses and rights are required in respect of clinical trials that are ongoing and cannot reasonably be terminated promptly due to health or safety reasons or the requirements of applicable law, such licenses and rights will continue in effect until such clinical trials are properly terminated; provided, further, that any license that has become fully paid-up and perpetual pursuant to Section 9.1 shall survive.

(c) Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing prior to such expiration or termination. Any expiration or termination of this Agreement shall be without prejudice to the rights of either Party against the other accrued or accruing under this Agreement prior to expiration or termination, including without limitation the obligation to pay royalties for Products sold prior to such expiration or termination. The provisions of Sections 6.1, 6.2 and 6.3(a) shall survive the expiration or termination of this Agreement for a period of five (5) years. In addition, the provisions of Sections 2.2(c) (to the extent the license in such section extends outside of Alnylam Products in the Alnylam Field), 2.2(d), 2.4, 2.6, 2.7, 4.7, 4.11, 4.12, 4.13, 4.14, 4.15, 5.1(d), 5.4, Article VII, 9.1, 9.5, 9.6, 10.1(d), 10.2, 10.4, 10.6, 10.8 and 10.16, and any license that has become fully paid-up and perpetual pursuant to Section 9.1, shall survive any expiration or termination of this Agreement.

9.6 Licenses upon Termination.

(a) Upon any termination of this Agreement, Alnylam shall enter into an agreement containing substantially the same provisions as this Agreement with any Sublicensees of Tekmira existing at the time of such termination, covering the Tekmira Products that had been licensed to such Sublicensee by Tekmira in compliance with this Agreement, provided that at the time of any termination of this Agreement, such Sublicensees are in full compliance with the terms and conditions of the sublicense agreement. Alnylam acknowledges that such Sublicensees of Tekmira that are then in full compliance with the terms and conditions of their respective sublicense agreement are third party beneficiaries of this Agreement, including this Section 9.6(a).

(b) Upon any termination of this Agreement, Tekmira shall enter into an agreement containing substantially the same provisions as this Agreement with any Sublicensees of Alnylam existing at the time of such termination, covering the Alnylam Products that had been licensed to such Sublicensee by Alnylam in compliance with this Agreement, provided that at the time of any termination of this Agreement, such Sublicensees are in full compliance with the terms and conditions of the sublicense agreement. Tekmira acknowledges that such Sublicensees of Alnylam that are then in full compliance with the terms and conditions of their respective sublicense agreement are third party beneficiaries of this Agreement, including this Section 9.6(b).

ARTICLE X- MISCELLANEOUS

10.1 Representations and Warranties.

(a) Mutual Representations and Warranties by Tekmira and Alnylam.

(i) Each Party hereby represents and warrants to the other Party as of the Effective Date:

(a) It is duly organized and validly existing under the laws of the jurisdiction of its incorporation or formation, and has all necessary power and authority to conduct its business in the manner in which it is currently being conducted, to own and use its assets in the manner in which its assets are currently owned and used, and to enter into and perform its obligations under this Agreement.

(b) The execution, delivery and performance of this Agreement has been duly authorized by all necessary action on the part of such Party and its Board of Directors and no consent, approval, order or authorization of, or registration, declaration or filing with any Third Party or governmental authority is necessary for the execution, delivery or performance of this Agreement.

(c) This Agreement constitutes the legal, valid and binding obligation of such Party, enforceable against it in accordance with its terms, subject to (A) laws of general application relating to bankruptcy, insolvency and the relief of debtors, and (B) rules of law governing specific performance, injunctive relief and other equitable remedies.

(d) It has never approved or commenced any proceeding, or made any election contemplating, the winding up or cessation of its business or affairs or the assignment of material assets for the benefit of creditors. To such Party's knowledge, no such proceeding is pending or threatened.

(ii) Each Party acknowledges and agrees that the other Party has not made any representation or warranty that it has or can provide all the rights that are necessary or useful to Research, Develop or Commercialize a Product.

(iii) Each Party represents and warrants to the other Party that as of the Effective Date it has the right to grant to such other Party, its Affiliates and Sublicensees the licenses granted hereunder and has not granted any conflicting rights to any other Person. Each Party shall maintain any applicable in-licenses in effect and shall not amend any such in-licenses in a manner that is detrimental to the rights of the other Party under this Agreement without the prior written consent of such other Party.

(b) Alnylam Representations and Warranties. Alnylam hereby represents and warrants to Tekmira that:

(i) to Alnylam's knowledge, the conception, development and reduction to practice of the Alnylam Licensed Technology licensed to Tekmira under this Agreement did not constitute or involve the misappropriation of trade secrets or other rights or property of any Person;

(ii) it has not assigned, transferred, conveyed or otherwise encumbered its right, title and interest in the Alnylam Licensed Technology in a manner that conflicts with any rights granted to Tekmira hereunder.

(c) Tekmira Representations and Warranties. Tekmira hereby represents and warrants to Tekmira that:

(i) to Tekmira's knowledge, the conception, development and reduction to practice of the Tekmira Combined Licensed Technology licensed to Alnylam under this Agreement did not constitute or involve the misappropriation of trade secrets or other rights or property of any Person; and

(ii) it has not assigned, transferred, conveyed or otherwise encumbered its right, title and interest in the Tekmira Combined Licensed Technology in a manner that conflicts with any rights granted to Alnylam hereunder.

(d) Warranty Disclaimer. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION OR EXTENDS ANY WARRANTY OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, TO THE OTHER PARTY WITH RESPECT TO ANY INTELLECTUAL PROPERTY, PRODUCTS, GOODS, RIGHTS OR OTHER SUBJECT MATTER OF THIS AGREEMENT AND HEREBY DISCLAIMS ALL IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND

NONINFRINGEMENT OR VALIDITY OF PATENT RIGHTS WITH RESPECT TO ANY AND ALL OF THE FOREGOING. EACH PARTY HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY THAT THE DEVELOPMENT, MANUFACTURE OR COMMERCIALIZATION OF ANY PRODUCT PURSUANT TO THIS AGREEMENT WILL BE SUCCESSFUL OR THAT ANY PARTICULAR SALES LEVEL WITH RESPECT TO ANY SUCH PRODUCT WILL BE ACHIEVED.

10.2 Dispute Resolution; Arbitration Procedures. The Parties agree that any disputes that arise under this Agreement between them during the period starting on the Effective Date and ending on the third anniversary of the Effective Date, including without limitation, claims relating to the enforcement of this Agreement, shall be resolved by binding arbitration conducted in accordance with the Commercial Arbitration Rules and Supplementary Procedures for Large Complex Disputes of the American Arbitration Association ("AAA"). The arbitration shall be conducted by a panel of three persons experienced in large commercial disputes who are independent of the arbitrating Parties and neutral with respect to the dispute presented for arbitration. Within [**] days after initiation of arbitration, each arbitrating Party shall select one person to act as an arbitrator and the Party-selected arbitrators shall select an additional arbitrator within [**] days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree on the third arbitrator, the additional arbitrator shall be appointed by the AAA. The place of the arbitration shall be in Chicago, Illinois, USA, and all proceedings and communications shall be in English. Except to the extent necessary to confirm an award or as may be required by law, neither a Party nor an arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both Parties.

10.3 Force Majeure. No failure or omission by the Parties in the performance of any obligation of this Agreement will be deemed a breach of this Agreement or create any liability if the same will arise from any cause or causes beyond the control of the Parties, including, but not limited to, the following: acts of God; acts or omissions of any government; any rules, regulations or orders issued by any governmental authority or by any officer, department, agency or instrumentality thereof; fire; flood; storm; earthquake; accident; war; rebellion; insurrection; riot; and invasion. The affected Party shall notify the other Party of such force majeure circumstances as soon as reasonably practical, and shall promptly undertake all reasonable efforts necessary to cure such force majeure circumstances.

10.4 Consequential Damages. NEITHER PARTY (INCLUDING ITS AFFILIATES AND SUBLICENSEES) SHALL BE LIABLE UNDER THIS AGREEMENT FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR FOR LOSS OF PROFIT OR LOST REVENUE, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 10.4 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OF A PARTY OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF CONFIDENTIALITY OBLIGATIONS IN ARTICLE VI.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

10.5 Assignment.

(a) This Agreement, and any of its rights and obligations, may not be assigned or otherwise transferred by either Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, delayed or conditioned; provided, however, that either Party may assign this entire Agreement, without the consent of the other Party, in connection with such Party's merger, consolidation or transfer or sale of all or substantially all of the assets of such Party; and provided further that the successor, surviving entity, purchaser of assets, or transferee, as applicable, expressly assumes in writing such Party's obligations under this Agreement, if any.

(b) Any purported transfer or assignment in contravention of this Section 10.5 shall, at the option of the non-assigning Party, be null and void and of no effect.

(c) This Agreement shall be binding upon and inure to the benefit of the Parties and their permitted successors and assigns.

10.6 Notices.

Notices to Alnylam will be addressed to:

Alnylam Pharmaceuticals, Inc.
300 Third Street
Cambridge, Massachusetts 02142
U.S.A.
Attention: Senior Vice President, Chief Business Officer
Facsimile No.: (617) 812-0353

With copy to:

WilmerHale LLP
60 State Street
Boston, Massachusetts 02109
Attention: Steven D. Singer, Esq.
Steven D. Barrett, Esq.
Facsimile No.: (617) 526-5000

Notices to Tekmira will be addressed to:

Tekmira Pharmaceuticals Corporation
100-8900 Glenlyon Parkway
Burnaby, B.C.
Canada V5J 5J8
Attention: President & CEO
Facsimile No.: (604) 630-5103

With copy to:

Orrick, Herrington & Sutcliffe LLP
1000 Marsh Road
Menlo Park, CA 94025-1015
Attention: Elizabeth A. Howard
R. King Milling
Facsimile No.: (650) 614-7401

Either Party may change its address by giving notice to the other Party in the manner provided in this Section 10.6. Any notice required or provided for by the terms of this Agreement will be in writing and will be (a) sent by certified mail, return receipt requested, postage prepaid, (b) sent via a reputable international express courier service, or (c) sent by facsimile transmission, with a copy by regular mail. The effective date of the notice will be the actual date of receipt by the receiving Party.

10.7 Independent Contractors. It is understood and agreed that the relationship between the Parties is that of independent contractors and that nothing in this Agreement will be construed as authorization for either Party to act as the agent for the other Party.

10.8 Governing Law; Jurisdiction. This Agreement will be governed and interpreted in accordance with the substantive laws of the State of Delaware, U.S.A., notwithstanding the provisions governing conflict of laws under such law of the State of Delaware to the contrary, provided that (a) matters of intellectual property law, if any, will be determined in accordance with the national intellectual property laws relevant to the intellectual property in question, and (b) the application of the 1980 United Nations Convention on Contracts for the International Sale of Goods is expressly excluded from this Agreement.

10.9 Severability. In the event that any provision of this Agreement is held by a court of competent jurisdiction to be unenforceable because it is invalid or in conflict with any law of the relevant jurisdiction, the validity of the remaining provisions will not be affected and the rights and obligations of the Parties will be construed and enforced as if the Agreement did not contain the particular provisions held to be unenforceable, provided that the Parties will negotiate in good faith a modification of this Agreement with a view to revising this Agreement in a manner which reflects, as closely as is reasonably practicable, the commercial terms of this Agreement as originally signed.

10.10 No Implied Waivers. The waiver by either Party of a breach or default of any provision of this Agreement by the other Party will not be construed as a waiver of any succeeding breach of the same or any other provision, nor will any delay or omission on the part of either Party to exercise or avail itself of any right, power or privilege that it has or may have hereunder operate as a waiver of any right, power or privilege by such Party.

10.11 Headings. The headings of articles and sections contained this Agreement are intended solely for convenience and ease of reference and do not constitute any part of this Agreement, or have any effect on its interpretation or construction.

10.12 Entire Agreement. This Agreement constitutes the entire agreement between the Parties with respect to its subject matter and supersedes all previous written or oral representations, agreements and understandings between the Parties including, without limitation, the Prior Cross-License Agreements and the Manufacturing Agreements, but

excluding the Settlement Agreement, the Supplemental Agreement (subject to Section 2.4) and the UBC Sublicense. The Parties specifically agree that the corresponding provisions of this Agreement shall supersede in their entirety any surviving provisions of the Prior Cross-License Agreements. This Agreement (including the attachments hereto) may be amended only by a writing signed by both Parties.

10.13 Waiver of Rule of Construction. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, the rule of construction that any ambiguity in this Agreement shall be construed against the drafting Party shall not apply.

10.14 No Third Party Beneficiaries. Except as expressly contemplated herein, no Third Party, including any employee of any Party to this Agreement, shall have or acquire any rights by reason of this Agreement.

10.15 Further Assurances. Each Party will provide such further documents or instruments required by the other Party as may be reasonably necessary or desirable to give effect to the purpose of this Agreement and carry out its provisions.

10.16 Performance by Affiliates. Either Party may use one or more of its Affiliates to perform its obligations and duties hereunder and Affiliates of a Party are expressly granted certain rights herein; provided that each such Affiliate shall be bound by the corresponding obligations of such Party and the relevant Party shall remain liable hereunder for the prompt payment and performance of all their respective obligations hereunder.

10.17 Counterparts. This Agreement may be executed in any number of counterparts, each of which will be deemed an original, and all of which together will constitute one and the same instrument.

[*Signature Page Follows*]

IN WITNESS WHEREOF, Alnylam, Tekmira and Protiva have set their hands to this Cross-License Agreement as of the date first written above.

ALNYLAM PHARMACEUTICALS, INC.

By: /s/ Barry Greene
Name: Barry Greene
Title: President and Chief Operating Officer

TEKMIRA PHARMACEUTICALS CORPORATION

By: /s/ Mark J. Murray
Name: Mark J. Murray
Title: President & CEO

PROTIVA BIOTHERAPEUTICS INC.
solely with respect to Section 10.12

By: /s/ Mark J. Murray
Name: Mark J. Murray
Title: President & CEO

EXHIBIT A - IP MANAGEMENT TERMS

Management of Category 1, 2, and 3 Patents

1. The Category 1 Patents shall be assigned to Tekmira pursuant to Section 5.1(a) of this Agreement. Within [**] days of the Effective Date, representative(s) of each Party shall meet in the offices of Blank Rome in NY, NY to coordinate the transition of prosecution control from Alnylam to Tekmira. Within [**] business days of the Effective Date, Alnylam will determine which priority applications, in whole or in part, within the [**] family will be assigned to Tekmira and shall record such assignments with the U.S. Patent and Trademark Office. For clarity, all priority applications, in whole or in part, to which [**] family members that have been assigned to Tekmira are entitled, or are necessary to effect a valid priority claim shall be assigned to Tekmira according to the procedure set forth above.

2. The Category 2 Patents and the Category 3 Patents shall be owned by Alnylam. If Tekmira obtains any ownership interest in any Category 2 Patents or any Category 3 Patents as a result of any inventorship determination pursuant to this Agreement, Tekmira shall assign such interest to Alnylam as set forth in Section 5.1(b) of this Agreement.

3. If it is determined that a novel lipid, or novel lipid formulation is disclosed for the first time in a Category 2 Patent application or a Category 3 Patent application, then a divisional or continuation will be filed to isolate this subject matter. The division or continuation will be assigned to Tekmira, and for the purposes of this Agreement will be treated as Category 1 IP.

4. Prosecution and Maintenance of Category 1 Patents.

a. Within [**] days following the Effective Date, each Party shall provide to the other Party the name of the person responsible for prosecution and maintenance of Category 1 Patents within such Party’s company.

b. The Parties agree that current outside US counsel utilized by Alnylam prior to the Effective Date shall continue to handle US prosecution and coordinate rest of world prosecution of Category 1 Patents for a period of at least [**] month from the Effective Date. For [**].

c. If the outside counsel identified in 3.b above are not acceptable to Tekmira due to a bona fide conflict of interest, the Parties shall agree on mutually acceptable outside counsel and the cost of transferring such cases shall be divided equally between Alnylam and Tekmira. If after [**] months from the effective date Tekmira wishes to transfer any of the above cases to an outside firm of their choosing and is such firm is acceptable to Alnylam, Tekmira shall be free to do so but the cost of transferring such cases shall be borne by Tekmira 100%.

d. If the Parties cannot agree on choice of outside counsel, each Party shall provide the names of three (3) law firms they find acceptable, excluding those firms the other Party found unacceptable, to the third party arbitrator as provided below and agree to abide by the decision of the arbitrator.

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

e. Starting on the Effective Date Tekmira shall control prosecution with input and agreement from Alnylam and shall diligently prosecute the Category 1 Patents claims in the broadest reasonable manner possible. Alnylam shall be copied on any correspondence with the respective patent offices related to the prosecution of the Category 1 Patents, and Tekmira shall consult Alnylam prior to any proposed filing, response or claim additions, deletions or amendments with sufficient time to allow for review, comment and agreement by Alnylam.

f. Alnylam shall be consulted and must agree on any inventorship determinations or any changes to inventorship prior to filing such changes with any patent office. In the event, however, that there is a disagreement between the Parties as to inventorship determinations, the Parties agree that they will be bound by the inventorship determinations made pursuant to the procedure outlined in paragraph 4.k below.

g. Except as otherwise set forth in 3.c above or 3.h below, prosecution and maintenance costs shall be divided equally between Alnylam and Tekmira for Category 1 Patents.

h. If for whatever reason Tekmira wishes to abandon an application for or cease to maintain any Category 1 Patents in a jurisdiction, Tekmira will provide Alnylam with [**] days advance notice and, if Alnylam wishes to maintain such application or patent, it will be at Alnylam's expense and such application or patent shall be assigned back to Alnylam, and Tekmira shall have no further rights in such application or patent and such application or patent shall cease to constitute Category 1 Patents.

i. Tekmira shall not have the right to utilize, refer to, incorporate or any way use to support claims, any subject matter that is explicitly disclosed in a patent application to which any of the Category 1 Patents claims priority that is also not explicitly disclosed in the Category 1 IP application in question or that is also not explicitly disclosed in other Tekmira owned or controlled patents or patent applications having an earlier filing date than the Category 1 Patent priority application containing such subject matter. For clarity, subject matter that is incorporated by reference or incorporated by virtue of a priority claim in the Category 1 Patents in question shall not in any way be used by Tekmira unless that subject matter is also explicitly disclosed in the Category 1 Patent in question or was explicitly disclosed in other Tekmira owned or controlled patent or patent applications having an earlier filing date than the Category 1 Patent or Category 1 Patent priority application in question.

j. Alnylam shall not have the right in any patent or patent application that it owns or controls, to utilize, refer to, incorporate or any way use to support claims in such patent or patent application, any subject matter that was explicitly disclosed in any of the Category 1 Patents by virtue of having a common priority document with any of the Category 1 Patents, unless it was explicitly disclosed in such Alnylam owned or controlled patent or patent application .

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k. In the event there is a disagreement between the Parties on any prosecution matter (including new patent application filings, claims, claim amendments, deletions or additions), or any inventorship determination or correction they agree to utilize the dispute resolution mechanism as set forth in paragraph 7 below.

5. Prosecution and Maintenance of Category 2 Patents.

a. Prosecution and maintenance of Category 2 Patents shall be controlled by Alnylam and as to Category 2 Patents Alnylam shall have sole discretion in any decisions regarding patent prosecution and all prosecution and maintenance costs shall be borne by Alnylam.

b. Within [**] days of Tekmira providing the names of Tekmira inventors to be added to patent application [**] in Alnylam patent family [**] Alnylam shall add such inventors by filing with the US Patent and Trademark Office a corresponding correction, and the added inventors shall assign their rights in this application to Alnylam upon their addition to the application. Alnylam will similarly correct the inventorship in related US and foreign applications or patents where a claim or claims of similar scope exist.

c. Within [**] days of the Effective Date an inventorship determination shall be performed on all Category 2 Patents at Alnylam's expense.

d. If it is determined that Tekmira inventors should be added any application(s) or patent(s), Alnylam shall add such inventors by filing with the respective patent office a corresponding correction, and the added inventors shall assign their rights in this application to Alnylam upon their addition to the application.

e. If Tekmira disagrees with the above inventorship determination the Parties agree to utilize the dispute resolution mechanism as set forth in paragraph 7 below.

f. Tekmira shall be provided [**] days advance notice on any material claim amendments, additions or deletions in any Category 2 Patents that utilize or relate to disputed subject matter or if it decides to abandon any patent or patent application.

g. Tekmira shall be copied on all correspondence with the respective patent offices related to the prosecution of Category 2 Patents for which an inventorship determination referenced above results in the addition of a Tekmira inventor.

6. Prosecution and Maintenance of Category 3 Patents.

a. Prosecution and maintenance of Category 3 Patents shall be controlled by Alnylam and as to Category 3 Patents Alnylam shall have sole discretion in any decisions regarding patent prosecution and all prosecution and maintenance costs shall be borne by Alnylam.

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b. Upon claim allowance an independent inventorship determination shall be made by Alnylam at its cost and inventorship shall be corrected if warranted. If Tekmira inventors are added to any applications, such inventors shall assign their rights to such patent applications to Alnylam.

c. In the event that Tekmira wishes to determine inventorship for any claim prior to allowance it may do so at its expense. If as a result of such determination Tekmira inventors are added to any applications, such inventors shall assign their rights to such patent applications to Alnylam

d. If Tekmira disagrees with the above inventorship determination, the Parties agree to utilize the dispute resolution mechanism as set forth in paragraph 7 below.

e. Tekmira shall be provided [**] days advance notice on any material claim amendments, additions or deletions in any Category 3 Patents that utilize or relate to disputed subject matter or if it decides to abandon any patent or patent application.

f. In addition to 6e above, Tekmira shall be copied on all correspondence with the respective patent offices related to the prosecution of such Tekmira Category 3 Patents for which an inventorship determination referenced above results in the addition of a Tekmira inventor.

7. Dispute Resolution Mechanism.

a. A third party gatekeeper/arbiter shall be identified along with a simple, speedy dispute resolution mechanism in the event of any disagreement among the Parties regarding the matters set forth in this Exhibit A.

b. The arbiter shall be mutually agreed to by the Parties. When a dispute arises among the Parties, the arbiter shall consider in good faith the position(s) of each Party in the dispute which the Parties shall have [**] business days to submit to such arbiter. The arbiter shall render his/her decision in an unbiased manner in accordance with the patent laws of the jurisdiction of the patent application as to which such disagreement pertains within [**] business days of receiving all relevant documentation from the Parties and, at the arbiter's discretion, discussion with the Parties; provided, however, that the arbiter shall hold no ex parte meetings or substantive conversations with a Party without the consent of the other Party.

c. In the event that the arbiter is no longer willing or capable of serving in this function a replacement shall be selected or if the Parties cannot agree to a replacement arbiter, one will be selected as follows:

i. Each of the Parties shall nominate five (5) potential arbiters and any potential arbiter appearing on both Parties' lists shall be the arbiter and the Parties shall attempt in good faith to secure such arbiter's services. In the event that there is more than one (1) arbiter that appears on both such lists, the Parties shall agree in good faith which arbiter to approach first. In the event that there are no arbiters in common, the Parties shall repeat the process until an arbiter appears on both such lists or until the Parties can otherwise agree on an arbiter.

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d. The costs of the arbiter shall be divided equally between the Parties.

8. Cooperation.

a. The Parties hereby agree as to Category 1 Patents, Category 2 Patents, Category 3 Patents:

i. to make its employees, agents and consultants reasonably available to the other Party (or the other Party's authorized attorneys, agents or representatives), to the extent reasonably necessary to enable such Party to undertake patent prosecution as contemplated by this Exhibit A;

ii. to cooperate, if necessary and appropriate, with the other Party in gaining patent term extensions wherever applicable to patent rights;

iii. to endeavor in good faith to coordinate its efforts wherever possible or reasonable with the other Party to minimize or avoid interference with the prosecution and maintenance of the other Party's patent applications;

iv. in the event one Party receives an obviousness-type double patenting rejection in an application such Party controls over an application controlled by the other Party, the Parties will enter into good faith discussions to take steps necessary to allow both sets of claims to issue, such steps potentially including assigning an ownership interest in the patent application in question to the other party so that common ownership is established allowing for the filing of a terminal disclaimer. In the event that such common ownership is established the Party receiving the ownership interest will license all of its rights back in such application to the other Party; and

v. Unless otherwise explicitly provided in this Agreement the Parties shall have rights with respect to the enforcement of Category 1 Patents, Category 2 Patents, Category 3 Patents according to their respective ownership interests in such patent rights as provided under applicable law.

9. For the avoidance of doubt, the Parties agree that, despite Tekmira's prior identification of the following patent families as being subject to an inventorship challenge by Tekmira, Tekmira does not challenge Alnylam's inventorship or sole ownership of the following patent families: [**].

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 1.9 - ALNYLAM EXISTING IN-LICENSES

1. Co-Exclusive License Agreement between Max Planck Innovation GmbH (formerly Garching Innovation GmbH) and Alnylam Pharmaceuticals, Inc., dated December 20, 2002, as amended by Amendment dated July 2, 2003, the Requirements Amendment effective June 15, 2005, the Waiver Amendment effective August 9, 2007 and the Amendment to the Alnylam Co-Exclusive License Agreement dated as of March 14, 2011, by and between Alnylam Pharmaceuticals, Inc., on the one hand, and Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology and Max-Planck-Innovation GmbH, on the other hand; and Co-Exclusive License Agreement between Max Planck Innovation GmbH (formerly Garching Innovation GmbH) and Alnylam Europe AG (formerly Ribopharma AG), dated July 30, 2003

SCHEDULE 1.10 - ALNYLAM EXISTING SUBLICENSES

1. InterfeRx Option Agreement between AlCana Technologies, Inc., and Alnylam Pharmaceuticals, Inc., dated December 9, 2009
2. License and Collaboration Agreement between Alnylam Pharmaceuticals, Inc. and Ascletis Pharmaceuticals (Hangzhou) Co., Ltd., dated June 29, 2012
3. License and Collaboration Agreement between Alnylam Pharmaceuticals, Inc. and Genzyme Corporation, dated October 18, 2012
4. License and Collaboration Agreement between Monsanto Company and Alnylam Pharmaceuticals, Inc., dated August 27, 2012
5. Research Collaboration and License Agreement between Novartis Institutes for BioMedical Research, Inc. and Alnylam Pharmaceuticals, Inc., dated October 12, 2005, as amended by letter amendment dated May 1, 2011
6. Amended and Restated License and Collaboration Agreement among Alnylam Pharmaceuticals, Inc., Isis Pharmaceuticals, Inc., and Regulus Therapeutics Inc. (formerly Regulus Therapeutics LLC), dated January 1, 2009, as amended by amendments dated June 10, 2010 and October 25, 2011
7. License and Collaboration Agreement among F. Hoffmann-La Roche Ltd, Hoffman-La Roche Inc., and Alnylam Pharmaceuticals, Inc., dated July 8, 2007, as amended by letter amendment dated May 29, 2008 (assigned to Arrowhead Research Corporation in October 2011)
8. Collaboration Agreement among Alnylam Pharmaceuticals, Inc., F. Hoffmann-La Roche Ltd., and Hoffman-La Roche Inc., dated October 29, 2009 (assigned to Arrowhead Research Corporation in October 2011)
9. License and Collaboration Agreement between Takeda Pharmaceutical Company Limited and Alnylam Pharmaceuticals, Inc., dated May 27, 2008, as supplemented or amended by letter agreements dated August 18, 2009 and March 16, 2011
10. Supplemental Agreement among Alnylam Pharmaceuticals, Inc., Tekmira Pharmaceuticals Corporation, Protiva Biotherapeutics Inc., the University of British Columbia, and AlCana Technologies, Inc., dated July 27, 2009

SCHEDULE 1.15 – CERTAIN ALNYLAM PATENTS

Case Number	Country Name	Case Type	Application Status	Application Number	Filing Date	Patent Number	Issue Date
[**]							

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 1.19 - CERTAIN BIODEFENSE TARGETS

Category A Pathogens:

BACTERIA:

[**]

VIRUSES:

[**]

Category B Pathogens:

BACTERIA:

[**]

VIRUSES:

[**]

Category C Pathogens

BACTERIA:

[**]

VIRUSES:

[**]

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 1.22 - CATEGORY 1 PATENTS

Case Number	Country Name	Law Firm	Case Type	Application Status	Application Number	Filing Date	Patent Number	Issue Date
[**]								

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 1.23 - CATEGORY 2 PATENTS

Case Number	Country Name	Law Firm	Case Type	Application Status	Application Number	Filing Date	Patent Number	Issue Date
[**]								

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 1.24 - CATEGORY 3 PATENTS

Case Number	Country Name	Law Firm	Case Type	Application Status	Application Number	Filing Date	Patent Number	Issue Date
[**]								

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SCHEDULE 1.70 - TEKMIRA MANUFACTURING DOCUMENTS

Tekmira Manufacturing Documents are limited to the following documents provided to Alnylam by Tekmira:

1. Batch records or master batch records for [**]

2. The following technical protocols and reports: [**]

3. Specifications for raw materials, components and final products for [**]

4. The following technical presentations: [**]

6. Production Plans for [**]

7. Technical transfer plans for [**]

8. [**]

9. Minutes of Production Meeting telecons [**]

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 4.28 as filed with 20-F

Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as [**]. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

Exhibit 4.28

EXECUTION COPY

LICENSE AGREEMENT

By and Between

PROTIVA BIOTHERAPEUTICS INC.

And

MARINA BIOTECH, Inc.

TABLE OF CONTENTS

LICENSE AGREEMENT

This LICENSE AGREEMENT ("**Agreement**") is made as of this 28th day of November, 2012 ("**Effective Date**"), by and between **PROTIVA BIOTHERAPEUTICS INC.**, a British Columbia corporation ("**PROTIVA**"), and **MARINA BIOTECH, INC.**, a Delaware corporation ("**MARINA**"). PROTIVA and MARINA are each referred to individually as a "**Party**" and together as the "**Parties**."

RECITALS

WHEREAS, MARINA has developed a proprietary platform for creating novel oligonucleotide therapeutics and owns or Controls (as defined below) certain intellectual property relating thereto; and

WHEREAS, PROTIVA wishes to obtain, and MARINA wishes to grant, a license to such intellectual property on the terms and conditions set forth herein;

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, the Parties agree as follows.

Article 1 DEFINITIONS AND INTERPRETATION

1.1 Definitions.

Unless the context otherwise requires, the terms in this Agreement with initial letters capitalized, shall have the meanings set forth below, or the meaning as designated in the indicated places throughout this Agreement.

(a) "**Affiliate**" means, with respect to a Person, any other Person that controls, is controlled by, or is under common control with that Person. For the purpose of this definition, "control" shall mean direct or indirect ownership of fifty percent (50%) or more of the shares of stock entitled to vote for the election of directors, in the case of a corporation, or fifty percent (50%) or more of the equity interest in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby the entity or person controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity, or the ability to cause the direction of the management or policies of a corporation or other entity. In the case of entities organized under the laws of certain countries, the maximum percentage ownership permitted by law for a foreign investor may be less than fifty percent (50%), and in such case such lower percentage shall be substituted in the preceding sentence, *provided*, that such foreign investor has the power to direct the management and policies of such entity.

(b) "**Agreement**" shall have the meaning set forth in the preamble.

(c) "**Applicable Law**" means all applicable laws, rules, ordinances, and regulations, including any rules, regulations, guidelines or other requirements of relevant government agencies, that may be in effect from time to time in the applicable country or jurisdiction, applicable to the specific activities being undertaken pursuant to this Agreement.

(d) "**Business Day**" means any day that is not a Saturday, a Sunday, or other day which is a statutory holiday in the Province of British Columbia, Canada or a Federal holiday in the State of Washington, U.S.A.

(e) "**Calendar Quarter**" means the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31.

(f) "**Calendar Year**" means each successive period of twelve (12) months commencing on January 1 and ending on December 31.

(g) "**Claims**" means all Third Party demands, claims, actions, proceedings and liabilities (whether criminal or civil, in contract, tort or otherwise) for losses, damages, reasonable legal costs and other reasonable expenses of any nature whatsoever.

(h) "**Combination Product**" means a single Product or a co-packaged Product in dosage form that includes one or more UNAs and one or more Other APIs. All reference to Product in this Agreement shall be deemed to include Combination Products, to the extent applicable.

(i) "**Commercialize**" or "**Commercialization**" means those activities comprising or relating to the manufacturing, promotion, marketing, advertising, distribution and sale of PROTIVA Products, including Phase IV trials or equivalent clinical trials conducted following Regulatory Approval as needed or useful to promote and market the Licensed Product and/or maintain such Regulatory Approval.

(j) "**Commercially Reasonable Efforts**" means, with respect to particular tasks or activities hereunder in developing or Commercializing a PROTIVA Product, a level of efforts applied to such tasks or activities reasonably consistent with the efforts commonly used by similarly-situated companies in the pharmaceutical industry (taking into account, among other things, the size, available resources, available funding, product lines and other relevant characteristics of such companies) to conduct such activities on products at a similar (as compared to the PROTIVA Product at the applicable time) stage in its product life and of similar market potential, profit potential and strategic value resulting from its own research efforts, based on information and conditions then-prevailing, including, without limitation, efficacy of the product, the competitiveness of alternative products in the marketplace, the patent and other proprietary position of the product, the likelihood of regulatory approval given the regulatory structure involved and the likelihood of adequate reimbursement. Commercially Reasonable Efforts shall be determined on a country by country or market-by-market basis (as most applicable) for a particular PROTIVA Product, and it is anticipated that the level of effort will change over time reflecting changes in the status of the PROTIVA Product and the country (or markets) involved.

(k) "**Confidential Information**" means all Know-How and other confidential and/or proprietary information and data of a financial, commercial, scientific or technical nature owned or Controlled by a disclosing Party or entrusted to a disclosing Party by a Third Party with the right to disclose, and which the disclosing Party or any of its Affiliates has supplied or otherwise made available to the other Party or its Affiliates, whether made available orally, in writing or in electronic form, including information comprising or relating to concepts, discoveries, inventions, data, designs or formulae in relation to this

Agreement. For purposes hereof, this Agreement and the terms hereof shall be deemed to be the Confidential Information of both Parties, subject to the rights of disclosure set forth in Article 8 and Subsections 12.2(b) and 12.2(c).

(l) "**Control**" or "**Controlled**" means, with respect to any Know How, Patents, other Intellectual Property Rights, or any confidential, proprietary or trade secret information, the legal authority or right (whether by ownership, license or otherwise) of a Party to grant a license or a sublicense of or under such Know How, Patents, or Intellectual Property Rights to another Person, or to otherwise disclose such proprietary or trade secret information to another Person, without breaching the terms of any agreement with a Third Party, or misappropriating the proprietary or trade secret information of a Third Party.

(m) "**Effective Date**" shall have the meaning set forth in the first paragraph of this Agreement.

(n) "**Feasibility Studies**" shall have the meaning set forth in Section 4.1(b).

(o) "**Field**" shall mean all uses and purposes for the development of human therapeutics.

(p) "**First Commercial Sale**" means, with respect to a particular country, the first commercial sale of a PROTIVA Product in a country by PROTIVA or its Affiliates to a Third Party or by a Sublicensee or its Affiliates to an unaffiliated Person, after all needed Regulatory Approvals for the Licensed Product have been granted in such country.

(q) "**Generic Product**" means, with respect to a PROTIVA Product, a generic product in a formulation similar to and substitutable for such PROTIVA Product.

(r) "**Indemnification Claim Notice**" shall have the meaning set forth in Subsection 11.3(b).

(s) "**Indemnified Party**" shall have the meaning set forth in Subsection 11.3(b).

(t) "**Indemnifying Party**" shall have the meaning set forth in Subsection 11.3(b).

(u) "**Intellectual Property Rights**" means all intellectual property rights subject to protection by intellectual property laws in any country of the world, arising under statutory or common law, contract, or otherwise, and whether or not perfected, including without limitation:

(i) all rights under Patents;

(ii) all rights associated with works of authorship including without limitation, copyrights, moral rights, copyright applications, copyright registrations, synchronization rights, mask work rights, mask work applications, mask work registrations;

(iii) all rights relating to the protection of trade secrets, know-how (including Know-How) and confidential information (including Confidential Information); and

(iv) all rights analogous to those set forth in this subsection above and any and all other proprietary rights relating to intangible property

(v) "**Invention**" means all discoveries, inventions, developments, improvements, Know-How, writings or rights conceived, discovered, invented, developed, created, made or reduced to practice.

(w) "**Joint IP**" shall have the meaning set forth in Subsection 6.1(b).

(x) "**Know-How**" means all technical information, know-how and data, including inventions (whether patentable or not), discoveries, trade secrets, specifications, instructions, processes, formulae, materials, expertise and other technology applicable to compounds, biologics, formulations, compositions, products or to their manufacture, development, registration, use or commercialization or methods of assaying or testing them or processes for their manufacture, formulations containing them, compositions incorporating or comprising them and including all biological, chemical, pharmacological, biochemical, toxicological, pharmaceutical, physical and analytical, safety, quality control, manufacturing, preclinical and clinical data, instructions, processes, formulae, expertise and information, regulatory filings and copies thereof, relevant to the development, manufacture, use or commercialization of and/or which may be useful in studying, testing, development, production or formulation of products, or intermediates for the synthesis thereof.

(y) "**License Fee**" shall have the meaning set forth at Section 4.1(c).

(z) "**MAA**" (marketing authorizing application) means an application for the authorization to market a Product in any country or group of countries outside the United States, as defined in the applicable laws and regulations and filed with the Regulatory Authority of a given country or group of countries.

(aa) "**Major Market**" means [**]. For clarity, obtaining Regulatory Approval of PROTIVA Product from [**], which approval applies [**] (as then constituted), shall be deemed to be obtaining a Regulatory Approval in a Major Market for purposes of the applicable provisions of this Agreement.

(bb) "**MARINA Indemnitees**" shall have the meaning set forth in Section 11.2.

(cc) "**MARINA Inventions**" shall have the meaning set forth in Subsection 6.1(a).

(dd) "**MARINA Know-How**" means the Know-How owned or Controlled by MARINA or its Affiliates on and after the Effective Date relating to the UNA® Platform Technology. The MARINA Know-How shall also include the UNA® Data.

(ee) "**MARINA Patents**" means the Patents identified in Exhibit A and any other Patents owned or Controlled by MARINA or its Affiliates on or after the Effective Date that have claims covering any aspect of the UNA Platform Technology, including Patents arising from MARINA Inventions.

(ff) "**MARINA Technology**" means MARINA Patents and MARINA Know-How and MARINA Inventions.

(gg) "**Milestone Event**" shall have the meaning set forth in Section 4.2.

(hh) "**NDA**" means a New Drug Application, as defined in 21 C.F.R. 314, and any other appropriate application or registration submitted to the appropriate Regulatory Authority in a particular country in the Territory to seek Regulatory Approval for sale of Licensed Product in such country.

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(ii) "**Net Sales**" means the gross invoice price of Product sold by PROTIVA or its Affiliates to the first Third Party (or by a Sublicensee or its Affiliates to a non-affiliated Person in any arm's length transaction) after deducting, if not previously deducted, from the amount invoiced or received:

(i) trade and quantity discounts other than early pay cash discounts;

(ii) returns, rebates, chargebacks and other allowances;

(iii) retroactive price reductions that are actually allowed or granted;

(iv) sales commissions paid to Third Party distributors and/or selling agents (which shall not be deemed to include contract sales organizations); and

(v) bad debt, sales or excise taxes, early payment cash discounts, transportation and insurance, custom duties, and other governmental charges.

For clarity, Net Sales shall not include funds:

(vi) derived from the transfer or sale of Product between any of PROTIVA and its Affiliates (or between any Sublicensee and its Affiliates);

(vii) derived from the transfer or sale of Product by PROTIVA or its Affiliates to a Third Party (or by a Sublicensee or its Affiliates to a non-affiliated Person) for the development or analytical, preclinical or clinical testing of a Product;

(viii) derived from the transfer or sale of reasonable quantities of Product by PROTIVA or its Affiliates to a Third Party (or by a Sublicensee or its Affiliates to a non-affiliated Person) for samples, donations or compassionate use; and

(ix) constituting Sublicensing Revenue.

Any Product sold in other than in an arm's length transaction or for other property (e.g., barter) shall be deemed invoiced at its fair market value. The calculation of Net Sales of any Combination Product shall, subject to the exclusions set forth above and be calculated using one of the following methods:

(x) by multiplying the annual Net Sales of the Combination Product during the applicable royalty accounting period by a fraction, the numerator of which is the aggregate gross selling price of the Product contained in the Combination Product if sold separately, and the denominator of which is the sum of the gross selling price of both the Product and the Other API(s) contained in the Combination Product if sold separately; or

(xi) if no such separate sales are made of any of the Product or the Other APIs during the applicable accounting period, or if any of the Product or the Other APIs have not been sold separately for at least one (1) year, PROTIVA shall calculate Net Sales of such Combination Product by the fraction C/C+D, where C is a reasonable estimate of the fair market value of the Product portion of such Combination Product, D is a reasonable estimate of the fair market value of the Other API(s) in such Combination Product, and the estimates of C and D are determined by mutual agreement of the Parties negotiating in good faith.

(jj) "**Other API**" means an active, proprietary pharmaceutical ingredient that is not an UNA and that, if administered independently, would have a clinical effect.

(kk) "**Party**" shall have the meaning set forth in the preamble.

(ll) "**Patents**" means all patents and patent applications, author certificates, inventor certificates, utility certificates, improvement patents and models and certificates of addition and all foreign counterparts of them and including all divisionals, continuations, substitutions, confirmations, continuations-in-part, re-registrations, re-examinations, reissues, additions, renewals, extensions, registrations, and supplemental protection certificates and the like of any of the foregoing.

(mm) "**Person**" means any individual, partnership, limited liability company, firm, corporation, association, trust, unincorporated organization or other entity.

(nn) "**Product**" means any product or process covered by a claim in a MARINA Patent or otherwise utilizing or incorporating MARINA Know-How.

(oo) "**PROTIVA Indemnitees**" shall have the meaning set forth in Section 11.1.

(pp) "**PROTIVA Product**" shall have the meaning set forth in Section 2.2.

(qq) "**Regulatory Approval**" means all approvals (including supplements, amendments, pre- and post-approvals and price approvals), licenses, registrations or authorizations necessary for the manufacture, distribution, use or sale of a Licensed Product in the applicable country or regulatory jurisdiction.

(rr) "**Regulatory Authority**" means any governmental agency or authority responsible for granting Regulatory Approvals for Products, including the United States Food and Drug Administration, the European Medicines Agency, or any successor entities thereto and any corresponding national or regional regulatory authorities.

(ss) "**Regulatory Filings**" means any submission to a Regulatory Authority of any appropriate regulatory application, and shall include, without limitation, any submission to a regulatory advisory board, MAA, and any supplement or amendment thereto. For the avoidance of doubt, Regulatory Filings shall include any Investigational New Drug (IND), New Drug Application (NDA) or the corresponding application in any other country or group of countries.

(tt) "**Royalties Report**" shall have the meaning set forth in Section 4.6.

(uu) "**Royalty Term**" means, as to a particular PROTIVA Product sold in a country, the period from the date of First Commercial Sale of such PROTIVA Product in such country until the later of:

(i) the date of expiration of the last to expire issued Patent included in the MARINA Patents having a Valid Claim that claims the PROTIVA Product in such country; or

(ii) [**] after such First Commercial Sale of the Licensed Product in a Major Market.

(vv) "**Sublicensee**" means a Person to whom PROTIVA or its Affiliate has granted a sublicense agreement under PROTIVA's rights pursuant to Section 2.2.

(ww) "**Sublicense Fees**" shall have the meaning set forth in Section 4.5.

(xx) "**Sublicensing Revenue**" means all consideration received by PROTIVA (or its Affiliates) from a Sublicensee in consideration of the grant of a sublicense under the MARINA Patents to such Sublicensee (which may include upfront fees, milestone payments and other similar fees), but excluding:

(i) royalties payable to PROTIVA (or its Affiliates) based on Net Sales by a Sublicensee or its Affiliates;

(ii) any amounts paid as reimbursement of research or development costs and expenses incurred by PROTIVA or its Affiliates (including past and ongoing costs and expenses) relating to PROTIVA Products;

(iii) direct reimbursement of Patent prosecution or enforcement costs;

(iv) payments of a share of amounts recovered in enforcing Patent or other Intellectual Property Rights (except to the extent such share is calculated or treated as royalties under the terms of such sublicense);

(v) transfer price payments for sale of compounds or products (such exclusion not to exceed [**] of actual fully-burdened cost of goods);

(vi) bona fide loans on commercial terms; and

(vii) any payments made to purchase equity in PROTIVA or a PROTIVA Affiliate at fair market value.

(yy) "**Term**" means the term of this Agreement as set forth in Section 9.1.

(zz) "**Territory**" means all countries of the world.

(aaa) "**Third Party**" means any Person other than a Party or an Affiliate of a Party.

(bbb) "**Third Party Claim**" means any claim, action, allegation, suit or legal proceeding brought by a Third Party against another entity or person.

(ccc) "**UNA**" means an unlocked nucleobase analog.

(ddd) "**UNA Data**" means all data and information owned or Controlled by MARINA relating to the structure, activity and/or other characteristics of the UNA Platform Technology.

(eee) "**UNA Platform Technology**" means the technology for the development, production and use of UNAs and compounds containing one or more UNAs, including, without limitation, Know-How relating to the manufacture, formulation, ingredients, preparation, presentation, means of delivery, dosage or packaging of such UNAs, all as in existence as of the Effective Date.

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(fff) "**United States**" or "**US**" means the United States of America, its territories and possessions.

(ggg) **"Upfront Payment"** shall have the meaning set forth in Subsection 4.1(a).

(hhh) "**USD**" or "**US$**" means the lawful currency of the United States.

(iii) "**Valid Claim**" means an unexpired claim of an issued Patent within the MARINA Patents that has not been ruled to be unpatentable, invalid or unenforceable by a court or other authority in the country of the Patent with competent jurisdiction, from which decision no appeal is taken or can be taken.

1.2 Interpretation.

In this agreement unless otherwise specified:

(a) "includes" and "including" shall mean respectively includes and including without limitation;

(b) a Party includes its permitted assignees and/or their respective permitted successors in title to substantially the whole of its undertaking;

(c) a statute or statutory instrument or any of their provisions is to be construed as a reference to that statute or statutory instrument or such provision as the same may have been or may from time to time hereafter be amended or re-enacted;

(d) words denoting the singular shall include the plural and vice versa and words denoting any gender shall include all genders;

(e) the Exhibits and other attachments form part of the operative provision of this Agreement and references to this Agreement shall, unless the context otherwise requires, include references to the Exhibits and attachments;

(f) the headings in this Agreement are for information only and shall not be considered in the interpretation of this Agreement;

(g) general words shall not be given a restrictive interpretation by reason of their being preceded or followed by words indicating a particular class of acts, matters or things; and

(h) the Parties agree that the terms and conditions of this Agreement are the result of negotiations between the Parties and that this Agreement shall not be construed in favor of or against any Party by reason of the extent to which any Party participated in the preparation of this Agreement.

Article 2 LICENSES

2.1 License Grant.

Subject to the terms and conditions of this Agreement, MARINA hereby grants to PROTIVA and its Affiliates a non-exclusive, irrevocable (subject to Subsection 9.2(c)), perpetual, worldwide license, with the right to grant sublicenses as permitted in Section 2.2, under the MARINA Technology to research, develop, make, have made, use, import, offer for sale, sell, have sold, commercialize and otherwise exploit any Product in the Field in the Territory.

2.2 Sublicense Rights.

PROTIVA may sublicense to a Third Party the rights granted to it by MARINA under Section 2.1 at any time at its sole discretion, but only in connection with:

(a) the continuing research, development and or commercialization of a PROTIVA Product or the manufacturing of a PROTIVA Product by such Third Party or its Affiliates, either itself or as part of a collaboration with PROTIVA or any of its Affiliates, or

(b) the sublicense of a technology platform consisting of the use of PROTIVA's proprietary lipid nano-particle technology in combination with MARINA Technology.

A "**PROTIVA Product**" means any Product with respect to which PROTIVA or any of its Affiliates has conducted research, manufacturing, development activities that are related to such Product. For the avoidance of doubt, this Section 2.2 shall not include any right by PROTIVA to grant a "naked" sublicense of MARINA Technology alone.

Article 3 DISCLOSURE AND TRANSFER OF MARINA KNOW-HOW AND COOPERATION

3.1 Disclosure and Transfer of MARINA Know-How.

As soon as reasonably possible after the Effective Date (and in any event within ten (10) days after the Effective Date), MARINA, without additional consideration, shall use good faith, diligent efforts to disclose to PROTIVA or its designated Affiliate all MARINA Know-How in existence as of the Effective Date and shall provide such copies of any existing tangible embodiment thereof in written or electronic form as may be reasonably requested by PROTIVA, including delivery of an electronic copy of the UNA Data in a commonly usable format (to the extent in existence on the date hereof). Such disclosures shall include all MARINA Know-How and any other data, information and documents known to and Controlled by MARINA as of the Effective Date which may be necessary or useful to PROTIVA to practice the licenses granted hereunder efficiently.

3.2 Cooperation.

Upon request by PROTIVA within a reasonable period after disclosure by MARINA of the MARINA Know-How and other data, information and documents pursuant to Section 3.1, MARINA will provide reasonable assistance to PROTIVA or its designated Affiliate in connection with understanding and using the MARINA Know-How for purposes consistent with licenses and rights granted to PROTIVA hereunder; *provided*, that PROTIVA shall promptly pay or reimburse MARINA for any travel or other out-of-pocket expenses incurred by MARINA in connection with providing such assistance requested by PROTIVA.

Article 4 FINANCIAL PROVISIONS

4.1 Upfront Payment.

(a) In partial consideration of the rights granted by MARINA to PROTIVA under this Agreement, PROTIVA shall pay to MARINA within [**] of the Effective Date a non-refundable, non-creditable upfront payment in the amount of [**] (the "**Upfront Payment**").

(b) [**]

(c) [**]

4.2 Milestone Payments.

(a) In partial consideration of the license rights granted by MARINA under this Agreement, PROTIVA shall pay to MARINA a milestone payment upon first achievement by PROTIVA or an Affiliate (but not by any Sublicensee, as further set forth below in this Section 4.2) of the applicable milestone event set forth in the table below (each such event, a "**Milestone Event**"), such payments to be in the listed amounts for the applicable Milestone Event:

Milestone Event	Milestone Payment
For each PROTIVA Product directed to a specific gene target:	
(1) [**]	[**]
(2) [**]	[**]
(3) [**]	[**]

(b) For clarity each of the above milestone payments shall be paid only once for a particular PROTIVA Product directed to a specific gene target, regardless if any such Milestone Event is achieved more than once for that particular PROTIVA Product directed to a specific gene target.

(c) For additional clarity, where PROTIVA has entered into a sublicense agreement with a Sublicensee who has been granted rights to commercialize a PROTIVA Product directed to a specific gene target, PROTIVA shall not be liable to pay any milestone payments on account of the achievement by the Sublicensee (alone, or in collaboration with PROTIVA or any of its Affiliates) of any of the foregoing Milestone Events; but instead, any payments received by PROTIVA on account of the Sublicensee's milestone achievement shall be included in Sublicensing Revenue and PROTIVA shall pay to MARINA the applicable Sublicense Fees pursuant to Section 4.5

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(d) PROTIVA shall promptly notify MARINA of the achievement of any Milestone Event for each PROTIVA Product directed to a specific gene target. All milestone payments under Subsection 4.2(a) are non-refundable and non-creditable, and shall be due within [**] of achievement of the applicable Milestone Event.

4.3 Royalties.

In partial consideration of the license rights granted by MARINA under this Agreement, PROTIVA shall pay to MARINA a royalty on Net Sales of PROTIVA Products by PROTIVA or any of its Affiliates during the Royalty Term as follows:

(a) For sales of a PROTIVA Product in any country in the Territory where such sale would infringe, absent the license granted in Section 2.1, a Valid Claim of an issued MARINA Patent, PROTIVA shall pay to MARINA a royalty on Net Sales of such PROTIVA Product calculated using the royalty rate set opposite the amount of Net Sales in the table below:

Net Sales in a Calendar Year	Royalty Rate
[**]	[**]
[**]	[**]
[**]	[**]

(b) For sales of a PROTIVA Product in any country in the Territory where either (i) there are no Valid Claims covering the PROTIVA Product that would be infringed, absent the license granted in Section 2.1, by a sale of such PROTIVA Product, or (ii) sales of Generic Products exist alongside sales of the PROTIVA Product, PROTIVA shall pay to MARINA a reduced royalty on Net Sales of such PROTIVA Product calculated using the royalty rate set opposite the amount of Net Sales in the table below:

Net Sales in a Calendar Year	Royalty Rate
[**]	[**]
[**]	[**]
[**]	[**]

provided, however, that the royalty obligation under this Subsection 4.3(b) in respect of such PROTIVA Product in all countries in the Territory shall cease upon the [**] anniversary of the First Commercial Sale of such PROTIVA Product in any Major Market country.

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4.4 Anti-Stacking Provisions.

If PROTIVA or its Affiliate owes to one or more Third Parties, under license agreement(s) granting PROTIVA (or its Affiliate or Sublicensee) Intellectual Property Rights that are needed to make, use, sell or otherwise commercialize the MARINA Technology as contained in the PROTIVA Product, royalties or similar payments on sales of such PROTIVA Products, then PROTIVA may reduce the royalties owed to MARINA under Section 4.3 by [**] of the royalty or similar payments actually paid to such Third Parties, provided that PROTIVA shall not reduce any particular royalty payment to MARINA by more than [**] of the amount otherwise owed under Section 4.3 for the applicable royalty period.

4.5 Sublicense Fees.

In partial consideration of the license rights granted by MARINA under this Agreement, including specifically the right to sublicense such rights under Section 2.2, PROTIVA shall pay to MARINA an amount (the "**Sublicense Fees**") equal to a percentage of Sublicensing Revenue received by PROTIVA (or its Affiliate) from its Sublicensees pursuant to such sublicenses. The percentage of Sublicensing Revenue payable by PROTIVA to MARINA shall be determined by the development stage of the PROTIVA Product that is the subject of the sublicense at the time PROTIVA or its Affiliate and the Sublicensee execute such sublicense, as follows:

Development Stage at Time of Sublicense Execution	Percentage of Sublicensing Revenue
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

4.6 Payment of Royalty and Sublicense Fee Obligations.

The royalty obligation under Section 4.3 shall accrue upon the sales of a PROTIVA Product in each particular country in the Territory, commencing upon First Commercial Sale after Regulatory Approval of the PROTIVA Product in such country and, except as otherwise provided under Subsection 4.3(b), such obligation shall end upon the expiration of the Royalty Term applicable to such PROTIVA Product in such country. All such royalty payments are non-refundable and non-creditable and shall be due within [**] after the end of each Calendar Quarter and are payable in immediately available funds. The Sublicense Fees owed under Section 4.5 shall be paid, with respect to particular Sublicensing Revenue received by PROTIVA, within [**] after PROTIVA's receipt of the applicable revenues, and are payable in immediately available funds. PROTIVA shall notify MARINA in writing promptly upon the First Commercial Sale of each PROTIVA Product in each country and thereafter PROTIVA shall furnish MARINA with

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a written report (the "**Royalties Report**") for each completed Calendar Quarter showing, on a country-by-country basis, according to the volume of units of PROTIVA Products sold in each such country (by SKU) during the reporting period (whether PROTIVA Product is sold by PROTIVA or its Affiliates or Sublicensees):

(a) the gross invoiced sales of the PROTIVA Product sold in each country during the reporting period, and the amounts deducted therefrom to determine Net Sales from such gross invoiced sales;

(b) the royalties payable in dollars, if any, which shall have accrued hereunder based upon such Net Sales; and

(c) the withholding taxes, if any, required by Applicable Law to be deducted in respect of such sales (provided that, as to sales by Sublicensees, PROTIVA shall report only the net sales numbers (using the definition for such term in the applicable Sublicense) as reported by the Sublicensee, if such Sublicensee does not report gross invoiced sales numbers).

With respect to sales of PROTIVA Products invoiced in US dollars, the gross invoiced sales, Net Sales and royalties payable shall be expressed in the Royalties Report in US Dollars. With respect to sales of PROTIVA Products invoiced in a currency other than US Dollars, the gross invoiced sales, Net Sales and royalties payable shall be expressed in the Royalties Report in the domestic currency of the party making the sale as well as in the US Dollar equivalent of the royalties payable and the exchange rate used in determining the amount of US dollars. The US dollar equivalent shall be calculated on a calendar-month basis using the average monthly interbank rate listed in *The Wall Street Journal*.

4.7 Currency Restrictions.

If at any time legal restrictions in any country in the world prevent the prompt remittance of any payments with respect to sales in that country, PROTIVA shall have the right and option upon written notice to MARINA to make (or to cause its Sublicensee to make) such payments by depositing the amount thereof in local currency to MARINA's account (or such other designated nominee by MARINA) in a bank or depository in such country.

4.8 Taxes.

In the event that laws, rules or regulations require PROTIVA to withhold taxes with respect to any payment to be made by PROTIVA to MARINA pursuant to this Agreement, PROTIVA will notify MARINA of such withholding requirement prior to making the payment to MARINA. Any and all taxes levied by a proper taxing authority required to be withheld by PROTIVA or its Sublicensees on account of royalties accruing to MARINA under this Agreement may be deducted from such royalty payment provided that (a) such amount is promptly paid for and on behalf of MARINA to the appropriate tax authorities, and (b) PROTIVA furnishes MARINA with official tax receipts or other appropriate evidence of payment issued by the appropriate tax authorities. PROTIVA shall provide such assistance to MARINA, including the provision of such documentation as may be required by a tax authority, as may be reasonably necessary in MARINA's efforts to claim an exemption from or reduction of such taxes.

4.9 Late Payments.

All fees and royalties not received by MARINA when due under this Agreement shall bear interest from the date they were due until the date they are paid at a rate equal to the then current 30-day United States dollar LIBOR rate plus two percent per annum or the maximum rate permitted by law, whichever is less. Notwithstanding anything to the contrary in this Agreement, PROTIVA shall have no obligation to pay royalties to MARINA pursuant to Section 4.3 until PROTIVA actually receives revenue from Net Sales.

4.10 Audit.

PROTIVA and its Affiliates shall keep complete and accurate records of the underlying revenue and expense data relating to the calculations of Net Sales, Sublicensing Revenue and payments required under this Agreement. MARINA shall have the right, at its own expense and no more than once per Calendar Year, to have an independent, certified public accountant, selected by MARINA and reasonably acceptable to PROTIVA, review all such records upon reasonable notice and during regular business hours and under obligations of strict confidence, for the sole purpose of verifying the basis and accuracy of payments required and made under this Agreement within the prior [**] period. No Calendar Quarter may be audited more than one time. PROTIVA shall receive a copy of each audit report promptly from MARINA. Should the inspection lead to the discovery of a discrepancy to MARINA's detriment, PROTIVA shall pay the amount of the discrepancy in MARINA's favor within [**] after being notified thereof. MARINA shall pay the full cost of the inspection unless the discrepancy is greater than [**], in which case PROTIVA shall pay to MARINA the actual cost charged by such accountant for such inspection. If such audit shows a discrepancy in PROTIVA's favor, then PROTIVA may credit the amount of such discrepancy against subsequent amounts owed to MARINA, or if no further amounts are owed under this Agreement, then MARINA shall pay PROTIVA the amount of the discrepancy within [**] after being notified thereof.

Article 5 PAYMENT TERMS

5.1 Payment Terms.

All payments from PROTIVA to MARINA shall be made by wire transfer to the credit of such bank account as may be designated by MARINA in this Agreement or in writing to PROTIVA. Any payment which falls due on a date which is not a Business Day may be made on the next succeeding Business Day.

5.2 Currency.

All payments under this Agreement shall be paid in US dollars.

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Article 6 INTELLECTUAL PROPERTY

6.1 Ownership of Inventions.

Subject to Section 6.2, as between PROTIVA and MARINA:

(a) all Inventions of any kind whatsoever first conceived, reduced to practice, developed or created by MARINA or its Affiliates, alone or with any Third Party, prior to or during the Term relating to UNA or the UNA Platform Technology ("**MARINA Inventions**") shall be owned by MARINA; and

(b) all Inventions of any kind whatsoever first conceived, reduced to practice, developed or created by one or more Persons acting on behalf of MARINA or its Affiliates (or any Third Party acting under its direction) together with one or more Persons acting on behalf of PROTIVA or its Affiliates (or any Third Party acting under its direction) during the Term relating to UNA or the UNA Platform Technology ("**Joint IP**"), shall be jointly owned by the Parties. Neither Party shall assign its rights to Joint IP without the prior written consent of the other Party.

Inventorship and authorship will be determined under the applicable rules and precedents prevailing in the United States.

6.2 Disclosure of Inventions During the Term.

If, within [**] after the Effective Date and during the Term, MARINA becomes the owner, solely or jointly, of any additional Intellectual Property Rights that constitute MARINA Inventions, whether developed in the performance of this Agreement or (unless prohibited by the terms of any agreement between MARINA and a Third Party) outside the framework of this Agreement, and whether or not patentable, MARINA will notify PROTIVA in writing within [**] of becoming aware of any such disclosable MARINA Inventions. MARINA shall, throughout the Term, provide status updates on any additional Intellectual Property Rights that constitute disclosable MARINA Inventions at such times and in such manner as may be mutually agreed by the Parties, provided that during the first two (2) years during the Term, the Parties shall meet no less frequently than on a Calendar Quarterly basis.

6.3 Perfection of Ownership Rights.

Each Party will ensure that its employees and contractors who perform any obligations under this Agreement have entered into written agreements with such Party under which its employees and contractors assign to such Party all ownership rights in any Intellectual Property Rights made or developed by its employees and contractors in the course of work for such Party.

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Article 7 PATENT PROSECUTION

7.1 Prosecution and Maintenance.

(a) All Patent applications included in the MARINA Patents and, upon issuance, all resulting issued Patents therefrom, shall be filed, prosecuted and maintained by MARINA, at its sole cost and expense and in its discretion, which shall be exercised in good faith, in accordance with this Article 7.

(b) All Patent applications arising from Joint IP and, upon issuance, all resulting issued Patents therefrom, shall be filed, prosecuted and maintained by PROTIVA, at its sole cost and expense and in its discretion, which shall be exercised in good faith, in accordance with this Article 7.

(c) Without limiting the generality of the foregoing, MARINA and PROTIVA shall in the performance of their respective obligations under Subsections 7.1(a) and 7.1(b), be responsible for:

(i) the continued prosecution of any pending Patent applications;

(ii) the maintenance of all such issued Patents; and

(iii) the filing and prosecution of additional Patent applications (and maintenance of Patents thereon) in any jurisdiction world-wide, on a commercially reasonable basis, including, without limitation, any continuations, continuations-in-part, divisionals, Patents of addition, reissues, re-examinations, supplemental protection certificates, renewals and extensions or substitutes therefore.

7.2 Updating of Patent Tables.

(a) The table of licensed Patents in Exhibit A ("**Table of Licensed Patents**") will be deemed to be a living document continually updated by notice from MARINA to PROTIVA of Patent filing, prosecution, maintenance and discontinuation of any MARINA Patents.

(b) PROTIVA shall create and maintain a table of Patents arising from Joint IP ("**Table of Jointly Owned Patents**"), which table will be deemed to be a living document continually updated by notice from PROTIVA to MARINA of Patent filing, prosecution, maintenance and discontinuation of any Patents arising from Joint IP.

(c) By way of non-limiting example, a Patent application shall be deemed to have been added to the Table of Licensed Patents or to the Table of Jointly Owned Patents, as applicable, on the date that such Patent application is submitted to the US Patent and Trademarks Office or any foreign equivalent.

7.3 Consultation and Reporting.

(a) On a timely basis, MARINA will consult with PROTIVA on all material actions to be taken with respect to the filing, prosecution and maintenance of the MARINA Patents, including claims and any proposed amendments thereto. PROTIVA will have the right to comment on MARINA's proposed actions and to identify any process, uses or Products arising out of the MARINA Technology that may be patentable and MARINA will reasonably consider such comments.

(b) On a timely basis, PROTIVA will consult with MARINA on all material actions to be taken with respect to the filing, prosecution and maintenance of any Patents arising from Joint IP, including claims and any proposed amendments thereto. MARINA will have the right to comment on PROTIVA 's proposed actions and to identify any process, uses or Products arising out of the Joint IP that may be patentable and PROTIVA will reasonably consider such comments.

(c) In the performance of their respective obligations under Section 7.1, MARINA will disclose to PROTIVA in respect of the MARINA Patents, and PROTIVA will disclose to MARINA in respect of the Patents arising from Joint IP, on a timely basis:

(i) the complete text of each Patent application and issued Patent within the MARINA Patents or Patents arising from Joint IP, as applicable; and

(ii) all material communications to and from the patent office, including communications concerning the institution or possible institution of any interference, opposition, re-examination, reissue, revocation, nullification or any official proceeding involving any of the MARINA Patents or Patents arising from Joint IP, as applicable.

(d) If MARINA desires additional claims to be filed, prosecuted and maintained under any Patents arising from Joint IP for MARINA or its sublicensees' uses outside the Field, MARINA will:

(i) notify PROTIVA in writing setting forth the specific claims, jurisdiction and nature of Patent protection required by MARINA; and

(ii) request that PROTIVA file a divisional application with such additional claims and either (A) oversee the prosecution of such divisional application, at its cost and expense, in which case MARINA will keep PROTIVA informed of the progress thereof, or (B) have PROTIVA oversee the prosecution of such divisional application, and reimburse PROTIVA for all costs and expenses (including PROTIVA's external patent counsel costs) incurred by PROTIVA in pursuing such additional claims ("**Patent Prosecution Fees**").

All Patent Prosecution Fees shall be due and payable to PROTIVA within [**] of MARINA'S receipt of each invoice from PROTIVA, with interest on late payment calculated in accordance with Section 4.9. Notwithstanding anything to the contrary in this Agreement, PROTIVA reserves the right to offset any unpaid Patent Prosecution Fees and accrued interest against any payments due by PROTIVA to MARINA hereunder.

(e) Notwithstanding Section 7.4, MARINA shall instruct its patent counsel retained from time to time in the Territory for the filing, prosecution and maintenance of the MARINA Patents to forthwith notify PROTIVA in writing in the event of any of the following:

(i) MARINA fails to pay when due any statement of account or invoice issued by such patent counsel in respect of the MARINA Patents;

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(ii) MARINA fails to provide to its patent counsel instructions relating to the filing, prosecution or maintenance of any of the Marina Patents, or any other proceeding relating thereto, that could reasonably, if left unattended, compromise the continued prosecution of any patent application, the issuance of any patent, the validity of any issued patent, the outcome of any proceeding relating to the MARINA Patents or otherwise impair any Patent rights under the MARINA Patents; or

(iii) if such patent counsel reasonably believes that a state of facts exists (including, without limitation, delay or lack of funds) that could reasonably, if left unattended, compromise the continued prosecution of any patent application, the issuance of any patent, the validity of any issued patent, the outcome of any proceeding relating to the MARINA Patents or otherwise impair any Patent rights under the MARINA Patents.

7.4 Abandonment, Withdrawal and Discontinuance.

(a) If either Party elects to:

(i) discontinue pursuing one or more Patent applications, Patent protection or Patent maintenance pertaining to any of the MARINA Patents or Patents arising from Joint IP or any continuation, continuation-in-part, divisional, reissue, re-examination or extension thereof for any reason; or

(ii) not pursue Patent protection in relation to any of the MARINA Patents or Patents arising from Joint IP in any specific jurisdiction for any reason;

the Party electing to discontinue Patent filing, prosecution or maintenance will give the other Party prior written notice of such decision (each, a "**Notice of Abandonment**"), and together with sufficient detail in sufficient time, such time not to be less than [**] prior to any deadline imposed by a patent office, to enable the other Party to assume and continue the filing, prosecution or maintenance of the Patents identified in the Notice of Abandonment (the "**Abandoned Patents**").

(b) The Notice of Abandonment will clearly identify the Patents that are being abandoned, the actions required to assume and continue the filing, prosecution or maintenance of the Patents and the deadlines by which action must be taken to avoid abandonment. The Party in receipt of such notice at its sole cost and expense, and in its sole discretion, may assume and continue the prosecution and/or maintenance of any particular Abandoned Patent identified in such notice (the "**Non-Abandoning Party**").

(c) In addition, if within [**] of receiving an Invention disclosure from the Non-Abandoning Party, the Abandoning Party does not file a Patent application for the Invention described therein that the Non-Abandoning Party believes could become a Patent:

(i) the Non-Abandoning Party may prepare and file a Patent application for the Invention;

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(ii) a Notice of Abandonment will be deemed to have been given upon the Abandoning Party's receipt of the Invention disclosure and the Patent application for the Invention, when filed by the Non-Abandoning Party, will be deemed an Abandoned Patent, including all rights under Patents related thereto, including foreign counterparts.

(d) Both Parties agree that, effective upon [**] after the Notice of Abandonment, the Abandoning Party will have no further obligations to assume and continue the filing, prosecution, maintenance, protection and related costs for the Abandoned Patents, provided that if the Non-Abandoning Party assumes and continues the prosecution and/or maintenance of any particular Abandoned Patent, the Abandoning Party will provide the Non-Abandoning Party with all reasonable assistance required for the prosecution, maintenance, defense and/or enforcement of the Abandoned Patent, at the Non-Abandoning Party's cost and expense.

7.5 Prosecuting Infringement Proceedings.

During the Term each Party shall promptly report in writing to the other Party any known or suspected infringement in the Field of any MARINA Patents or Patents arising from Joint IP of which it becomes aware, and shall provide the other Party with all available evidence supporting such infringement, or unauthorized use or misappropriation. In the event of such alleged infringement by a Third Party, the following shall apply:

(a) MARINA shall have the first right, in its sole discretion and sole expense and using counsel of its choice and reasonably acceptable to PROTIVA, to initiate an infringement or other appropriate suit against any Third Party anywhere in the Territory who at any time has infringed, or is suspected of infringing, any such Patent in the Field;

(b) if MARINA does not take steps to prosecute such claim or litigation within [**] after receipt of notice thereof, PROTIVA may take such legally permissible action as it deems necessary or appropriate to prosecute such claim or litigation (or defend such litigation in the event of a counterclaim) at its own expense, using counsel of its choice, but shall not be obligated to do so;

(c) the Party prosecuting such litigation (in this Article, the "**Litigating Party**") shall have the right to control such litigation and shall bear all legal expenses (including court costs and legal fees), including settlement thereof; provided, however, that no settlement or consent judgment or other voluntary final disposition of any suit or action brought by a Party pursuant to this Section may be entered into without the consent of the other Party if such settlement would require the other Party to be subject to an injunction or to make a monetary payment or would restrict the claims in or admit any invalidity of any such Patent or significantly adversely affect the rights of the other Party to this Agreement (the "**Non-litigating Party**"). By way of example and not by way of limitation, there shall be no right of the Litigating Party to stipulate or admit to the invalidity or unenforceability of any such Patents. Before any action is taken by the Litigating Party, the Parties agree to, in good faith, consult with a goal of adopting a mutually satisfactory position;

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(d) the Non-litigating Party agrees to co-operate reasonably in any such litigation to the extent of executing all necessary documents, supplying essential documentary evidence and making essential witnesses then in its employment available and to vest in the Litigating Party the right to institute any such suits, so long as all the direct or indirect costs and expenses of bringing and conducting any such litigation or settlement shall be borne by the Litigating Party, provided that the Parties shall recover their respective actual out-of-pocket expenses, or equitable proportions thereof, associated with any litigation or settlement thereof from any recovery made by any Party. Any excess amount remaining after satisfaction of the Parties' recovery of their respective actual out-of-pocket expenses (the "**Excess Amount**") shall be shared as follows: (i) [**] to the Litigating Party and (ii) [**] to the Non-litigating Party;

(e) the Litigating Party shall keep the Non-litigating Party fully informed of the actions and positions taken or proposed to be taken by the Litigating Party on behalf of itself or a sublicense (if applicable) and actions and positions taken by all other parties to such litigation; and

(f) at any time during the litigation, the Non-litigating Party may elect to participate formally in the litigation to the extent that the court may permit, at its expense (subject to the possibility of recovery of some or all of such additional expenses as described in Subsection 7.5(d) or from such other parties to the litigation).

7.6 Breach of Confidence Proceedings.

In the event of an alleged breach of confidentiality respecting Confidential Information or any Third Party use of Confidential Information, if each Party agrees in its sole discretion that the interests of the Parties are aligned in connection with such breach or use, each Party shall reasonably cooperate with the other to enjoin such Third Party's use of such Confidential Information.

7.7 Defense of Infringement Proceedings.

In the event that a Third Party at any time provides written notice of a claim, or brings an action, suit or proceeding, against any Party or any of their respective Affiliates or Sublicensees, claiming infringement of its Patents or unauthorized use or misappropriation of its know-how, due to the use of the Intellectual Property Rights in and to the MARINA Technology or the making, using or selling of Products covered by the MARINA Patents the Party in receipt of such written notice or claim shall promptly notify the other Party of same, enclosing a copy of the claim and all papers served. In the event of such alleged infringement, the Parties will assist one another and cooperate in any such litigation and, if applicable, be subject to the indemnification obligations of Article 12.

7.8 Procedures.

If required under applicable law in order for the Litigating Party to initiate and/or maintain such suit, or if the Litigating Party is unable to initiate or prosecute such suit solely in its own name or it is otherwise advisable to obtain an effective legal remedy, in each case, the Non-Litigating Party shall join as a party to the suit and will execute and cause its Affiliates to execute all document necessary for the Litigating Party to initiate litigation to prosecute and maintain such action. In addition, at the Litigating Party's request, the Non-Litigating Party shall provide

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reasonable assistance to the Litigating Party in connection with an infringement suit at no charge to the Litigating Party except for reimbursement by the Litigating Party of reasonable out-of-pocket expenses incurred by the Non-Litigating Party in rendering such assistance.

7.9 Product Trademarks.

PROTIVA shall own the trademarks for any PROTIVA Product and shall be solely responsible for filing and maintaining such trademarks in the Territory (including payment of costs associated therewith). PROTIVA shall also assume full responsibility, at its sole cost and expense, for taking legal action against any infringement by a Third Party of any PROTIVA Product trademark, and for claims of infringement of the rights of a Third Party by the use of a PROTIVA Product's trademark.

Article 8 CONFIDENTIALITY

8.1 Duty of Confidence.

Subject to the other provisions of this Article 8, all Confidential Information disclosed by a Party or its Affiliates under this Agreement will be maintained in confidence and otherwise safeguarded by the recipient Party. The recipient Party may only use the Confidential Information for the purposes of this Agreement and pursuant to the rights granted to the recipient Party under this Agreement. Subject to the other provisions of this Article 8, each Party shall hold as confidential such Confidential Information of the other Party or its Affiliates in the same manner and with the same protection as such recipient Party maintains its own confidential information. Subject to the other provisions of this Article 8, a recipient Party may only disclose Confidential Information of the other Party to employees, agents, contractors, consultants and advisers of the Party and its Affiliates and to Third Parties (including, in the case of PROTIVA, Sublicensees and their Affiliates) but in each case only to the extent reasonably necessary for the purposes of, and for those matters undertaken pursuant to, this Agreement and only if such Persons are bound to maintain the confidentiality of the Confidential Information in a manner consistent with the confidentiality provisions of this Agreement.

8.2 Exceptions.

The obligations under this Article 8 shall not apply to any information to the extent the recipient Party can demonstrate by competent evidence that such information:

(a) is (at the time of disclosure) or becomes (after the time of disclosure) generally known to the public or part of the public domain through no breach of this Agreement by the recipient Party or its Affiliates;

(b) was known to, or was otherwise in the possession of, the recipient Party or its Affiliates prior to the time of disclosure by the disclosing Party or any of its Affiliates;

(c) is disclosed to the recipient Party or an Affiliate on a non-confidential basis by a Third Party who is entitled to disclose it without breaching any confidentiality obligation to the disclosing Party or any of its Affiliates; or

(d) is independently developed by or on behalf of the recipient Party or its Affiliates, as evidenced by its written records, without reference to the Confidential Information disclosed by the disclosing Party or its Affiliates under this Agreement.

(e) Specific aspects or details of Confidential Information shall not be deemed to be within the public domain or in the possession of the recipient Party merely because the Confidential Information is embraced by more general information in the public domain or in the possession of the recipient Party. Further, any combination of Confidential Information shall not be considered in the public domain or in the possession of the recipient Party merely because individual elements of such Confidential Information are in the public domain or in the possession of the recipient Party unless the combination and its principles are in the public domain or in the possession of the recipient Party.

8.3 Authorized Disclosures.

(a) In addition to disclosures allowed under Section 8.2, PROTIVA may disclose Confidential Information belonging to MARINA or its Affiliates to the extent such disclosure is necessary in the following instances:

(i) filing or prosecuting Patents as permitted by this Agreement; and

(ii) in connection with Regulatory Filings for Products.

(b) In addition, PROTIVA may disclose Confidential Information belonging to MARINA or its Affiliates to the extent such disclosure is necessary in connection with prosecuting or defending litigation as permitted by this Agreement; *provided*, that PROTIVA (i) informs MARINA as soon as reasonably practicable of the proposed disclosure; and (ii) shall use commercially reasonable efforts (but in no event less than the efforts used by PROTIVA with respect to confidential information derived from its other drug development and commercialization efforts) to limit the disclosure for the required purpose and to obtain protections to maintain the confidentiality of such MARINA Confidential Information.

(c) In addition, PROTIVA and its Affiliates and Sublicensees may disclose Confidential Information of MARINA to Third Parties (including Sublicensees and their Affiliates) as may be necessary or useful in connection with the development, manufacture or commercialization of Products; *provided*, that such Third Parties are bound in writing to maintain the confidentiality of such Confidential Information in a manner consistent with the confidentiality provisions of this Agreement.

(d) In the event the recipient Party is required to disclose Confidential Information of the disclosing Party by law or in connection with bona fide legal process, such disclosure shall not be a breach of this Agreement; *provided*, that the recipient Party (i) informs the disclosing Party as soon as reasonably practicable of the required disclosure; (ii) limits the disclosure to the required purpose; and (iii) at the disclosing Party's request and expense, assists in the disclosing Party's attempt to object to or limit the required disclosure.

(e) Notwithstanding anything to the contrary contained in this Article 8 or Article 11, MARINA shall be permitted to disclose a copy of this Agreement to:

(i) MARINA's current or prospective banks, financial institutions, investors or other Third Parties for the purpose of raising capital or borrowing money or maintaining compliance with agreements, arrangements and understandings relating thereto; and

(ii) to any Person who proposes to be an assignee or to purchase or otherwise succeed (by merger, operation of law or otherwise) to all of MARINA's right, title and interest in, to and under this Agreement, if (A) such Person agrees to maintain the confidentiality of this Agreement pursuant to a written agreement at least as protective as the terms set forth in this Article 8 (with the exception of the term of the obligation of confidentiality, which may be for a specified term of years) and (B) any such assignment, purchase or succession would be permitted under Section 13.1.

Article 9 TERM AND TERMINATION

9.1 Term.

The term of this Agreement, as to a particular PROTIVA Product in a particular country, shall expire (on a country-by-country basis) upon the earlier of:

(a) the expiration of the Royalty Term for such PROTIVA Product in such country; or

(b) the end of calendar quarter in which sales in such country of Generic Products exceed [**] (on a "per unit" basis) of the sales of the PROTIVA Product in such country.

Upon expiration of the Royalty Term with respect to a PROTIVA Product in a particular country, then the licenses granted in Section 2.1 for such PROTIVA Product in such country shall become fully paid up and irrevocable, and shall survive any expiration or termination of this Agreement. This Agreement shall expire in its entirety upon the expiration of the last Royalty Term for any MARINA Patent with respect to which PROTIVA has a license under this Agreement, unless earlier terminated pursuant to this Article 9.

9.2 Termination.

(a) Termination for Convenience. PROTIVA shall have the right to terminate this Agreement for convenience in its entirety, or in respect of any particular country or countries in the Territory, by giving ninety (90) days prior written notice to MARINA, *provided that* no such termination shall be effective sooner than the date that is nine (9) months after the Effective Date.

(b) Termination for Bankruptcy/Insolvency.

(i) A Party may immediately terminate this Agreement in its entirety, or in respect of any particular country or countries in the Territory, on written notice in the event (each, a "**Financial Event**") any of the following occurs with respect to the other Party (the "**Bankrupt Party**"):

(A) such Bankrupt Party files a petition in bankruptcy or makes a general assignment for the benefit of creditors or otherwise acknowledges in writing insolvency, or is adjudged bankrupt, and such Bankrupt Party (1) fails to assume this Agreement in any such bankruptcy proceeding within thirty (30) days after filing or (2) assumes and assigns this Agreement to a Third Party;

(B) such Bankrupt Party goes into or is placed in a process of complete liquidation;

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(C) a trustee or receiver is appointed for any substantial portion of such Bankrupt Party's business and such trustee or receiver is not discharged within sixty (60) days after appointment;

(D) any case or proceeding shall have been commenced or other action taken against such Bankrupt Party in bankruptcy or seeking liquidation, reorganization, dissolution, a winding-up arrangement, composition or readjustment of its debts or any other relief under any bankruptcy, insolvency, reorganization or similar act or law of any jurisdiction now or hereafter in effect and is not dismissed or converted into a voluntary proceeding governed by Subparagraph 9.2(b)(i)(A) within sixty (60) days after filing; or

(E) there shall have been issued a warrant of attachment, execution, distraint or similar process against any substantial part of the property of such Bankrupt Party and such event shall have continued for a period of sixty (60) days and none of the following has occurred: (1) it is dismissed, (2) it is bonded in a manner reasonably satisfactory to the other Party, or (3) it is discharged.

(ii) In the event MARINA:

(A) makes an assignment for the benefit of creditors, or petition or applies to any tribunal for the appointment of a custodian, receiver, or trustee for all or a substantial part of its assets;

(B) commences any proceeding under any bankruptcy, dissolution, or liquidation law or statute of any jurisdiction whether now or hereafter in effect;

(C) has any such petition or application filed or any such proceeding commenced against it in which an order for relief is entered or an adjudication or appointment is made, and which remains undismissed for a period of one hundred twenty (120) calendar days or more;

(D) takes any corporate action indicating its consent to, approval of, or acquiescence in any such petition, application, proceeding, or order for relief or the appointment of a custodian receiver, or trustee for all or substantial part of its assets; or

(E) permits any such custodianship, receivership, or trusteeship to continue undischarged for a period of one hundred twenty (120) calendar days or more;

(each, a "**Bankruptcy Action**") and the occurrence of any of the foregoing causes the applicable Party or any Third Party, including, without limitation, a trustee in bankruptcy, to be empowered under state or federal law to reject this Agreement or any Agreement supplementary hereto, then PROTIVA shall have the following rights:

(F) in the event of a rejection of this Agreement or any agreement supplementary hereto, PROTIVA shall be permitted to receive and use any

MARINA Technology within the scope of its license hereunder for the purpose of enabling it to mitigate damages caused to PROTIVA because of the rejection of this Agreement;

(G) in the event of a rejection of this Agreement or any Agreement supplementary hereto, PROTIVA may elect to retain its rights under this Agreement or any agreement supplementary hereto as provided in Section 365(n) of the United States Bankruptcy Code or comparable provision of the laws of any other country in the Territory. Upon PROTIVA's written request to MARINA or the bankruptcy trustee or receiver, MARINA or such bankruptcy trustee or receiver shall not interfere with the rights of PROTIVA as provided in this Agreement or in any agreement supplementary thereto;

(H) in the event of a rejection of this Agreement or any Agreement supplementary hereto, PROTIVA may elect to retain its rights under this Agreement or any agreement supplementary hereto as provided in Section 365(n) of the United States Bankruptcy Code or comparable provision of the laws of any other country in the Territory without prejudice to any of its rights of setoff and/or recoupment with respect to this Agreement under the Bankruptcy Code or applicable non-bankruptcy law; and

(I) in the event of a rejection of this Agreement or any Agreement supplementary hereto, PROTIVA may retain its rights under this Agreement or any agreement supplementary hereto as provided in Section 365(n) of the United States Bankruptcy Code or comparable provision of the laws of any other country in the Territory without prejudice to any of its rights under Section 503(b) of the United States Bankruptcy Code or comparable provision of the laws of any other country.

(iii) Notwithstanding anything to the contrary in this Subsection 9.2(b):

(A) any reorganization or arrangement involving MARINA, its Affiliates and/or its wholly owned subsidiaries which does not prejudice the rights of PROTIVA shall not constitute a Bankruptcy Action for the purposes of this Subsection 9.2(b) and shall not give rise to the remedies set forth in this Subsection 9.2(b); and

(B) if PROTIVA asserts any rights under Subparagraphs 9.2(b)(ii)(F), 9.2(b)(ii)(G), 9.2(b)(ii)(H) or 9.2(b)(ii)(I), PROTIVA shall continue to be bound by all liabilities and obligations imposed upon PROTIVA and its Affiliates and Sublicensees, and any remedies available to MARINA under this Agreement.

(c) Termination for PROTIVA Material Breach. Upon any material breach by PROTIVA under this Agreement, MARINA may notify PROTIVA in writing of such breach and require that PROTIVA cure such breach within a cure period not shorter than sixty (60) days after receipt of MARINA's notice for any default of a payment obligation under this Agreement, or one hundred and twenty (120) days after receipt of MARINA's notice for any other

material breach. In the event PROTIVA shall not have cured such breach by the end of the applicable cure period, MARINA may terminate this Agreement immediately upon written notice to PROTIVA. Notwithstanding the foregoing cure periods, non-payment of the Upfront Payment in accordance with Section 4.1 shall automatically and immediately terminate this Agreement.

(d) Termination for MARINA Material Breach. Upon any material breach by MARINA under this Agreement, PROTIVA may notify MARINA in writing of such breach and require that MARINA cure such breach within a cure period of one hundred and twenty (120) days after receipt of PROTIVA's notice. In the event MARINA shall not have cured such breach by the end of the cure period, then, at PROTIVA's sole option:

(i) the license granted by MARINA to PROTIVA shall automatically convert into a worldwide, royalty-free, fully paid-up, perpetual license; or

(ii) PROTIVA may terminate this Agreement in its entirety, or in respect of any particular country or countries in the Territory, immediately upon written notice to MARINA.

9.3 Effect of Termination.

(a) Upon termination of this Agreement in its entirety pursuant to this Article 9:

(i) all licenses granted hereunder to PROTIVA shall revert to MARINA;

(ii) all sublicenses granted by PROTIVA under the rights or licenses granted to PROTIVA under this Agreement shall survive such termination, *provided that* the applicable Sublicensees are not in material breach of such sublicense agreements, and shall become direct licenses with MARINA *except that* MARINA shall not have any obligations under any such sublicense agreements that are greater than the obligations of MARINA under this Agreement; and

(iii) PROTIVA (and its Affiliates) shall immediately cease all development and Commercialization of any PROTIVA Products that contain MARINA Know-How and/or are claimed by a Valid Claim, and shall return to MARINA all physical manifestations of the MARINA Technology and MARINA Confidential Information.

(b) Upon termination of this Agreement in any particular country in the Territory pursuant to this Article 9, this Agreement shall be amended so as to delete from the Territory, the country that is the subject of the termination.

9.4 Survival.

(a) Notwithstanding any expiration or termination of this Agreement, the provisions of Article 1; Sections 4.8, 4.9 and 4.10; Sections 6.1 and 6.3; Sections 7.1, 7.7, 7.8 and 7.9 and (as to Joint IP only) Sections 7.3, 7.4 and 7.5; Article 8; Article 9; Sections 10.1 and 10.2 (solely for purposes of indemnification from third party claims); Sections 10.3, 10.4(c), 10.5; Article 11; Article 12; Article 13, and any other provisions which by their nature are intended to survive any such expiration or termination shall survive any expiration or termination of this Agreement. Termination of this Agreement shall not relieve the Parties of any liability which accrued hereunder prior to the effective date of such termination nor preclude either Party from pursuing all rights and remedies it may have hereunder or at law or in equity with respect to any breach or default of this Agreement nor prejudice either Party's right to obtain performance of any obligation.

(b) Any sublicense contemplated in Section 2.2 shall survive termination of the licenses or other rights granted to PROTIVA under this Agreement and be assumed by MARINA as long as:

(i) the Sublicensee is not then in breach of its license and/or sublicense agreement;

(ii) the Sublicensee agrees in writing to be bound to MARINA as a licensor under the terms and conditions of the license and/or sublicense agreement; and

(iii) the Sublicensee agrees in writing that in no event shall MARINA assume any obligations or liabilities, or be under any obligation or requirement of performance, under any such license and/or sublicense extending beyond MARINA's obligations and liabilities under this Agreement.

Article 10 REPRESENTATIONS, WARRANTIES AND COVENANTS

10.1 Representations and Warranties by Each Party.

Each Party represents and warrants to the other as of the Effective Date that:

(a) it is a corporation duly organized, validly existing, and in good standing under the laws of its jurisdiction of formation;

(b) it has full corporate power and authority to execute, deliver, and perform this Agreement, and has taken all corporate action required by law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement;

(c) this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms;

(d) all consents, approvals and authorizations from all governmental authorities or other Third Parties required to be obtained by such Party in connection with the execution, delivery and performance of this Agreement have been obtained; and

(e) the execution and delivery of this Agreement and all other instruments and documents required to be executed pursuant to this Agreement, and the consummation of the transactions contemplated hereby do not (i) conflict with or result in a breach of any provision of its organizational documents, (ii) result in a breach of any agreement to which it is a party; or (iii) violate any law.

10.2 Representations and Warranties by MARINA.

MARINA represents and warrants to PROTIVA as of the Effective Date that:

(a) Exhibit A sets forth a complete and accurate list of all MARINA Patents;

(b) MARINA has obtained from all individuals who participated in any respect in the invention or authorship of any MARINA Technology effective assignments of all ownership rights of such individuals in such MARINA Technology, either pursuant to written agreement or by operation of law;

(c) All of MARINA'S employees, officers, and consultants have executed agreements or have existing obligations under applicable laws requiring assignment to MARINA of all inventions made during the course of and as the result of their association with MARINA and obligating the individual to maintain as confidential MARINA's Confidential Information as well as confidential information of other parties (including PROTIVA and its Affiliates, although they may not be specifically referenced by name) which such individual may receive, to the extent required to support MARINA's obligations under this Agreement;

(d) MARINA has all necessary legal rights and authority to grant the licenses and rights granted under this Agreement and has not assigned, transferred, conveyed or licensed its right, title and interest in the MARINA Technology in any manner inconsistent with such license grant or the other terms of this Agreement;

(e) MARINA has all necessary legal rights and authority to use and disclose and to enable PROTIVA to use and disclose (in each case under appropriate conditions of confidentiality) the MARINA Know-How;

(f) To MARINA'S knowledge, the issued Patents in the MARINA Patents are valid and enforceable without any claims, challenges, oppositions, interference or other proceedings pending or, to MARINA's knowledge, threatened and MARINA has filed and prosecuted Patent applications within the MARINA Patents in good faith and, to MARINA's knowledge, complied with all duties of disclosure with respect thereto;

(g) To MARINA's knowledge, MARINA has not committed any act, or omitted to commit any act, that may cause the MARINA Patents to expire prematurely or be declared invalid or unenforceable;

(h) All application, registration, maintenance and renewal fees in respect of the MARINA Patents as of the Effective Date have been paid and all necessary documents and certificates have been filed with the relevant agencies for the purpose of maintaining the MARINA Patents;

(i) To MARINA's knowledge, the practice of the MARINA Technology does not infringe Patents or misappropriate Know-How of any Third Party, nor has MARINA received any written notice alleging such infringement or misappropriation;

(j) MARINA has not initiated or been involved in any proceedings or claims in which it alleges that any Third Party is or was infringing the MARINA Patents or misappropriating any MARINA Know-How, nor have any such proceedings been threatened by MARINA, nor does MARINA know of any valid basis for any such proceedings;

(k) MARINA has taken all reasonable precautions to preserve the confidentiality of the MARINA Know-How;

(l) MARINA has not entered into a government funding relationship that would result in rights to any Products residing in the US Government, National Institutes of Health, National Institute for Drug Abuse or other agency, and the licenses granted hereunder are not subject to overriding obligations to the US Government as set forth in Public Law 96-517 (35 U.S.C. 200-204), as amended, or any similar obligations under the laws of any other country;

(m) Subject to Subsection 0, MARINA has not granted any Third Party rights that would otherwise interfere or be inconsistent with PROTIVA's rights hereunder, and there are no agreements or arrangements to which MARINA or any of its Affiliates is a party relating to the Products, MARINA Patents, MARINA Know-How or that would limit the rights granted to PROTIVA under this Agreement or that restrict or will result in a restriction on PROTIVA' ability to develop, manufacture, register, use or commercialize the Products in the Territory; and

(n) MARINA has not failed to disclose to PROTIVA any fact or circumstance known to MARINA and relating to any of the MARINA Technology that would be reasonably material to PROTIVA in determining to enter into this Agreement or the transactions contemplated herein.

10.3 Acknowledgements of PROTIVA.

PROTIVA acknowledges that MARINA has granted rights to practice certain MARINA Patents:

(a) to [**] solely in connection with the development and commercialization of a limited number of specified proprietary compounds belonging to [**]; and

(b) to [**] in connection with DNAi human therapeutic use.

DNAi does not include RNAi, antisense and microRNA oligonucleotides that base pair with mRNAs, microRNAs or pre-mRNAs to affect expression of a gene, directly or indirectly. The Parties agree that the foregoing grants do not interfere with, are not otherwise inconsistent with, and do not limit the rights granted to PROTIVA in Section 2.1.

10.4 Covenants of MARINA.

MARINA covenants and agrees that:

(a) it will not grant any interest in the MARINA Technology which is inconsistent with the terms and conditions of this Agreement;

(b) if, at any time after execution of this Agreement, it becomes aware that it or any employee, agent or subcontractor of MARINA who participated, or is participating, in the development of the MARINA Technology is on, or is being added to the FDA Debarment List, it will provide written notice of this to PROTIVA within two (2) Business Days of its becoming aware of this fact; and

(c) it shall maintain insurance with respect to its indemnification obligations under this Agreement in such amounts as are commercially reasonable in the industry for companies conducting similar business and shall require any of its Affiliates undertaking activities under this Agreement to do the same.

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10.5 No Other Warranties.

EXCEPT AS EXPRESSLY STATED IN THIS Article 10:

(a) NO OTHER REPRESENTATION, CONDITION OR WARRANTY WHATSOEVER IS MADE OR GIVEN BY OR ON BEHALF OF PROTIVA OR MARINA; AND

(b) ALL OTHER CONDITIONS AND WARRANTIES WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING ANY CONDITIONS AND WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

Article 11 INDEMNIFICATION; LIABILITY

11.1 Indemnification by MARINA.

MARINA shall defend, indemnify, and hold PROTIVA, its Affiliates, and their respective officers, directors, employees and agents, and all successors and assigns of any of the foregoing ("**PROTIVA Indemnitees**") harmless from and against any Claims against them to the extent arising or resulting from:

(a) the gross negligence or willful misconduct of MARINA or any of its Affiliates; or

(b) the breach of any of the covenants, representations or warranties made by MARINA to PROTIVA under this Agreement;

provided, *however*, that MARINA shall not be obliged to so indemnify, defend and hold harmless the PROTIVA Indemnitees for any Claims to the extent that PROTIVA has an obligation to indemnify MARINA Indemnitees pursuant to Section 11.2 or to the extent that such Claims arise from the breach, gross negligence or willful misconduct of PROTIVA or a PROTIVA Indemnitee.

11.2 Indemnification by PROTIVA.

PROTIVA shall defend, indemnify, and hold MARINA, its Affiliates, and their respective officers, directors, employees and agents, and all successors and assigns of any of the foregoing ("**MARINA Indemnitees**") harmless from and against any Claims against them to the extent arising or resulting from:

(a) the gross negligence or willful misconduct of PROTIVA or any of its Affiliates or Sublicensees;

(b) the breach of any of the covenants, representations or warranties made by PROTIVA to MARINA under this Agreement;

(c) the exercise or practice by PROTIVA, its Affiliates or Sublicensees of the license granted to PROTIVA under Section 2.1 (excluding any such Claim that alleges that the exercise or practice of the MARINA Technology infringes a Patent or misappropriates other Intellectual Property Rights of a Third Party); or

(d) the development, manufacture or commercialization of any PROTIVA Product by or for PROTIVA, its Affiliates or Sublicensees;

provided, *however*, that PROTIVA shall not be obliged to so indemnify, defend and hold harmless the MARINA Indemnitees for any Claims to the extent that MARINA has an obligation to indemnify PROTIVA Indemnitees pursuant to Section 11.1 or to the extent that such Claims arise from the breach, gross negligence or willful misconduct of MARINA or a MARINA Indemnitee.

11.3 Indemnification Procedure.

(a) For the avoidance of doubt, all indemnification claims in respect of a PROTIVA Indemnitee or MARINA Indemnitee shall be made solely by PROTIVA or MARINA, respectively, on behalf of the PROTIVA Indemnitee or MARINA Indemnitee, as the case may be.

(b) A Party seeking indemnification hereunder ("**Indemnified Party**") shall notify the other Party ("**Indemnifying Party**") in writing reasonably promptly after the assertion against the Indemnified Party of any Claim or fact in respect of which the Indemnified Party intends to base a claim for indemnification hereunder ("**Indemnification Claim Notice**"), but the failure or delay to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any obligation or liability that it may have to the Indemnified Party, except to the extent that the Indemnifying Party demonstrates that its ability to defend or resolve such Claim is adversely affected thereby. The Indemnification Claim Notice shall contain a description of the claim and the nature and amount of the Claim (to the extent that the nature and amount of such Claim is known at such time). Upon the request of the Indemnifying Party, the Indemnified Party shall furnish promptly to the Indemnifying Party copies of all correspondence, communications and official documents (including court documents) received or sent in respect of such Claim.

(c) Subject to the provisions of Subsection 11.3(d), the Indemnifying Party shall, within [**] after receipt of the Indemnification Claim Notice, advise the Indemnified Party whether it is assuming the defense and handling of such Claim, at the Indemnifying Party's sole expense. The assumption of the defense of a Claim by the Indemnifying Party shall not be construed as acknowledgement that the Indemnifying Party is liable to indemnify any indemnitee in respect of the Claim, nor shall it constitute a waiver by the Indemnifying Party of any defenses it may assert against any Indemnified Party's claim for indemnification. In the event that it is ultimately decided that the Indemnifying Party is not obligated to indemnify or hold an indemnitee harmless from and against the Claim, the Indemnified Party shall reimburse the Indemnifying Party for any and all reasonable costs and expenses (including attorneys' fees and costs of suit) incurred by the Indemnifying Party in its defense of the Claim.

(d) Upon assumption of the defense of a Claim by the Indemnifying Party:

(i) the Indemnifying Party shall have the right to and shall assume sole control and responsibility for dealing with the Claim;

(ii) the Indemnifying Party may, at its own cost, appoint as counsel in connection with conducting the defense and handling of such Claim any law firm or counsel reasonably selected by the Indemnifying Party and reasonably satisfactory to the Indemnified Party (such consent not to be unreasonably withheld or delayed);

(iii) the Indemnifying Party shall keep the Indemnified Party informed of the status of such Claim; and

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(iv) the Indemnifying Party shall have the right to settle the Claim on any terms the Indemnifying Party chooses;

provided, however, that it shall not, without the prior written consent of the Indemnified Party, agree to a settlement of any Claim which could lead to liability for or create any financial or other obligation or restriction on the Indemnified Party (or abrogate the license rights granted under this Agreement) for which the Indemnified Party is not entitled to indemnification hereunder or which admits any wrongdoing or responsibility for the Claim on behalf of the Indemnified Party. The Indemnified Party shall cooperate with the Indemnifying Party at the Indemnifying Party's expense. In particular, the Indemnified Party shall furnish such records, information and testimony, provide witnesses and attend such conferences, discovery proceedings, hearings, trials and appeals as may be reasonably requested in connection therewith; subject to the right of the Indemnified Party to obtain confidentiality protection in connection therewith consistent with the confidentiality provisions of this Agreement. Such cooperation shall include access during normal business hours by the Indemnifying Party to, and reasonable retention by the Indemnified Party of, records and information that are reasonably relevant to such Claim, and making the Indemnified Party, the PROTIVA Indemnitees or MARINA Indemnitees, as the case may be, and its and their employees and agents available on a mutually convenient basis to provide additional information and explanation of any records or information provided. The Indemnified Party shall be entitled to participate in, but not control, the defense of such Claim with its own counsel and at its own expense; *provided, however*, that if the litigants in any such action include both the Indemnified Party and the Indemnifying Party and legal counsel for the Indemnified Party shall have reasonably concluded in a written legal opinion delivered to the Indemnifying Party that, by reason of certain bona fide defenses available to the Indemnified Party which are different from or additional to those available to the Indemnifying Party, the interests of the Indemnified Party materially conflict with the interests of the Indemnifying Party such that it would be unethical under applicable rules relating to attorney conflicts of interest for the Indemnifying Party and such Indemnified Party to be represented by the same counsel with respect to such defense, the Indemnified Party shall have the right to select one separate counsel and to assert such legal defenses, with the reasonable expenses and fees of such separate counsel to be reimbursed by the Indemnifying Party as and when incurred.

(e) If the Indemnifying Party fails to assume or conduct the defense and handling of any Claim in good faith as provided Subsections 11.3(c) and 11.3(d), the Indemnified Party may, at the Indemnifying Party's expense, select counsel reasonably acceptable to the Indemnifying Party (such consent not to be unreasonably withheld or delayed) in connection with conducting the defense and handling of such Claim and defend or handle such Claim in such manner as it may deem appropriate; *provided*, that the foregoing shall not be construed as a limitation on the Indemnified Party's right to claim that the Indemnifying Party has breached its obligations pursuant to this Article 11. In such event, the Indemnified Party shall keep the Indemnifying Party timely apprised of the status of such Claim and the Indemnified Party shall have the right to settle the Claim on any terms the Indemnified Party chooses; *provided, however*, that the Indemnified Party shall not, without the prior written consent of the Indemnifying Party, agree to a settlement of any Claim which could lead to liability or create any financial or other

obligation on the part of the Indemnifying Party, other than its liability for indemnification of the Indemnified Party as provided in this Article 11, or which admits any wrongdoing or responsibility for the claim on behalf of the Indemnifying Party.

11.4 Mitigation of Loss.

Each Indemnified Party will take and will procure that its Affiliates take all such reasonable steps and action as are necessary or as the Indemnifying Party may reasonably require in order to mitigate any Claims (or potential losses or damages) under this Article 11. Nothing in this Agreement shall or shall be deemed to relieve any Party of any common law or other duty to mitigate any losses incurred by it.

11.5 Insurance.

PROTIVA shall, at its own expense, procure and maintain during the Term and for a period of [**] thereafter, insurance policy/policies, including product liability insurance, adequate to cover its obligations hereunder and which are consistent with normal business practices of prudent companies similarly situated.

11.6 Special, Indirect and Other Losses.

NEITHER PARTY NOR ANY OF ITS AFFILIATES SHALL BE LIABLE IN CONTRACT, TORT, NEGLIGENCE BREACH OF STATUTORY DUTY OR OTHERWISE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR PUNITIVE DAMAGES OR FOR ANY ECONOMIC LOSS OR LOSS OF PROFITS SUFFERED BY THE OTHER PARTY, EXCEPT TO THE EXTENT ANY SUCH DAMAGES ARE REQUIRED TO BE PAID TO A THIRD PARTY AS PART OF A CLAIM FOR WHICH A PARTY PROVIDES INDEMNIFICATION UNDER THIS Article 11.

11.7 No Exclusion.

Neither Party excludes any liability for death or personal bodily injury caused by its negligence or the negligence of its Affiliates or, in the case of PROTIVA, its Sublicensees, or their respective employees, agents or sub-contractors.

Article 12 PUBLICATIONS AND PUBLICITY

12.1 Publications.

For avoidance of doubt, PROTIVA or any of its Affiliates may, without any required consents from MARINA but subject to its confidentiality obligations under Article 8 with respect to the Confidential Information of MARINA:

(a) issue press releases and other public statements as it deems appropriate in connection with the development and commercialization of the Products under this Agreement; and

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(b) publish or have published information about clinical trials related to the Products, including the results of such clinical trials

12.2 Publicity

(a) Neither Party shall use the name, symbol, trademark, trade name or logo of the other Party or its Affiliates in any press release, publication or other form of public disclosure without the prior written consent of the other Party in each instance (such consent not to be unreasonably withheld or delayed), except for those disclosures for which consent has already been obtained. Notwithstanding the foregoing, PROTIVA shall be entitled, upon reasonable prior notice to MARINA, to use the name of MARINA to identify its licensor to the extent necessary or useful in connection with the development or commercialization of the Products, including in connection with sublicensing and subcontracting transactions.

(b) Subject to Subsection 12.2(c), each Party agrees not to issue any press release or other public statement, whether oral or written, disclosing the existence of this Agreement, the terms hereof or any information relating to this Agreement without the prior written consent of the other Party, which approval shall not be unreasonably withheld, conditioned or delayed; *provided, however*, that PROTIVA may issue press releases and other public statements as it deems appropriate in connection with the development and commercialization of Products under this Agreement and *provided further*, that the Parties approve the text of the press releases annexed as Exhibit B to this Agreement.

(c) Notwithstanding the foregoing, each Party may, without the prior approval of the other Party, make any disclosures required of it to comply with any duty of disclosure it may have pursuant to law or governmental regulation or pursuant to the rules of any recognized stock exchange. The Parties shall nevertheless use good faith efforts to coordinate with each other with respect to the timing, form and content of such required disclosure. If so requested by the other Party, the Party subject to such obligation shall use commercially reasonable efforts to obtain an order, agreement or other governmental or Third Party action protecting to the maximum extent possible the confidentiality of such provisions of this Agreement as reasonably requested by the other Party. Unless the Parties otherwise agree, such disclosure shall be limited to the minimum required as determined by the disclosing Party in consultation with its legal counsel. Without limiting the foregoing, each Party shall consult with the other Party on the provisions of this Agreement, together with exhibits or other attachments attached hereto, to be redacted in any filings made by MARINA or PROTIVA with the Securities and Exchange Commission (or other regulatory body) or as otherwise required by law.

Article 13 GENERAL PROVISIONS

13.1 Assignment.

Neither Party may assign its rights and obligations under this Agreement without the other Party's prior written consent, except that:

(a) a Party may assign its rights and obligations under this Agreement or any part hereof to one or more of its Affiliates without the consent of the other Party; and

(b) either Party may assign this Agreement in its entirety to a successor to all or substantially all of its business or assets to which this Agreement relates.

The assigning Party shall provide the other Party with prompt written notice of any such assignment pursuant to Subsection 13.1(b). Any permitted assignee shall assume all obligations of its assignor under this Agreement (or related to the assigned portion in case of a partial assignment to an Affiliate), and no permitted assignment shall relieve the assignor of liability hereunder. Any attempted assignment in contravention of the foregoing shall be void. Subject to the terms of this Agreement, this Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns.

13.2 Extension to Affiliates; Subcontractors.

PROTIVA shall have the right to extend the rights, immunities and obligations granted in this Agreement to one or more of its Affiliates. All applicable terms and provisions of this Agreement shall apply to any such Affiliate to which this Agreement has been extended to the same extent as such terms and provisions apply to PROTIVA. PROTIVA shall remain primarily liable for any acts or omissions of its Affiliates. In addition, PROTIVA may subcontract to Third Parties the performance of any tasks and obligations relating to its exercise of the license and other rights under this Agreement as PROTIVA deems appropriate, subject to its confidentiality obligations pursuant to Article 8.

13.3 Severability.

Should one or more of the provisions of this Agreement become void or unenforceable as a matter of law, then this Agreement shall be construed as if such provision were not contained herein and the remainder of this Agreement shall be in full force and effect, and the Parties will use their commercially reasonable efforts to substitute for the invalid or unenforceable provision a valid and enforceable provision which conforms as nearly as possible with the original intent of the Parties.

13.4 Governing Law and Jurisdiction.

This Agreement shall be governed by and construed under the laws of New York, without giving effect to the conflicts of laws provision thereof. Any disputes between the Parties relating to this Agreement shall be subject to the exclusive jurisdiction and venue of the federal courts located in the Southern District of New York (without restricting any right of appeal), and the Parties hereby waive any objection which they may have now or hereafter to the laying of venue of any proceedings in such courts and to any claim that such proceedings have been brought in an inconvenient forum, and further agree that a judgment or order in any such proceedings shall be binding upon each of them and may be enforced in the courts of any other jurisdiction.

13.5 Force Majeure.

Neither Party shall be responsible to the other for any failure or delay in performing any of its obligations under this Agreement or for other nonperformance hereunder if such delay or nonperformance is caused by strike, stoppage of labor, lockout or other labor trouble, fire, flood, accident, war, act of terrorism, act of God or of the government of any country or of any local government, or by other cause unavoidable or beyond the reasonable control of any Party hereto.

13.6 Waivers and Amendments.

The failure of any Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other Party. No waiver shall be effective unless it has been given in writing and signed by the Party giving such waiver. No provision of this Agreement may be amended or modified other than by a written document signed by authorized representatives of each Party.

13.7 Relationship of the Parties.

Nothing contained in this Agreement shall be deemed to constitute a partnership, joint venture, or legal entity of any type between MARINA and PROTIVA, or to constitute one as the agent of the other. Moreover, each Party agrees not to construe this Agreement, or any of the transactions contemplated hereby, as a partnership for any tax purposes. Each Party shall act solely as an independent contractor, and nothing in this Agreement shall be construed to give any Party the power or authority to act for, bind, or commit the other.

13.8 Notices.

All notices, consents, waivers, and other communications under this Agreement must be in writing and will be deemed to have been duly given when: (a) delivered by hand (with written confirmation of receipt); (b) sent by fax (with written confirmation of receipt), *provided*, that a copy is immediately sent by an internationally recognized overnight delivery service (receipt requested); or (c) when received by the addressee, if sent by an internationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses and fax numbers set forth below (or to such other addresses and fax numbers as a Party may designate by notice):

If to MARINA:

MARINA Biotech, Inc.
PO Box 1599
Bothell, Washington
USA 98041

Attn: Mr. J. Michael French
President and CEO

Fax: (206) 830-9424

If to PROTIVA:

PROTIVA Biotherapeutics Inc.
100 - 8900 Glenlyon Parkway
Burnaby, British Columbia
Canada V5J 5J8

Attn: Dr. Mark Murray
President & CEO

Fax: (604) 419-3201

13.9 Further Assurances.

PROTIVA and MARINA hereby covenant and agree without the necessity of any further consideration, to execute, acknowledge and deliver any and all such other documents and take any such other action as may be reasonably necessary to carry out the intent and purposes of this Agreement.

13.10 Compliance with Law.

Each Party shall perform its obligations under this Agreement in accordance with all applicable laws. No Party shall, or shall be required to, undertake any activity under or in connection with this Agreement which violates, or which it believes, in good faith, may violate, any applicable law.

13.11 No Third Party Beneficiary Rights.

The provisions of this Agreement are for the sole benefit of the Parties and their successors and permitted assigns, and they shall not be construed as conferring any rights to any Third Party (including any third party beneficiary rights).

13.12 English Language.

This Agreement is written and executed in the English language. Any translation into any other language shall not be an official version of this Agreement and in the event of any conflict in interpretation between the English version and such translation, the English version shall prevail.

13.13 Expenses.

Except as otherwise expressly provided in this Agreement, each Party shall pay the fees and expenses of its respective lawyers and other experts and all other expenses and costs incurred by such Party incidental to the negotiation, preparation, execution and delivery of this Agreement.

13.14 Entire Agreement.

This Agreement, together with its Exhibits, sets forth the entire agreement and understanding of the Parties as to the subject matter hereof and supersedes all proposals, oral or written, and all other prior communications between the Parties, with respect to such subject matter. In the event of any conflict between a substantive provision of this Agreement and any Exhibit hereto, the substantive provisions of this Agreement shall prevail.

13.15 Cumulative Remedies.

No remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

13.16 Counterparts.

This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may be executed by the Parties and transmitted by facsimile or other form of electronic transmission and if so executed and transmitted shall be for all purposes as effective as if the Parties had delivered an executed original agreement.

IN WITNESS WHEREOF, the Parties intending to be bound have caused this Agreement to be executed by their duly authorized representatives.

PROTIVA BIOTHERAPEUTICS INC.

By:	"*signed*"
Name:	Paul Brennan
Title:	SVP Business Development

MARINA BIOTECH, INC.

By:	"*signed*"
Name:	J. Michael French
Title:	President & CEO

EXHIBIT A
LIST OF CERTAIN MARINA PATENTS

CONFIDENTIAL

[**]

[**] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

EXHIBIT B
PRESS RELEASES

Tekmira Acquires Worldwide License to Novel RNAi Technology
Tekmira and Marina Biotech Enter into License Agreement for UNA Technology

November 28, 2012

Vancouver, BC — Tekmira Pharmaceuticals Corporation (Nasdaq: TKMR, TSX: TKM), a leading developer of RNA interference (RNAi) therapeutics, announced today that it will obtain a worldwide, non-exclusive license to a novel RNAi payload technology called Unlocked Nucleobase Analog (UNA) from Marina Biotech, Inc. (OTCQX:MRNA) for the development of RNAi therapeutics.

UNA technology can be used in the development of RNAi therapeutics, which treat disease by silencing specific disease causing genes. UNAs can be incorporated into RNAi drugs and have the potential to improve them by increasing their stability and reducing off-target effects.

“Our license to Marina’s UNA technology expands and diversifies our foundation of technologies that enable us to develop RNAi therapeutics. With Tekmira’s leading LNP delivery technology, a strong balance sheet, and access to multiple RNAi payload technologies, we are well positioned to aggressively advance multiple products into human clinical trials,” said Dr. Mark J. Murray, Tekmira’s President and CEO.

“We intend to leverage our expertise in LNP delivery and our broad understanding of therapeutic RNA payload design to optimize the use of UNA in our development pipeline, as well as provide pharmaceutical partners the opportunity to license UNAs combined with our LNP delivery technology to develop RNAi therapeutics,” added Dr. Murray.

Under the license agreement, Tekmira will receive a worldwide, non-exclusive rights to MARINA Biotech’s UNA technology for the development of RNAi therapeutic products, and MARINA will receive an upfront payment plus milestone and royalty payments on products developed by Tekmira that use UNA technology. Financial terms of the license agreement were not disclosed.

Unlocked Nucleobase Analogs (UNA) are acyclic ribonucleoside analogs in which the bond between C2’ and C3’ atoms is broken. This change in sugar structure renders this nucleoside analog very flexible. This characteristic is in contrast to the widely used locked nucleosides that lock the sugar conformation by a bridged bond between C2’ and C4’ atoms. The flexible nature of UNA reduces the binding affinity between two strands of an RNAi drug and gives unique characteristics to its genes silencing abilities. MARINA Biotech has demonstrated that UNA has the potential to improve RNAi therapeutics by increasing stability and reducing sense and antisense mediated off-target effects while retaining potency.

About RNAi and Tekmira’s LNP

RNAi therapeutics have the potential to treat a broad number of human diseases by “silencing” disease causing genes. The discoverers of RNAi, a gene silencing mechanism used by all cells, were awarded the 2006 Nobel Prize for Physiology or Medicine. RNAi therapeutics, such as “siRNAs,” require delivery technology to be effective systemically. Tekmira believes its LNP technology represents the most widely adopted delivery technology for the systemic delivery of RNAi therapeutics. Tekmira’s LNP platform is being utilized in multiple clinical trials by both Tekmira and its partners. Tekmira’s LNP technology (formerly referred to as stable nucleic acid-lipid particles or SNALP) encapsulates siRNAs with high

efficiency in uniform lipid nanoparticles that are effective in delivering RNAi therapeutics to disease sites in numerous preclinical models. Tekmira's LNP formulations are manufactured by a proprietary method which is robust, scalable and highly reproducible, and LNP-based products have been reviewed by multiple FDA divisions for use in clinical trials. LNP formulations comprise several lipid components that can be adjusted to suit the specific application.

About Tekmira

Tekmira Pharmaceuticals Corporation is a biopharmaceutical company focused on advancing novel RNAi therapeutics and providing its leading lipid nanoparticle delivery technology to pharmaceutical partners. Tekmira has been working in the field of nucleic acid delivery for over a decade and has broad intellectual property covering LNPs. Further information about Tekmira can be found at www.tekmirapharm.com. Tekmira is based in Vancouver, B.C.

Forward-Looking Statements and Information

This news release contains "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws (collectively, "forward-looking statements"). Forward-looking statements are generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "budgets," "could," "estimates," "expects," "forecasts," "projects," and similar expressions, and the negative of such expressions. Forward-looking statements in this news release include statements about a worldwide non-exclusive license to UNA technology from Marina Biotech, Inc.; the potential of UNA technology to improve siRNA; the use of UNA technology by Tekmira; the use of UNA technology to lead to future development of RNAi (ribonucleic acid interference) therapeutic products; providing pharmaceutical partners the opportunity to license UNAs combined with Tekmira's LNP delivery technology to develop RNAi therapeutics; delivery of upfront payment plus milestone and royalty payments on products developed by Tekmira that use UNA technology; UNAs potential to improve siRNA therapeutics; Tekmira's aggressive advancement of multiple products into human clinical trials; Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi product development programs; and expectations regarding the expansion of Tekmira's product pipeline.

With respect to the forward-looking statements contained in this news release, Tekmira has made numerous assumptions regarding, among other things: LNP's status as a leading RNAi delivery technology; Tekmira's research and development capabilities and resources; UNA's compatibility with Tekmira's existing LNP technology platform and other technologies; the potential for UNA technology to lower the potential for off-target effects and increase the specificity of the guide strand; and the opportunity to develop product candidates using UNA technology. While Tekmira considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Additionally, there are known and unknown risk factors which could cause Tekmira's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, among others: the possibility that UNA technology does not improve siRNA; the possibility that UNA is not compatible with Tekmira's LNP technology and does not result in additional product candidates being developed by Tekmira; the possibility that pharmaceutical companies will not license UNAs combined with Tekmira's LNP delivery technology to develop RNAi therapeutics; the possibility that other organizations have made advancements in RNAi delivery and payload technology that Tekmira is not aware of; and the possibility that Tekmira may not advance any further product candidates or expand its product pipeline.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's annual report on Form 20-F for the year ended December 31, 2011 (Annual Report), which is available at www.sedar.com or at www.sec.gov/edgar.shtml. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

Contact Information

Investors
Jodi Regts
Director, Investor Relations
Phone: 604-419-3234
Email: jregts@tekmirapharm.com

Media
David Ryan
Longview Communications Inc.
Phone: 416-669-7906
Email: dryan@longviewcomms.ca

Marina Biotech Announces Worldwide Non-Exclusive Licensing Agreement for Nucleic Acid Chemistry to Tekmira Pharmaceuticals

Bothell, WA, November 28, 2012 – Marina Biotech, Inc. (OTCQX:MRNA), a leading oligonucleotide-based drug discovery and development company, announced today that it has entered into a license agreement with Tekmira Pharmaceuticals Corporation (Nasdaq: TKMR, TSX: TKM), where Marina will provide Tekmira a worldwide, non-exclusive license to Marina Biotech's Unlocked Nucleobase Analog (UNA) technology for the development of RNA interference therapeutics. Tekmira will have full responsibility for the development and commercialization of any products arising under the Agreement. Under terms of the Agreement, Marina Biotech will receive an upfront payment plus milestone and royalty payments on products developed by Tekmira that use UNA technology. Further terms of the Agreement were not disclosed.

"We are pleased to enter into this agreement with Tekmira, a leader in the development of RNAi-based therapeutics," stated J. Michael French, President and Chief Executive Officer of Marina Biotech. "Marina Biotech's UNA technology is quite novel. Besides providing drug-like properties to an RNAi drug, UNAs also eliminate passenger strand activity as well as reduce guide strand mediated microRNA-like off-target activity. The result is that UNAs are able to significantly increase target specificity of an RNAi compound to its gene target. We look forward to a continued relationship with the great team at Tekmira."

About Unlocked Nucleobase Analogs

Unlocked Nucleobase Analogs (UNA) are acyclic ribonucleoside analogs in which the bond between C2' and C3' atoms is broken. This change in sugar structure renders this nucleoside analog very flexible. This characteristic is in sharp contrast to the widely used locked nucleosides that lock the sugar conformation by a bridged bond between C2' and C4' atoms. The flexible nature of UNA reduces the binding affinity between two strands of an RNAi drug and gives unique characteristics to its genes silencing abilities. Marina Biotech has demonstrated that UNA has the potential to improve RNAi therapeutics by increasing stability and reducing sense and antisense mediated off-target effects while retaining potency.

About Marina Biotech, Inc.

Marina Biotech is a biotechnology company focused on the development and commercialization of oligonucleotide-based therapeutics utilizing multiple mechanisms of action including RNA interference (RNAi) and messenger RNA translational blocking. The Marina Biotech pipeline currently includes a clinical program in Familial Adenomatous Polyposis (a precancerous syndrome) and two preclinical programs — in bladder cancer and myotonic dystrophy. Marina Biotech has entered into an agreement with both Mirna Therapeutics and ProNAi Therapeutics to license Marina Biotech's SMARTICLES® technology for the delivery of microRNA mimics and DNAi, respectively. In addition, Marina Biotech announced exclusive licensing agreements with Monsanto Company for Marina Biotech's delivery and chemistry technologies and with Girindus America for the supply of CRN-based oligonucleotides. Marina Biotech recently entered into a non-exclusive agreement with Novartis Institutes for Biomedical Research to license Marina Biotech's CRN technology for development of nucleic acid-based therapeutics. Marina Biotech's goal is to improve human health through the development of RNAi- and oligonucleotide-based compounds and drug delivery technologies that together provide superior therapeutic options for patients. Additional information about Marina Biotech is available at http://www.marinabio.com.

Forward-Looking Statements

Statements made in this news release may be forward-looking statements within the meaning of Federal Securities laws that are subject to certain risks and uncertainties and involve factors that may cause actual results to differ materially from those projected or suggested. Factors that could cause actual results to differ materially from those in forward-looking statements include, but are not limited to: (i) the ability of Marina Biotech to obtain additional and substantial funding in the immediate future; (ii) the ability of Marina Biotech to attract and/or maintain research, development, commercialization and manufacturing partners; (iii) the ability of Marina Biotech and/or a partner to successfully complete product research and development, including preclinical and clinical studies and commercialization; (iv) the ability of Marina Biotech and/or a partner to obtain required governmental approvals; and (v) the ability of Marina Biotech and/or a partner to develop and commercialize products prior to, and that can compete favorably with those of, competitors. Additional factors that could cause actual results to differ materially from those projected or suggested in any forward-looking statements are contained in Marina Biotech's most recent periodic reports on Form 10-K and Form 10-Q that are filed with the Securities and Exchange Commission. Marina Biotech assumes no obligation to update and supplement forward-looking statements because of subsequent events.

Contact:

Michael French
Chief Executive Officer
(425) 892-4322
admin@marinabio.com

Exhibit 4.29

EMPLOYMENT AGREEMENT

THIS AGREEMENT made the 1st day of March, 2013

BETWEEN:

TEKMIRA PHARMACEUTICALS CORPORATION, a company incorporated under the laws of British Columbia (the "**Company**"), with offices at 100 – 8900 Glenlyon Parkway, Burnaby, British Columbia fax: (604) 419-3201

AND:

DIANE GARDINER (the "**Executive**"), of
Surrey, British Columbia

WHEREAS:

A. The Company is in the business of acquiring, inventing, developing, discovering, adapting and commercializing inventions, methods, processes and products in the fields of chemistry, biochemistry, biotechnology and pharmaceuticals;

B. The Executive has the expertise, qualifications and required certifications to perform the services contemplated by this Agreement; and

C. The Company wishes to employ the Executive to perform the services, on the terms and conditions herein set forth, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

NOW THEREFORE THIS AGREEMENT WITNESSES that the parties hereto agree as follows:

1. EMPLOYMENT

(a) The Executive will be employed by and will serve the Company as its Vice President, Human Resources. The Executive will report directly to the Chief Executive Officer of the Company and will perform the duties and responsibilities assigned to her from time to time by the Chief Executive Officer. The Executive will comply with all lawful instructions given by the Chief Executive Officer of the Company.

(b) The terms and conditions of this Agreement will have effect as and from March 1, 2013 and the Executive's employment as Vice President, Human Resources will continue until terminated as provided for in this Agreement.

(c) The Executive acknowledges and agrees that in addition to the terms and conditions of this Agreement, her employment with the Company is subject to and governed by the Company's policies as established from time to time. The Executive agrees to comply with the terms of such policies so long as they are not inconsistent with any provisions of the Agreement. The Executive will inform herself of the details of such policies and amendments thereto established from time to time.

(d) The Executive agrees that, as a high technology professional as defined in the Regulations to the *Employment Standards Act* of British Columbia, and an executive, her hours of work will vary and may be irregular and will be those hours required to meet the objectives of her employment. The Executive agrees that the compensation described in Section 2 of this Agreement compensates her in full for all hours worked.

(e) The Executive will devote herself exclusively to the Company's business and will not be employed or engaged in any capacity in any other business without the prior permission of the Company, such permission not to be unreasonably withheld.

(f) Concurrently with the execution and delivery of this Agreement and in consideration of her employment by the Company, the Executive and the Company will enter into a "Confidentiality Agreement and Assignment of Inventions" in the form attached hereto as Appendix A.

2. REMUNERATION AND BENEFITS

(a) The Company will pay the Executive an annual salary of $160,000.00 (Canadian funds), less required deductions (the "**Base Salary**"). The Base Salary will be payable semi-monthly.

(b) The Base Salary will be reviewed on an annual basis. This review will not result in a decrease in the Base Salary nor will it necessarily result in an increase to the Base Salary.

(c) The Executive will be eligible for an annual cash bonus of up to 20 percent of the Base Salary, if the Chief Executive Officer and the Board of Directors in their discretion determine that the Executive has achieved the performance objectives agreed to between the Executive and the Chief Executive Officer. Any bonus payable during the first year of the Executive's employment will be pro-rated.

(d) The Company will facilitate the Executive's enrolment in the Company's insurance benefits plans, as amended from time to time. In all cases, eligibility to participate in the plans and to receive benefits under the plans will be subject to the terms and requirements of the plans themselves and/or the insurance provider. The Company is not responsible for the payment of benefits in any circumstance. Further, the Company reserves the right to change any of the insurance benefit

plans or providers, however, if the Company is unable to maintain similar coverage as to the insurance benefits plans or the providers, then the Executive will be provided with compensation to assist in securing her own coverage, such compensation to be determined by the Company.

(e) The Executive will be eligible for participation in the Company's share incentive plan, subject to the terms of the plan.

(f) The Company will reimburse the Executive for all reasonable expenses actually and properly incurred by the Executive in connection with the performance of her duties. The Executive will provide the Company with receipts supporting her claims for reimbursement.

3. VACATION

The Executive will be entitled to an annual paid vacation of four (4) weeks, to be scheduled at times that are mutually acceptable to the Executive and the Company.

4. NON-COMPETITION AND NON-SOLICITATION

(a) The biotechnology industry is highly competitive and employees leaving the employ of the Company have the ability to cause significant damage to the Company's interests if they join a competing business immediately upon leaving the Company.

(b) Definitions:

(i) "**Business**" or "**Business of the Company**" means:

(A) the researching, developing, production and marketing of RNA interference drugs and delivery technology, as such business grows and evolves during this Agreement; and

(B) any other material business carried on from time to time by the Company or any subsidiary or affiliate of the Company.

(ii) "**Competing Business**" means any endeavour, activity or business which is competitive in any material way with the Business of the Company worldwide.

(iii) "**Customer**" means any entity that is a customer of the Company that the Executive has been directly or indirectly, through her reports, involved in servicing on behalf of the Company.

(iv) "**Prospective Customer**" means any entity during the course of her employment that was solicited by the Executive on behalf of the Company for the purposes of becoming a customer of the Company or whom she knows was solicited by the Company for the purpose of becoming a customer of the Company.

(c) The Executive shall not, during the term of this Agreement and for the Restricted Period (as defined below) following the termination of her employment for any reason, on her own behalf or on behalf of any entity, whether directly or indirectly, in any capacity whatsoever, alone, through or in connection with any entity, carry on or be employed by or engaged in or have any financial or other interest in or be otherwise commercially involved in a Competing Business. In this Agreement, "**Restricted Period**" means: (i) in the event that the Executive is terminated pursuant to Section 6(b) of this Employment Agreement, a period equivalent to the amount of notice that the Executive is entitled pursuant to Section 6(b)(ii); or (ii) in the event that the Executive's employment is terminated pursuant to a Change of Control (as defined below), a period of twelve (12) months.

(d) The Executive shall, however, not be in default of Section 4(c) by virtue of the Executive:

(i) following the termination of employment, holding, strictly for portfolio purposes and as a passive investor, no more than five percent (5%) of the issued and outstanding shares of, or any other interest in, any corporation or other entity that is a Competing Business; or

(ii) during the course of employment, holding, strictly for portfolio purposes and as a passive investor, no more than five percent (5%) of the issued and outstanding shares of, or any other interest in, any corporation or other entity, the business of which corporation or other entity is in the same Business as the Company, and provided further that the Executive first obtains the Company's written consent, which consent will not be unreasonably withheld.

(e) If the Executive holds issued and outstanding shares or any other interest in a corporation or other entity pursuant to Section 4(d)(ii) and following the acquisition of such shares or other interest the business of the corporation or other entity becomes a Competing Business, the Executive will promptly dispose of her shares or other interest in such corporation or other entity.

(f) The Executive shall not, during this Agreement and for the Restricted Period following the termination of her employment, for whatever reason, on her own behalf or on behalf of or in connection with any other entity, without the prior written and informed consent of the Company, directly or indirectly, in any capacity whatsoever, alone, through or in connection with any entity:

(i) canvass or solicit the business of (or procure or assist the canvassing or soliciting of the business of) any Customer or Prospective Customer of the Company, or otherwise solicit, induce or encourage any Customer or Prospective Customer of the Company to cease to engage the services of the Company, for any purpose which is competitive with the Business; or

(ii) accept (or procure or assist the acceptance of) any business from any Customer or Prospective Customer of the Company which business is competitive with the Business; or

(iii) supply (or procure or assist the supply of) any goods or services to any Customer or Prospective Customer of the Company for any purpose which is competitive with the Business; or

(iv) employ, engage, offer employment or engagement to or solicit the employment or engagement of or otherwise entice away from or solicit, induce or encourage to leave the employment or engagement of the Company, any individual who is employed or engaged by the Company whether or not such individual would commit any breach of her contract or terms of employment or engagement by leaving the employ or the engagement of the Company; or

(v) procure or assist any entity to employ, engage, offer employment or engagement or solicit the employment or engagement of any individual who is employed or engaged by the Company or otherwise entice away from the employment or engagement of the Company any such individual. Notwithstanding the foregoing, the Executive shall, be permitted to, solely in a personal capacity, provide letters of reference for individuals who are employed by the Company.

(g) The Executive expressly recognizes and acknowledges that it is the intent of the parties that her activities following the termination of her employment with the Company be restricted in the manner described in this Agreement, and acknowledges that good, valuable, and sufficient consideration has been provided in exchange for such restrictions.

5. INJUNCTIVE RELIEF

(a) The Executive understands and agrees that the Company has a material interest in preserving the relationships it has developed with its executives, customers and suppliers against impairment by competitive activities of a former executive. Accordingly, the Executive agrees that the restrictions and covenants contained in Section 4 are reasonably required for the protection of the Company and its goodwill and that the Executive's agreement to those restrictions and covenants by the execution of this Agreement, are of the essence to this Agreement and constitute a material inducement to the Company to enter into this Agreement and to employ the Executive, and that the Company would not enter into this Agreement absent such an inducement.

(b) The Executive understands and acknowledges that if the Executive breaches Section 4, that breach will give rise to irreparable injury to the Company for which damages are an inadequate remedy, and the Company may pursue injunctive relief for such breach in a court of competent jurisdiction.

6. TERMINATION

(a) The Executive may terminate her employment by giving at least three (3) months' advance notice in writing to the Company of the effective date of the resignation. The Company may waive such notice, in whole or in part, and if it does so, the Executive's resignation will become effective and her employment will cease on the date set by the Company in the notice of waiver.

(b) The Company may terminate the Executive's employment:

(i) without notice or payment in lieu thereof, for just cause, which for the purposes of this Agreement will be defined to include but not be limited to the Executive's willful and continued failure to perform her duties hereunder and the Executive's willful engagement in conduct that is injurious to the Company, monetarily or otherwise; or

(ii) at the Company's sole discretion for any reason, without cause, upon providing to the Executive an amount equal to six (6) months' Base Salary, (the "**Severance Amount**"), plus one additional month of Base Salary for each complete year of service with the Company, to a total maximum Severance Amount of twelve (12) months' Base Salary. The Company may pay the Severance Amount by way of a lump sum payment or by way of salary continuance. The Severance Amount is inclusive of any entitlement to minimum standard severance under the *B.C. Employment Standards Act*.

(c) In this Agreement, "**Change of Control**" means the first occurrence of any one of:

(i) the acquisition or continuing ownership by any person or persons acting jointly or in concert (as such phrase is defined in the *Securities Act* (British Columbia)), directly or indirectly, of common shares or of convertible securities, which, when added to all other securities of the Company at the time held by such person or persons, or persons associated or affiliated with such person or persons within the meaning of the *Business Corporations Act* (British Columbia) (collectively, the "**Acquirors**"), and assuming the conversion, exchange or exercise of convertible securities beneficially owned by the Acquirors, results in the Acquirors beneficially owning shares that would, notwithstanding any agreement to the contrary, entitle the holders thereof for the first time to cast more than 50% of the votes attaching to all shares in the capital of the Company that may be cast to elect directors;

(ii) the sale, lease or exchange or other disposition of all or substantially all of the Company's assets;

(iii) an amalgamation, merger, arrangement or other business combination (a "**Business Combination**") involving the Company that results in the security holders of the parties to the Business Combination, other than the Company, owning, directly or indirectly, shares of the continuing entity that entitle the holders thereof to cast more than 50% of the votes attaching to all shares in the capital of the continuing entity that may be cast to elect directors; or

(iv) the Company's Board of Directors, by resolution, determines that a Change of Control of the Company has occurred."

(d) If a Change of Control occurs and within twelve (12) months after the occurrence of a Change of Control, the Executive resigns her employment for Good Reason upon giving the Company not less than three (3) months' prior written notice of resignation; or at the Company's sole discretion, the Executive is terminated without cause within twelve (12) months after a Change of Control, the Executive will be entitled to receive the Change of Control Severance Amount (as defined below). In this Agreement, "**Good Reason**" means one or more of the following events occurring without the Executive's written consent:

(i) a fundamental change in the Executive's status, position, remuneration, authority or responsibilities that does not represent a promotion from or represents an adverse change from the status, position, authority or responsibilities in effect immediately prior to the Change of Control;

(ii) a fundamental reduction in the Base Salary or retirement plans, health benefits, bonus potential or other compensation plans, practices, policies or programs provided to the Executive immediately prior to the Change of Control;

(iii) relocation of the Executive's principal place of employment to a place outside of Metro Vancouver;

(iv) any request by the Company that the Executive participate in an unlawful act pursuant to the laws of British Columbia or Canada; or

(v) any failure to secure the agreement of any successor company or other entity to the Company to fully assume the Company's obligations under this Agreement.

(e) In this Agreement, the "**Change of Control Severance Amount**" means an amount calculated as follows:

(i) an amount equal to twelve (12) month's Base Salary; plus

(ii) a bonus payment equal to the average of the actual bonus payments made to the Executive from the previous three (3) calendar years preceding the date of termination of employment.

(f) No matter how the Executive's employment is terminated, the Executive will be entitled to any wages and bonus payable for service up to and including the day of termination.

7. RETURN OF MATERIALS UPON TERMINATION OF EMPLOYMENT

The Executive will return to the Company all Company documents, files, manuals, books, software, equipment, keys, equipment, identification or credit cards, and all other property belonging to Company upon the termination of her employment with the Company for any reason.

8. GENERAL PROVISIONS

(a) **Non-Waiver.** Failure on the part of either party to complain of any act or failure to act of the other of them or to declare the other party in default of this Agreement, irrespective of how long such failure continues, will not constitute a waiver by such party of their rights hereunder or of the right to then or subsequently declare a default.

(b) **Severability.** In the event that any provision or part of this Agreement is determined to be void or unenforceable in whole or in part, the remaining provisions, or parts thereof, will be and remain in full force and effect.

(c) **Entire Agreement.** This Agreement constitutes the entire agreement between the parties with respect to the employment of the Executive and supersedes any and all agreements, understandings, warranties or representations of any kind, written or oral, express or implied, including any relating to the nature of the position or its duration, and each of the parties releases and forever discharges the other of and from all manner of actions, causes of action, claim or demands whatsoever under or in respect of any agreement.

(d) **Survival.** The provisions of Sections 1(g), 4 and 8(f) will survive the termination of this Agreement.

(e) **Modification of Agreement.** Any modification of this Agreement must be in writing and signed by both the Company and the Executive or it will have no effect and will be void.

(f) **Disputes.** Except for disputes arising in respect of Section 4, all disputes arising out of or in connection with this Agreement and the employment relationship between the parties, are to be referred to and finally resolved by arbitration administered by the British Columbia International Commercial Arbitration Centre, pursuant to its Rules. The place of arbitration will be Vancouver, British Columbia.

(g) **Governing Law.** This Agreement will be governed by and construed according to the laws of the Province of British Columbia.

(h) **Reimbursement of Legal Fees.** The Company will reimburse the Executive for all reasonable and receipted legal fees incurred by the Executive in the negotiation, drafting, and completion of this Agreement.

(i) **Independent Legal Advice.** The Executive agrees that the contents, terms and effect of this Agreement have been explained to her by a lawyer and are fully understood. The Executive further agrees that the consideration described aforesaid is accepted voluntarily for the purpose of employment with the Company under the terms and conditions described above.

IN WITNESS WHEREOF this Agreement has been executed by the parties hereto as of the date and year first above written.

SIGNED, SEALED AND DELIVERED by **Diane Gardiner** in the presence of:	)	/s/ *Diane Gardiner*
_____	)	**DIANE GARDINER**
Witness	)	
Address	)	
_____	)	
Occupation	)	

TEKMIRA PHARMACEUTICALS CORPORATION

Per: */s/ Mark J. Murray*
Mark J. Murray

APPENDIX "A"

CONFIDENTIALITY AGREEMENT
AND ASSIGNMENT OF INVENTIONS AGREEMENT

THIS AGREEMENT (this "**Agreement**") dated for reference the 1st day of March, 2013

BETWEEN:

TEKMIRA PHARMACEUTICALS CORPORATION
(the "**Company**"), a company incorporated under the laws of
British Columbia with offices at 100 – 8900 Glenlyon Parkway,
Burnaby, British Columbia fax: (604) 419-3201

AND:

DIANE GARDINER (the "**Executive**"), of
Surrey, British Columbia

WHEREAS:

A. The Company is in the business of acquiring, inventing, developing, discovering, adapting and commercializing inventions, methods, processes and products in the fields of chemistry, biochemistry, biotechnology and pharmaceuticals; and

B. In connection with the employment of the Executive by the Company, the parties desire to establish the terms and conditions under which the Executive will (i) receive from and disclose to the Company proprietary and confidential information; (ii) agree to keep the information confidential, to protect it from disclosure and to use it only in accordance with the terms of this Agreement; and (iii) assign to the Company all rights, including any ownership interest which may arise in all inventions and intellectual property developed or disclosed by the Executive over the course of her work during her employment with the Company, as set out in this Agreement.

NOW THEREFORE THIS AGREEMENT WITNESSES that in consideration of the employment of the Executive by the Company and the payment by the Company to the Executive of the sum of $10.00 and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **INTERPRETATION**

1.1 **Definitions.** In this Agreement:

(a) "**Business**" or "**Business of the Company**" means:

(i) the researching, developing, production and marketing of RNA interference drugs and delivery technology, as such business grows and evolves during this Agreement; and

(ii) any other material business carried on from time to time by the Company or any subsidiary or affiliate of the Company.

(b) "**Confidential Information**" shall mean any information relating to the Business of the Company, whether or not conceived, originated, discovered or developed in whole or in part by the Executive, that is not generally known to the public or to other persons who are not bound by obligations of confidentiality and:

(i) from which the Company derives economic value, actual or potential, from the information not being generally known; or

(ii) in respect of which the Company otherwise has a legitimate interest in maintaining secrecy;

and which, without limiting the generality of the foregoing, shall include:

(iii) all proprietary information licensed to, acquired, used or developed by the Company in its research and development activities (including but not restricted to the research and development of RNA interference drugs and delivery technology), other scientific strategies and concepts, designs, know-how, information, material, formulas, processes, research data and proprietary rights in the nature of copyrights, patents, trademarks, licenses and industrial designs;

(iv) all information relating to the Business of the Company, and to all other aspects of the Company's structure, personnel and operations, including financial, clinical, regulatory, marketing, advertising and commercial information and strategies, customer lists, compilations, agreements and contractual records and correspondence; programs, devices, concepts, inventions, designs, methods, processes, data, know-how, unique combinations of separate items that is not generally known and items provided or disclosed to the Company by third parties subject to restrictions on use or disclosure;

(v) all know-how relating to the Business of the Company including, all biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, clinical, safety, manufacturing and quality control data and information, and all applications, registrations, licenses, authorizations, approvals and correspondence submitted to regulatory authorities;

(vi) all information relating to the businesses of competitors of the Company including information relating to competitors' research and development, intellectual property, operations, financial, clinical, regulatory, marketing, advertising and commercial strategies, that is not generally known;

(vii) all information provided by the Company's agents, consultants, lawyers, contractors, licensors or licensees to the Company and relating to the Business of the Company; and

(viii) all information relating to the Executive's compensation and benefits, including her salary, vacation, stock options, rights to continuing education, perquisites, severance notice, rights on termination and all other compensation and benefits, except that he shall be entitled to disclose such information to her bankers, advisors, agents, consultants and other third parties who have a duty of confidence to him and who have a need to know such information in order to provide advice, products or services to him.

All Work Product shall be deemed to be the Company's Confidential Information.

(c) "**Effective Date**" means March 1, 2013, being the date that the Executive started working at the Company, as indicated in her employment agreement with the Company.

(d) "**Inventions**" shall mean any and all inventions, discoveries, developments, enhancements, improvements, concepts, formulas, designs, processes, ideas, writings and other works, whether or not reduced to practice, and whether or not protectable under patent, copyright, trade secret or similar laws.

(e) "**Work Product**" shall mean any and all Inventions and possible Inventions relating to the Business of the Company and which the Executive may make or conceive, alone or jointly with others, during her involvement in any capacity with the Company, whether during or outside her regular working hours, except those Inventions made or conceived by the Executive entirely on her own time that do not relate to the Business of the Company and do not derive from any equipment, supplies, facilities, Confidential Information or other information, gained, directly or indirectly, from or through her involvement in any capacity with the Company.

2. CONFIDENTIALITY

2.1 **Basic Obligation of Confidentiality.** The Executive hereby acknowledges and agrees that in the course of her involvement with the Company, the Company may disclose to him or he may otherwise have access or be exposed to Confidential Information. The Company hereby agrees to provide such access to the Executive and the Executive hereby agrees to receive and hold all Confidential Information on the terms and conditions set out in this Agreement.

Except as otherwise set out in this Agreement, the Executive will keep strictly confidential all Confidential Information and all other information belonging to the Company that he acquires, observes or is informed of, directly or indirectly, in connection with her involvement, in any capacity, with the Company.

2.2 **Fiduciary Capacity.** The Executive will be and act toward the Company as a fiduciary in respect of the Confidential Information.

2.3 **Non-disclosure.** Except with the prior written consent of the Company, the Executive will not at any time, either during or after her involvement in any capacity with the Company;

(a) use or copy any Confidential Information or recollections thereof for any purpose other than the performance of her duties for the benefit of the Company;

(b) publish or disclose any Confidential Information or recollections thereof to any person other than to employees of the Company who have a need to know such Confidential Information in the performance of their duties for the Company;

(c) permit or cause any Confidential Information to be used, copied, published, disclosed, translated or adapted except as otherwise expressly permitted by this Agreement; or

(d) permit or cause any Confidential Information to be stored off the premises of the Company, including permitting or causing such Confidential Information to be stored in electronic format on personal computers, except in accordance with written procedures of the Company, as amended from time to time in writing.

2.4 **Taking Precautions.** The Executive will take all reasonable precautions necessary or prudent to prevent material in her possession or control that contains or refers to Confidential Information from being discovered, used or copied by third parties.

2.5 **The Company's Ownership of Confidential Information.** As between the Executive and the Company, the Company shall own all right, title and interest in and to the Confidential Information, whether or not created or developed by the Executive.

2.6 **Control of Confidential Information and Return of Information.** All physical materials produced or prepared by the Executive containing Confidential Information, including, without limitation, records, devices, computer files, data, notes, reports, proposals, lists, correspondence, specifications, drawings, plans, materials, accounts, reports, financial statements, estimates and all other materials prepared in the course of her responsibilities to or for the benefit of the Company, together with all copies thereof (in whatever medium recorded), shall belong to the Company, and the Executive will promptly turn over to the Company's possession every original and copy of any and all such items in her possession or control upon request by the Company. If the material is such that it cannot reasonably be delivered, upon request from the Company, the Executive will provide reasonable evidence that such materials have been destroyed, purged or erased.

2.7 **Purpose of Use.** The Executive agrees that he will use Confidential Information only for purposes authorized or directed by the Company.

2.8 **Exemptions.** The obligations of confidentiality set out in this Article 2 will not apply to any of the following:

(a) information that is already known to the Executive, though not due to a prior disclosure by the Company or by a person who obtained knowledge of the information, directly or indirectly, from the Company;

(b) information disclosed to the Executive by another person who is not obliged to maintain the confidentiality of that information and who did not obtain knowledge of the information, directly or indirectly, from the Company;

(c) information that is developed by the Executive independently of Confidential Information received from the Company and such independent development can be documented by the Executive;

(d) other particular information or material which the Company expressly exempts by written instrument signed by the Company;

(e) information or material that is in the public domain through no fault of the Executive; and

(f) information required by operation of law, court order or government agency to be disclosed, provided that:

(i) in the event that the Executive is required to disclose such information or material, upon becoming aware of the obligation to disclose, the Executive will provide to the Company prompt written notice so that the Company may seek a protective order or other appropriate remedy and/or waive compliance with the provisions of this Agreement;

(ii) if the Company agrees that the disclosure is required by law, it will give the Executive written authorization to disclose the information for the required purposes only;

(iii) if the Company does not agree that the disclosure is required by law, this Agreement will continue to apply, except to the extent that a Court of competent jurisdiction orders otherwise; and

(iv) if a protective order or other remedy is not obtained or if compliance with this Agreement is waived, the Executive will furnish only that portion of

the Confidential Information that is legally required and will exercise all reasonable efforts to obtain confidential treatment of such Confidential Information.

3. ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS

3.1 **Notice of Invention.** The Executive agrees to promptly and fully inform the Company of all Work Product, whether or not patentable, throughout the course of her involvement, in any capacity, with the Company, whether or not developed before or after execution of this Agreement. On her ceasing to be employed by the Company for any reason whatsoever, the Executive will immediately deliver up to the Company all Work Product.

3.2 **Assignment of Rights.** Subject only to the exceptions set out in Exhibit I attached to this Agreement, the Executive will assign, and does hereby assign, to the Company or, at the option of the Company and upon notice from the Company, to the Company's designee, all of her right, title and interest in and to all Work Product and all other rights and interests of a proprietary nature in and associated with the Work Product, including all patents, patent applications filed and other registrations granted thereon. To the extent that the Executive retains or acquires legal title to any such rights and interests, the Executive hereby declares and confirms that such legal title is and will be held by him only as trustee and agent for the Company. The Executive agrees that the Company's rights hereunder shall attach to all Work Product, notwithstanding that it may be perfected or reduced to specific form after he has terminated her relationship with the Company. The Executive further agrees that the Company's rights hereunder are worldwide rights and are not limited to Canada, but shall extend to every country of the world.

3.3 **Moral Rights.** Without limiting the foregoing, the Executive hereby irrevocably waives any and all moral rights arising under the *Copyright Act* (Canada), as amended, or any successor legislation of similar force and effect or similar legislation in other applicable jurisdictions or at common law that he may have with respect to all Work Product, and agrees never to assert any moral rights which he may have in the Work Product, including, without limitation, the right to the integrity of the Work Product, the right to be associated with the Work Product, the right to restrain or claim damages for any distortion, mutilation or other modification or enhancement of the Work Product and the right to restrain the use or reproduction of the Work Product in any context and in connection with any product, service, cause or institution, and the Executive further confirms that the Company may use or alter any Work Product as the Company sees fits in its absolute discretion.

3.4 **Goodwill.** The Executive hereby agrees that all goodwill he has established or may establish with clients, customers, suppliers, principals, shareholders, investors, collaborators, strategic partners, licensees, contacts or prospects of the Company relating to the Business of the Company (or of its partners, subsidiaries or affiliates), both before and after the Effective Date, shall, as between the Executive and the Company, be and remain the property of the Company exclusively, for the Company to use, alter, vary, adapt and exploit as the Company shall determine in its discretion.

3.5 **Assistance.** The Executive hereby agrees to reasonably assist the Company, at the Company's request and expense, in:

(a) making patent applications for all Work Product, including instructions to lawyers and/or patent agents as to the characteristics of the Work Product in sufficient detail to enable the preparation of a suitable patent specification, to execute all formal documentation incidental to an application for letters patent and to execute assignment documents in favour of the Company for such applications;

(b) making applications for all other forms of intellectual property registration relating to all Work Product;

(c) prosecuting and maintaining the patent applications and other intellectual property relating to all Work Product; and

(d) registering, maintaining and enforcing the patents and other intellectual property registrations relating to all Work Product.

If the Company is unable for any reason to secure the Executive's signature with respect to any Work Product including, without limitation, to apply for or to pursue any application for any patents or copyright registrations covering such Work Product, then the Executive hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as her agent and attorney-in-fact, to act for and in her behalf and stead to execute and file any papers, oaths and to do all other lawfully permitted acts with respect to such Work Product with the same legal force and effect as if executed by him.

3.6 **Assistance with Proceedings.** The Executive further agrees to reasonably assist the Company, at the Company's request and expense, in connection with any defence to an allegation of infringement of another person's intellectual property rights, claim of invalidity of another person's intellectual property rights, opposition to, or intervention regarding, an application for letters patent, copyright or trademark or other proceedings relating to intellectual property or applications for registration thereof.

3.7 **Commercialization.** The Executive understands that the decision whether or not to commercialize or market any Work Product is within the Company's sole discretion and for the Company's sole benefit and that no royalty or other consideration will be due or payable to him as a result of the Company's efforts to commercialize or market any such Work Product.

3.8 **Prior Inventions.** In order to have them excluded from this Agreement, the Executive has set forth on Exhibit I attached to this Agreement a complete list of all Inventions for which a patent application has not yet been filed that he has, alone or jointly with others, conceived, developed or reduced to practice prior to the execution of this Agreement to which he has any right, title or interest, and which relate to the Business of the Company. If such list is blank or no such list is attached, the Executive represents and warrants that there are no such prior Inventions.

4. **GENERAL**

4.1 **Term.** Subject to Section 4.10, the term of this Agreement is from the Effective Date and terminates on the date that the Executive is no longer working at or for the Company in any capacity.

4.2 **No Conflicting Obligations.** The Executive hereby represents and warrants that he has no agreements with or obligations to any other person with respect to the matters covered by this Agreement or concerning the Confidential Information that are in conflict with anything in this Agreement, except as disclosed in Exhibit I attached to this Agreement.

4.3 **Publicity.** The Executive shall not, without the prior written consent of the Company, make or give any public announcements, press releases or statements to the public or the press regarding any Work Product or any Confidential Information.

4.4 **Further Assurances.** The parties will execute and deliver to each other such further instruments and assurances and do such further acts as may be required to give effect to this Agreement.

4.5 **Notices.** All notices and other communications that are required or permitted by this Agreement must be in writing and shall be hand delivered or sent by express delivery service or certified or registered mail, postage prepaid, or by facsimile transmission (with receipt confirmed in writing) to the parties at the addresses on page 1 of this Agreement. Any such notice shall be deemed to have been received on the earlier of the date actually received or the date five (5) days after the same was posted or sent. Either party may change its address or its facsimile number by giving the other party written notice, delivered in accordance with this section.

4.6 **Equitable Remedies.** The Executive understands and acknowledges that if he breaches any of her obligations under this Agreement, that breach may give rise to irreparable injury to the Company for which damages are an inadequate remedy. In the event of any such breach by the Executive, in addition to all other remedies available to the Company at law or in equity, the Company will be entitled as a matter of right to apply to a court of competent jurisdiction for such relief by way of restraining order, injunction, decree or otherwise, as may be appropriate to ensure compliance with the provisions of this Agreement.

4.7 **Non-Waiver.** Failure on the part of either party to complain of any act or failure to act of the other of them or to declare the other party in default of this Agreement, irrespective of how long such failure continues, will not constitute a waiver by such party of their rights hereunder or of the right to then or subsequently declare a default.

4.8 **Severability.** In the event that any provision or part of this Agreement is determined to be void or unenforceable in whole or in part, the remaining provisions, or parts thereof, will be and remain in full force and effect.

4.9 **Entire Agreement.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes any and all agreements, understandings, warranties or representations of any kind, written or oral, express or implied, including any relating to the nature of the position or its duration, and each of the parties releases and forever discharges the other of and from all manner of actions, causes of action, claim or demands whatsoever under or in respect of any agreement.

4.10 **Survival.** Notwithstanding the expiration or early termination of this Agreement, the provisions of Article 1, Article 2 (including the obligations of confidentiality and to return Confidential Information, which shall endure, with respect to each item of Confidential Information, for so long as those items fall within the definition of Confidential Information), Sections 3.2, 3.3, 3.4, 3.5 and 3.6 and Article 4 shall survive any expiration or early termination of this Agreement.

4.11 **Modification of Agreement.** Any modification of this Agreement must be in writing and signed by both the Company and the Executive or it will have no effect and will be void.

4.12 **Governing Law.** This Agreement will be governed by and construed according to the laws of the Province of British Columbia.

4.13 **Reimbursement of Legal Fees.** The Company will reimburse the Executive for all reasonable and receipted legal fees incurred by the Executive in the negotiation, drafting, and completion of this Agreement.

4.14 **Independent Legal Advice.** The Executive agrees that he has obtained or has had an opportunity to obtain independent legal advice in connection with this Agreement, and further acknowledge that he has read, understands, and agrees to be bound by all of the terms and conditions contained herein.

IN WITNESS WHEREOF this Agreement has been executed by the parties hereto as of the date and year first above written.

SIGNED, SEALED AND DELIVERED by **DIANE GARDINER** in the presence of:	)	
_____	)	/s/ *Diane Gardiner*
Witness Signature	)	**DIANE GARDINER**
_____	)	
Witness Name	)	
_____	)	
Witness Address	)	
_____	)	
	)	
_____	)	
Witness Occupation	)	

TEKMIRA PHARMACEUTICALS CORPORATION

Per: */s/ Mark J. Murray*
Mark J. Murray

EXHIBIT I
to Confidentiality Agreement and Assignment of Inventions

EXCLUSIONS FROM WORK PRODUCT

None.

Exhibit 12.1

CERTIFICATION PURSUANT TO RULE 13a-14 OR 15d-14 OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mark J. Murray, certify that:

1. I have reviewed this annual report on Form 20-F of Tekmira Pharmaceuticals Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent function):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 27, 2013

/s/ Mark J. Murray

Name: Mark J. Murray
Title: President and Chief Executive Officer

Exhibit 12.2

CERTIFICATION PURSUANT TO RULE 13a-14 OR 15d-14 OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Ian C. Mortimer, certify that:

1. I have reviewed this annual report on Form 20-F of Tekmira Pharmaceuticals Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent function):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 27, 2013

/s/ Ian C. Mortimer

Name: Ian C. Mortimer
Title: Executive Vice President, Finance and Chief Financial Officer

Exhibit 13.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Tekmira Pharmaceuticals Corporation (the "Company") on Form 20-F for the year ended December 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I Mark J. Murray, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly represents, in all material respects, the financial condition and results of the operations of the Company.

Date: March 27, 2013

/s/ Mark J. Murray

Name: Mark J. Murray
Title: President and Chief Executive Officer

Exhibit 13.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Tekmira Pharmaceuticals Corporation (the "Company") on Form 20-F for the year ended December 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I Ian C. Mortimer, Executive Vice President, Finance and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly represents, in all material respects, the financial condition and results of the operations of the Company.

Date: March 27, 2013

/s/ Ian C. Mortimer

Name: Ian C. Mortimer
Title: Executive Vice President, Finance and Chief Financial Officer

Exhibit 15.1

KPMG LLP
Chartered Accountants
PO Box 10426 777 Dunsmuir Street
Vancouver BC V7Y 1K3
Canada

Telephone (604) 691-3000
Fax (604) 691-3031
Internet www.kpmg.ca

The Board of Directors
Tekmira Pharmaceuticals Corporation

We consent to the incorporation by reference in the Registration Statement (No. 333-185883) on Form F-10 of Tekmira Pharmaceuticals Corporation of our report dated March 27, 2013, with respect to the consolidated balance sheets of Tekmira Pharmaceuticals Corporation as at December 31, 2012 and December 31, 2011, and the related consolidated statements of operations and comprehensive income (loss), stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2012, which report appears in the December 31, 2012 annual report on Form 20-F of Tekmira Pharmaceuticals Corporation.

/s/ KPMG LLP

Chartered Accountants
March 27, 2013
Vancouver, Canada