
**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, 2011**
- 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
100—8900 Glenlyon Parkway
Burnaby, British Columbia, Canada, V5J 5J8
Telephone: +1 604 419 3200
Facsimile: +1 604 419 3202

(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
Common Shares, without par value

Name of each exchange on which registered
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, 2011 was 12,148,636 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

TABLE OF CONTENTS

GENERAL INTRODUCTION AND USE OF CERTAIN TERMS	4
FORWARD LOOKING STATEMENTS	4
PART I	6
ITEM 1 IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS	6
ITEM 2 OFFER STATISTICS AND EXPECTED TIMETABLE	6
ITEM 3 KEY INFORMATION	6
3A. Selected Financial Data	6
3B. Capitalization and Indebtedness	7
3C. Reasons for the Offer and Use of Proceeds	7
3D. Risk Factors	7
ITEM 4 INFORMATION ON THE COMPANY	19
4A. History and Development of the Company	19
4B. Business Overview	20
4C. Organizational structure	28
4D. Property, plant and equipment	28
ITEM 4A UNRESOLVED STAFF COMMENTS	28
ITEM 5 OPERATING AND FINANCIAL REVIEW AND PROSPECTS	28
5B. Liquidity and Capital Resources	36
5C. Research and Development, Patents and Licences	36
5D. Trend Information	36
5E. Off-Balance Sheet Arrangements	38
5F. Tabular Disclosure of Contractual Obligations	38
ITEM 6 DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES	39
6A. Directors and Management	39
6B. Compensation	42
6C. Board Practices	49
6D. Employees	51
6E. Share Ownership	51
ITEM 7 MAJOR SHAREHOLDER AND RELATED PARTY TRANSACTIONS	58
7A. Major Shareholders	58
7B. Related Party Transactions	59
7C. Interests of Experts and Counsel	59
ITEM 8 FINANCIAL INFORMATION	59
8A. Consolidated Statements and Other Financial Information	59
8B. Significant Changes	60
ITEM 9 THE OFFER AND LISTING	60
9A. Offer and Listing Details	61
9B. Plan of Distribution	61
9C. Markets	61
9D. Selling Shareholders	61
9E. Dilution	61
9F. Expenses of the Issue	61
ITEM 10 ADDITIONAL INFORMATION	61
10A. Share Capital	61
10B. Notice of Articles and Articles	61
10C. Material Contracts	65
10D. Exchange Controls	65
10E. Taxation	65
10F. Dividends and Paying Agents	70
10G. Statement by Experts	70
10H. Documents on Display	70
10I. Subsidiary Information	71
ITEM 11 QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	71
ITEM 12 DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES	71
12A. Debt Securities	71
12B. Warrants and Rights	71
12C. Other Securities	71
12D. American Depository Shares	71

Table of Contents

<u>PART II</u>		72
ITEM 13	<u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u>	72
ITEM 14	<u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS/ USE OF PROCEEDS</u>	72
ITEM 15	<u>CONTROLS AND PROCEDURES</u>	72
ITEM 16A	<u>AUDIT COMMITTEE FINANCIAL EXPERTS</u>	73
ITEM 16B	<u>CODE OF ETHICS</u>	73
ITEM 16C	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>	73
ITEM 16D	<u>EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</u>	74
ITEM 16E	<u>PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u>	74
ITEM 16F	<u>CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT</u>	74
ITEM 16G	<u>CORPORATE GOVERNANCE</u>	74
ITEM 16H	<u>MINE SAFETY DISCLOSURE</u>	75
<u>PART III</u>		76
ITEM 17	<u>FINANCIAL STATEMENTS</u>	76
ITEM 18	<u>FINANCIAL STATEMENTS</u>	76
ITEM 19	<u>EXHIBITS</u>	76

GENERAL INTRODUCTION AND USE OF CERTAIN TERMS

In this Annual Report, references to:

- “Company” means Tekmira Pharmaceuticals Corporation, a British Columbia company;
- “Protiva” means Protiva Biotherapeutics Inc., a British Columbia company and a wholly-owned subsidiary of Tekmira; and
- “We”, “us”, “our”, and “Tekmira” means 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, 2011 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; 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 quantum and timing of potential funding; use of lipid nanoparticle (LNP) technology by Tekmira’s licensees; the effects of Tekmira’s products on the treatment of elevated low-density lipoprotein (LDL) cholesterol, cancer and infectious disease and alcohol dependence; the ALN-VSP, ALN-TTR, and ALN-PCS product development programs of Alnylam Pharmaceuticals, Inc.; Tekmira’s expectations with respect to existing and future agreements with third parties; statements about the initiation and details of the TKM-Ebola Phase 1 human clinical trial; statements about the nature, prospects and anticipated timing to resolve the Tekmira’s litigation with Alnylam and AlCana Technologies, Inc., including the patent infringement lawsuit; the nature, scope and quantum of damages sought by Tekmira from Alnylam and AlCana; statements about the injunction granted by the Supreme Court of British Columbia against certain individuals from AlCana; measures taken to ensure that Tekmira can pursue the litigation with Alnylam and AlCana without interruption to Tekmira’s core business activities; statements about the USPTO patent interference proceedings between Alnylam and Tekmira; estimates and scope of Tekmira’s financial guidance and expected cash runway; 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 high LDL cholesterol, cancer, infectious disease, and alcohol dependence; the developmental milestones and approvals required to trigger funding for TKM-Ebola from the Transformational Medical Technologies program; results in non-human primates are indicative of the potential effect in humans; Tekmira’s research and development capabilities and resources; U.S. Food and Drug Administration (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 collaborative partners including the U.S. Government and the manufacturing agreement with Alnylam; the nature and prospects of the litigation with Alnylam and AlCana, including the patent infringement lawsuit filed by Alnylam; based on the conduct of Alnylam and AlCana, the nature, scope and quantum of damages that Tekmira is entitled to; costs and timing of the litigation with Alnylam and AlCana and the effects of such on Tekmira’s financial position and execution of Tekmira’s business strategy; the effect of Alnylam’s and AlCana’s answers and counterclaims on Tekmira’s litigation position; the sufficiency of budgeted capital expenditures in carrying out planned activities; Tekmira’s ability to protect its intellectual property rights and not to infringe on the intellectual property rights of others; the ability to succeed at establishing a successful commercialization program for any of Tekmira’s products; and the availability and cost of labor and services. 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. All forward-looking statements herein are qualified in their entirety by this

[Table of Contents](#)

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, 2011, 2010, 2009, 2008, and 2007. 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,				
	2011	2010	2009	2008	2007
	\$	\$	\$	\$	\$
Operating Data					
Revenue	16,647	21,355	14,428	11,732	15,769
Expenses	27,187	33,870	22,905	40,716	13,155
Income (Loss) from operations	(10,540)	(12,515)	(8,477)	(28,984)	2,613
Net and comprehensive income (loss)	(9,937)	(12,415)	(8,749)	(29,920)	(2,558)
Weighted average number of common shares—basic ⁽²⁾	11,319	10,333	10,325	8,116	4,770
Weighted average number of common shares—diluted ⁽²⁾	11,319	10,333	10,325	8,116	4,770
Income (Loss) per common share—basic	(0.88)	(1.20)	(0.85)	(3.69)	(0.54)
Income (Loss) per common share—diluted	(0.88)	(1.20)	(0.85)	(3.69)	(0.54)
Balance Sheet Data					
Total current assets	11,794	17,909	25,958	33,261	23,068
Total assets	13,991	21,022	29,279	35,871	24,593
Total liabilities	8,676	10,290	6,816	4,933	6,401
Share capital	233,501	229,492	229,427	229,412	195,317
Total Stockholders’ equity	5,315	10,733	22,463	30,938	18,192
Number of shares outstanding ⁽²⁾	12,149	10,339	10,329	10,325	4,913

Notes:

- (1) The operating data for the years ending December 31, 2011, 2010, 2009 and 2008 is derived from financial statements prepared under U.S. GAAP. The operating data for the year ending December 31, 2007 is derived from financial statements prepared under Canadian GAAP and then reconciled to U.S. GAAP. The balance sheet data at December 31, 2011, 2010 and 2009 is derived from financial statements prepared under U.S. GAAP. The balance sheet data at December 31, 2008 and 2007 is derived from financial statements prepared under Canadian GAAP and then reconciled to U.S. GAAP. 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. 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, 2011 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 April 30, 2007, Inex’s (Tekmira’s predecessor company) common shares were consolidated on a basis of two current common shares for one new common share. 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.

[Table of Contents](#)

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\$0.9987 per US\$1.00 (or US\$1.0013 per CDN\$1.00) using the Bank of Canada exchange rate on March 23, 2012.

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,				
	2011	2010	2009	2008	2007
Period end	\$1.0170	\$0.9946	\$1.0466	\$1.2246	\$0.9881
Average	\$0.9891	\$1.0304	\$1.1374	\$1.0716	\$1.0659
High	\$1.0549	\$1.0745	\$1.3000	\$1.2970	\$1.1853
Low	\$0.9428	\$0.9360	\$1.0292	\$0.9719	\$0.9170

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:

Month	Exchange rate CDN\$ per US\$1.00	
	High	Low
March 1, 2012 through March 23, 2012	\$1.0161	\$0.9965
February 2012	\$1.0016	\$0.9866
January 2012	\$1.0272	\$0.9986
December 2011	\$1.0406	\$1.0105
November 2011	\$1.0487	\$1.0126
October 2011	\$1.0604	\$0.9935
September 2011	\$1.0389	\$0.9752

3B. Capitalization and Indebtedness

Not applicable.

3C. Reasons for the Offer and Use of Proceeds

Not applicable.

3D. Risk Factors

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 Our Business

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 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

Table of Contents

- manage our spending and cash requirements as our expenses are expected to increase due to clinical trials, regulatory approvals, commercialization and our lawsuit with Alnylam and AlCana.

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, 2011 we had \$7.2 million in working capital excluding deferred revenue and expense balances. We believe that our current funds on hand, including funds from a recently completed equity private placement and access to a term loan, plus expected income including funds from our collaborative partners and the U.S. Government will be sufficient to extend our cash runway into the second half of 2013. 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:

- legal costs associated with ongoing litigation with Alnylam and AlCana as well as potential costs associated with the outcome of the litigation, including damages, costs and attorney fees;
- revenues earned from our collaborative partnerships, including Alnylam;
- 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 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 and our ongoing litigation with Alnylam.

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.

[Table of Contents](#)

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, we have incurred losses since inception and have not received any revenues other than from research and development collaborations, license fees and milestone payments. From inception to December 31, 2011, we have an accumulated net deficit of \$258.8 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.

A determination that we have defaulted under the terms of our term loan debt would have a material adverse effect on our business and financial condition.

In December 2011, we secured a US\$3.0 million term loan from Silicon Valley Bank (SVB). The loan may limit our access to additional capital and the loan is subject to specific non-financial covenants, which include ongoing reporting obligations and restrictions on Tekmira's ability to incur further indebtedness, dispose of its assets, encumber its property, and enter into a merger or amalgamation. The loan is secured by the assets and intellectual property of Tekmira. At December 31, 2011 we had not drawn down on the loan facility. If we fail to meet our ongoing obligations and covenants under the loan facility prior to drawing down on the loan, we may not be able to draw down on the loan as the need arises. Additionally, should we draw down on the loan and fail to meet our obligations and covenants under the loan, we could default on the loan, which may prevent us from drawing down further on the loan and place at risk the assets and intellectual property of Tekmira that are granted as collateral for the loan.

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 our Alnylam and U.S. Government collaborations to provide revenue to fund our operations, especially in the near term. These collaborations represented 25% and 69%, respectively, of our operating revenue for the fiscal year 2011. 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. In particular, there is now a risk that our collaboration with Alnylam could be adversely affected, following our initiation of a lawsuit with Alnylam. 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 U.S. Government 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 U.S. Government could cancel this funding at any time.

The contract we signed with the U.S. Government 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 U.S. Government may later extend the contract to cover the entire TKM-Ebola program through to FDA drug approval.

This is our first U.S. Government contract of any notable size. Our lack of experience in dealing with the U.S. Government brings uncertainty into our cash flow projections and uncertainty into our ability to execute the contract within U.S. Government 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 the U.S. Government could cancel 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

Table of Contents

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. One of the contract research organizations we are currently working with is undergoing a financial restructuring. The outcome of the restructuring is not currently determinable and may impact timelines in the development of TKM-Ebola.

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 becomes 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 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 on 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 Science 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.

[Table of Contents](#)

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, 2011. 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 Our Industry

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.

Table of Contents

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 future product candidates 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

[Table of Contents](#)

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 to 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 will 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 small interfering RNA (siRNA) chemistry technology that we may need to apply to our product candidates. There are also many issued patents that claim genes or

[Table of Contents](#)

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, including Alnylam, 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. For example, we are currently involved in a patent interference proceeding declared by the U.S. Patent and Trademark Office to determine priority of invention to subject matter of Alnylam's U.S. Patent No. 7,718,629 in light of Tekmira's U.S. Patent Application 11/807,872. This proceeding, and 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 licenses to core siRNA patents held or applied for by Alnylam. The Alnylam licenses are subject to termination in the event of a breach by us of the licenses or of certain of our other agreements with Alnylam, 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, especially in light of our ongoing lawsuit with Alnylam. Alnylam has also provided us notice that certain intellectual property to which they have an exclusive license, under the UBC sublicense agreement, has not been granted to us for all of our product candidates. 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 eight gene targets (three exclusive and five 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 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.

[Table of Contents](#)

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 patents and other proprietary rights, and we are or 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 royalties in order to continue to 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.

We have ongoing litigation with Alnylam and AlCana where we have alleged misappropriation of our proprietary lipid nanoparticle delivery technology, resulting in damage to our intellectual property and business interests. Alnylam and AlCana have responded to our complaint and have also filed counterclaims. In addition, Alnylam has filed a patent infringement lawsuit against us arising from our research activities with a pharmaceutical collaborator. Isis Pharmaceuticals, Inc. is named as a co-plaintiff in the patent infringement suit. Litigation is subject to inherent uncertainty and if we are unsuccessful in defending ourselves we could be required to pay significant damages, costs and attorney fees. We also continue to incur significant costs in the litigation and the litigation has diverted the attention of management and other resources that could otherwise be engaged in other activities. See "Item 8A Legal Proceedings" section of this Annual Report for more information.

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, including our ongoing litigation with Alnylam and AlCana, 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. In addition, we have sued certain individuals from AlCana for theft of confidential documents containing our confidential information and trade secrets. See "Item 8A Legal Proceedings" section of this Annual Report for more information.

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.

[Table of Contents](#)

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. These agents may be competitive with our product candidate TKM-PLK1.

We are also aware of other companies developing drugs to treat high cholesterol, some with compounds at a later stage of development than our product candidate TKM-ApoB. There are several drugs currently approved for treatment of high cholesterol including the statins, such as Lipitor and Crestor, fibrates and bile acid sequestrant drugs. Many new agents are in development for the treatment of high cholesterol including an antisense drug targeting ApoB (Kynamro) which is being developed by Isis Pharmaceuticals, Inc. and Genzyme Corporation, a wholly-owned subsidiary of Sanofi-aventis. Kynamro has shown promising clinical activity in recently completed Phase 3 studies and Genzyme is seeking drug approval. There are also a number of drugs in development that target the gene proprotein convertase subtilisin/kexin type 9 (PCSK9) to treat hypercholesterolemia including Alnylam's ALN-PCS, as well as antibodies being developed by Regeneron Pharmaceuticals Inc., Amgen Inc., and Pfizer.

In addition, there are organizations working on treatments for hemorrhagic fever viruses. AVI BioPharma Inc. has a drug candidate (AVI-6002) in active clinical development which is competitive with our TKM-Ebola product candidate. AVI BioPharma commenced initial human safety studies of its therapeutic candidate against the Ebola virus in May 2011. Since AVI BioPharma's development efforts are presently ahead of TKM-Ebola, AVI BioPharma may gain marketing approval before our product candidate. Furthermore, if U.S. Government funding is constrained, funding could be limited or discontinued for two competing products treating the same disease.

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 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 noncompetitive 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 that are 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 Biotech, Inc., RXi Pharmaceuticals Corporation, Dicerna Pharmaceuticals, Inc., Sylentis S.A., Santaris Pharma A/S, Benitec Ltd and Opko Health, Inc., 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 and AVI BioPharma. Like RNAi therapeutic products, antisense drugs target messenger RNAs, or mRNAs, in order to suppress the activity of specific

[Table of Contents](#)

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

[Table of Contents](#)

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, and 2011, 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 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:

- developments in our lawsuit with Alnylam and AlCana and potential outcome of the litigation, which may involve the award of significant damages, costs and attorney fees;
- general economic and political conditions in Canada, the United States and globally;

Table of Contents

- 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.

In the past, companies that have experienced volatility in their value have been the subject of securities class action litigation. There can be no assurance that we will not become involved in securities class action litigation in the future. Such litigation often results in substantial costs and diversion of management's attention and resources.

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-based 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.

[Table of Contents](#)

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 4.B. “Business Overview” below.

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 2009, 2010 and 2011 we invested \$1.7 million, \$0.8 million and \$0.1 in property and equipment. Our 2009 and 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 capital divestitures in the last three fiscal years.

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

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 collaboration 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) and multivalent RNA (MV-RNA). 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 Alnylam’s RNAi intellectual property to develop eight RNAi therapeutic products. We have exclusive access to MV-RNA technology for the development of RNAi therapeutic products.

In the field of RNAi therapeutics, we have licensed our LNP delivery technology to Alnylam Pharmaceuticals, Inc. and Merck & Co., Inc. Alnylam has granted non-exclusive access to some of our intellectual property to certain 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. (formerly Hana Biosciences, Inc.) and Aradigm Corporation.

RNA Interference Therapeutics

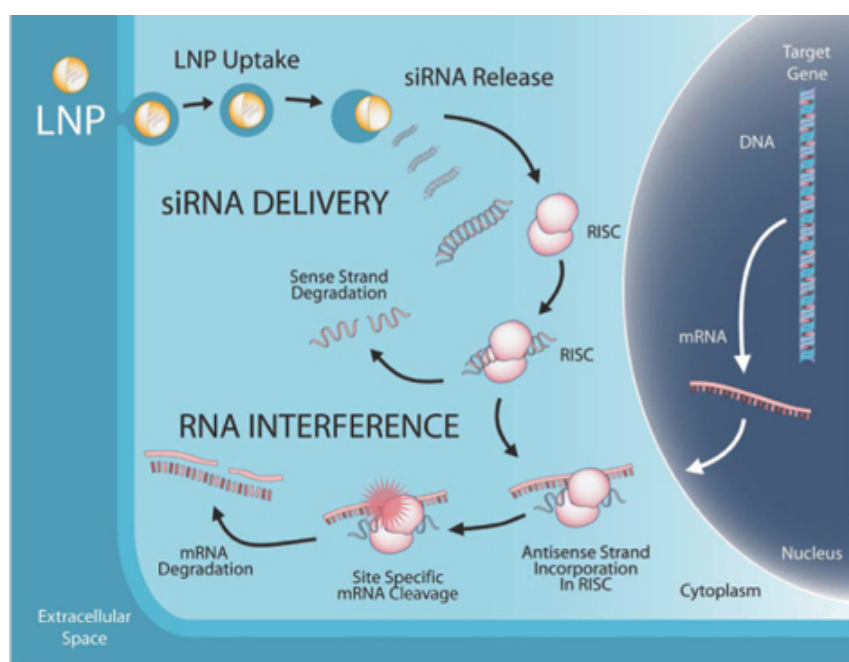
RNAi is considered to be one of the most important discoveries in the field of biology in the last decade. The scientists who discovered the mechanism were awarded the 2006 Nobel Prize in Medicine. Intense research activity has subsequently uncovered the complex molecular mechanisms responsible for RNAi 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.

Table of Contents

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

[Table of Contents](#)

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

Our most advanced RNAi product candidates are TKM-PLK1, TKM-Ebola and TKM-ApoB. Alnylam has granted us a worldwide license to their core technology and intellectual property for the discovery, development and commercialization of RNAi products directed to eight RNAi gene targets—three exclusive and five non-exclusive licenses. Five of the targets, ApoB, PLK1, Ebola, WEE1 and CSN5, have already been selected on a non-exclusive basis, and ALDH2 was recently selected as an exclusive target. We may select up to two additional exclusive targets in the future under the selection procedures described more fully below.

TKM-PLK1

Our lead oncology product candidate, TKM-PLK1, has been shown in pre-clinical 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 pre-clinical 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 potent anti-tumor efficacy in pre-clinical 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 three 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 up to 52 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 March 27, 2012, we provided an update on the ongoing TKM-PLK1 Phase 1 clinical trial announcing that a total of 20 patients have been enrolled and a total of 82 doses have been administered to patients. The trial continues to enroll patients and we expect to have established the maximum tolerated dose and release interim results over the coming months.

A second Phase 1 human clinical trial of TKM-PLK1 was initiated in collaboration with the United States National Cancer Institute (NCI). This trial's objectives included an assessment of drug activity in patients providing biopsies as a means of establishing human proof-of-concept for both RNAi and Tekmira's LNP technology. In late 2011 and early 2012 Alnylam disclosed interim clinical data from their ALN-TTR and ALN-PCS programs, both of which utilize Tekmira's LNP technology. As these data provide robust proof-of-concept for LNP mediated RNAi in human subjects, we have elected to discontinue the NCI trial, apply the resources that had previously been set aside to support the trial to other programs and have focused our collaboration with the NCI on research to identify novel oncology targets.

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 pre-clinical 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 Government to advance an RNAi therapeutic utilizing our LNP technology to treat Ebola virus infection. In the initial phase of the contract, which is expected to last approximately three years and is funded under the TMT program, we are eligible to receive up to US\$34.7 million. This initial funding is for the development of TKM-Ebola, including completion of pre-clinical development, filing an IND application with the FDA and completing a Phase 1 human safety clinical trial.

The United States 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 budget for

[Table of Contents](#)

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 Government for direct labor, third party costs and an apportionment of overheads plus a profit margin. The funding is paid through monthly reimbursements, and the U.S. Government has the ability to cancel at any time.

On November 28, 2011 we announced that an Investigational New Drug (IND) application for TKM-Ebola was approved by the United States Food and Drug Administration (FDA). On February 8, 2012, we announced that Phase 1 clinical trial for TKM-Ebola had been initiated. The Phase 1 TKM-Ebola clinical trial is a placebo-controlled, single-blind, single-ascending dose study with additional multiple-ascending dose cohorts in healthy human volunteers. The objective of the Phase 1 trial is to assess the safety and tolerability of TKM-Ebola and evaluate the pharmacokinetics and systemic exposure following both a single-ascending dose and multiple-ascending doses of TKM-Ebola. TKM-Ebola will be 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

On January 7, 2010 we announced the completion of a Phase 1 clinical trial for our product candidate TKM-ApoB. TKM-ApoB is being developed as a treatment for patients with high levels of low-density lipoprotein (LDL) cholesterol, or “bad” cholesterol, who are not well served by current therapy. TKM-ApoB is designed to reduce the production of apolipoprotein B 100 (ApoB), a protein produced in the liver that plays a central role in cholesterol metabolism. We enrolled a total of 23 subjects in the TKM-ApoB Phase 1 clinical trial. Of the 23 subjects enrolled, 17 subjects received a single dose of TKM-ApoB at one of seven different dosing levels and six subjects received a placebo. The primary endpoints of the TKM-ApoB Phase 1 clinical trial were measures of safety and tolerability. TKM-ApoB was well tolerated overall in this study with no evidence of liver toxicity, which was the anticipated dose-limiting toxicity observed in pre-clinical studies. Of the two subjects treated at the highest dose level, one subject experienced an adverse event comprised of flu-like symptoms, cytokine release and transient hypotension consistent with stimulation of the immune system caused by the ApoB siRNA payload. The other subject treated at the highest dose level experienced no side effects. Based on the potential for the immune stimulation to interfere with further dose escalation, we decided to conclude the trial. Subsequent to the completion of the trial, we have made adjustments to the ApoB siRNA to minimize any immune stimulatory properties. We also continue to make significant advancements in LNP formulation development and there are several alternative LNP formulations with improved characteristics that are currently being evaluated for TKM-ApoB development.

On June 2, 2011 we announced that we have secured non-exclusive licenses from Alnylam targeting two validated oncology targets: WEE1 and CSN5. Our collaborators at the National Cancer Institute (NCI) identified the novel cancer genes WEE1 and CSN5 from human tumor samples, and together we have generated encouraging pre-clinical data by leveraging our expertise in siRNA design and delivery. Gene expression data from human tumor samples indicate that both CSN5 and WEE1 are up-regulated in a number of human cancers and have been identified as potential molecular targets in breast, liver, lung, ovarian and skin cancer, amongst other tumor types. We are conducting pre-clinical work to further evaluate these targets before initiating formal toxicology studies.

On March 1, 2012, we announced that we have secured an exclusive license from Alnylam to develop TKM-ALDH2, a systemically delivered RNAi therapeutic that utilizes Tekmira’s LNP for the treatment of Alcohol Dependence (AD). Currently, many approved treatments for AD have low response rates and poor patient compliance rates. ALDH2 is a well validated target with both genetic and pharmacological data supporting its role as a key player in alcohol avoidance. It is expected that TKM-ALDH2 could be administered as a “once-a-month” treatment of AD.

Tekmira is also evaluating a number of other pre-clinical candidates for advancement within its product pipeline.

Partnerships and Collaborations

Alnylam collaborations and licenses

On January 8, 2007, we entered into a licensing and collaboration agreement with Alnylam giving them an exclusive license to certain historical lipid nanoparticle intellectual property owned by Tekmira for the discovery, development, and commercialization of RNAi therapeutics. This agreement only covered intellectual property owned before Tekmira’s business combination with Protiva Biotherapeutics, Inc. on May 30, 2008.

Protiva, which is now a wholly owned subsidiary of ours, and Alnylam entered into a cross-license Agreement in August 2007, which was amended and restated in May 2008, granting Alnylam non-exclusive access to Protiva’s intellectual property in the RNAi field and required Alnylam to fund a certain level of collaborative research for two years. The research collaboration element of the Alnylam Cross-License expired in August 2009. We are, however, continuing to make LNP research batches for Alnylam under a manufacturing agreement which is discussed below.

[Table of Contents](#)

In August 2007, pursuant to the terms of the cross-license, Alnylam made a payment of US\$3.0 million that gives Alnylam the right to “opt-in” to the Tekmira TKM-PLK1 project and share equally in any future product revenues, provided that Alnylam contributes 50% of TKM-PLK1 product development costs. Alnylam has until the start of a TKM-PLK1 Phase 2 clinical trial of the TKM-PLK1 project to exercise their opt-in right. In the event that Alnylam chooses to exercise that right, the US\$3.0 million already paid will be credited towards Alnylam’s 50% share of project costs to date.

In addition, we are eligible to receive up to US\$16.0 million in milestones from Alnylam for each RNAi therapeutic advanced by Alnylam or its partners that utilizes our intellectual property, and low- to mid-single digit royalties on product sales.

The agreements with Alnylam grant 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 eight gene targets – three exclusive and five 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 targets, ApoB, PLK1, Ebola, WEE1, and CSN5, have already been granted on a non-exclusive basis, along with an additional license for ALDH2, which has been granted on an exclusive basis. We may select two additional exclusive gene targets to develop RNAi therapeutic products, provided that the targets are not part of an ongoing or planned development program of Alnylam. 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, and TKM-PLK1 if Alnylam opts-in to the development program). We will have no milestone obligations on the three exclusive licenses.

In April 2009, Alnylam announced that they had initiated a Phase 1 human clinical trial for a product candidate that utilizes our LNP technology. The Alnylam product candidate, 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. We are responsible for manufacturing the ALN-VSP drug product. 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. Interim ALN-VSP data was presented at the American Society of Clinical Oncology (ASCO) meeting in May 2010 and at the Chemotherapy Foundation Symposium in November 2010. 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. Alnylam has announced that it expects to partner its ALN-VSP program prior to initiating a Phase 2 clinical study.

Alnylam is advancing two ALN-TTR formulations, ALN-TTR01 and ALN-TTR02. Both formulations 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 and are being manufactured by us. 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. On November 21, 2011, we announced that Alnylam had presented preliminary Phase 1 clinical results for ALN-TTR01. Alnylam reported that that ALN-TTR01 was safe and well tolerated and that ALN-TTR01 demonstrated rapid, dose-dependent, and durable lowering of serum TTR protein levels after a single dose in ATTR patients. Following clearance of the CTA filed for ALN-TTR02 in January 2012, Alnylam announced the initiation of the ALN-TTR02 Phase 1 study in March 2012 with data expected to be reported in the third quarter of 2012.

Alnylam is also developing ALN-PCS, an RNAi therapeutic, to treat hypercholesterolemia, or high levels of cholesterol in the blood. ALN-PCS is manufactured by us and is enabled by our LNP delivery technology. 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 January 4, 2012, we announced that Alnylam had presented positive preliminary results from its ongoing clinical trial of ALN-PCS. Alnylam reported that ALN-PCS was safe and well tolerated and that ALN-PCS demonstrated statistically significant RNAi silencing of PCSK9 of up to 66% and reductions of up to over 50% in levels of low-density lipoprotein cholesterol (LDL-C), or “bad” cholesterol, a clinically validated endpoint. Alnylam expects to partner its ALN-PCS program prior to initiating a Phase 2 clinical study.

Under a manufacturing agreement entered into in January 2009 we continue to be the exclusive manufacturer of any products that utilize our technology as required by Alnylam through to the end of Phase 2 clinical trials. Alnylam will pay for the provision of staff and for external costs incurred. Pursuant to the terms of the Alnylam Manufacturing Agreement, there is a contractual minimum of CDN\$11.2 million payable by Alnylam for the three year period from 2009 to 2011. From January 1, 2012, at the start of each calendar quarter, Alnylam will prepay for the provision of our staff based on their estimate of work to be performed in that quarter. Any under or over estimate will be reconciled at the end of each quarter. Alnylam will continue to pay for external costs incurred by us on their behalf on a monthly invoice basis.

We have ongoing litigation with Alnylam and AlCana Technologies, Inc. where we have alleged misappropriation of our proprietary lipid nanoparticle delivery technology, resulting in damage to our intellectual property and business interests. Alnylam and AlCana have responded to our complaint and have also filed counterclaims. In addition, Alnylam has filed a patent infringement lawsuit against us arising from our research activities with a pharmaceutical collaborator. Isis

[Table of Contents](#)

Pharmaceuticals, Inc. is named as a co-plaintiff in the patent infringement suit. Litigation is subject to inherent uncertainty and if we are unsuccessful in defending ourselves we could be required to pay significant damages, costs, and attorney fees. We also continue to incur significant costs in the litigation and the litigation has diverted the attention of management and other resources that could otherwise be engaged in other activities. See “Item 8A Legal Proceedings” section of this Annual Report for more information.

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 worldwide 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.

We paid Halo-Bio an initial license fee of \$97,940 (US\$100,000).

Under the Agreement, the maximum future license fees and other contingent payments are US\$1,960,000 and the Company will pay up to US\$12,700,000 in milestones on each product developed plus royalties.

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. Government under the Transformational Medical Technologies (TMT) program as discussed in “TKM-Ebola” section above.

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 (formerly INX-0125, Optisomal Vinorelbine) and Brakiva (formerly INX-0076, 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\$19.0 million upon achievement of further development and regulatory milestones and we are also eligible to receive single-digit royalties on product sales. The milestone payments can be made in common shares of Talon. 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 and in November 2007 initiated a Phase 2 clinical trial investigating Marqibo as a treatment for uveal melanoma. In December 2009, Talon announced the results of its Phase 2 relapsed ALL clinical trial. 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 September 27, 2011, Talon announced its NDA for Marqibo had been accepted for filing by the FDA. On March 21, 2012, the Oncologic Drugs Advisory Committee voted 7 yes, 4 no, and 2 abstain that evidence from clinical studies supports a favorable benefit/risk assessment for use of Marqibo in the indicated population. The FDA is expected to review Talon's NDA by May 13, 2012.

Alocrest is an extended delivery formulation of the commercially available anticancer drug vinorelbine. Vinorelbine is an approved chemotherapeutic drug that is off-patent in the United States. Talon initiated a Phase 1 clinical trial for Alocrest in August 2006 and released preliminary data in October 2007. Talon is currently seeking a partner to continue the advancement of Alocrest through clinical trials.

Brakiva is a lipid encapsulated formulation of the approved anti-cancer and off-patent drug topotecan. Talon initiated a Phase 1 clinical trial for Brakiva in November 2008 in patients with advanced solid tumors.

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 sublicensees 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 sublicensees 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. Alnylam has provided us notice that this sublicense back to Tekmira only covers products developed under the Tekmira-Alnylam agreement and not products covered under the Protiva-Alnylam agreement.

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 in this on-going collaboration. This license is on

[Table of Contents](#)

terms essentially similar to those of our license from UBC described above, and has similarly been sublicensed by us to Alnylam, and similarly sublicensed to us and Protiva by Alnylam for the same gene targets, except that we are to pay milestones of up to US\$1,325,000 and single-digit royalties directly to UBC if we use any AlCana intellectual property generated under this supplemental agreement.

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.

Patent applications that we have filed with the United States Patent and Trademark Office have not, to date, been the subject of interferences, with the exception of one recent interference with an Alnylam patent. The Alnylam patent interference proceeding was declared by the U.S. Patent and Trademark Office to determine priority of invention to subject matter of Alnylam's U.S. Patent No. 7,718,629 in light of Tekmira's U.S. Patent Application 11/807,872. Tekmira believes certain claims in Alnylam's '629 patent are invalid and that Tekmira filed on the claimed sequence prior to Alnylam. On March 13, 2012, the USPTO released its decision in the motions phase of a patent interference proceeding. The USPTO granted two of our three motions, including our motion that Alnylam's broad claims are unpatentable due to lack of adequate written description support. Alnylam's corresponding motion that Protiva's claims are unpatentable for lack of written description support was denied, as was their motion that Protiva is not entitled to priority benefit based on our provisional applications 60/817,556 and 60/808,859. The next phase of the interference proceedings will determine priority for the remaining claims.

We also have ongoing litigation with Alnylam and AlCana where we have alleged misappropriation of our proprietary lipid nanoparticle delivery technology, resulting in damage to our intellectual property and business interests. Alnylam and AlCana have responded to our complaint and have also filed counterclaims. In addition, Alnylam has filed a patent infringement lawsuit against us arising from our research activities with a pharmaceutical collaborator. Isis is named as a co-plaintiff in the patent infringement suit. See "Item 8A Legal Proceedings" section of this Annual Report for more information.

Our portfolio includes approximately 120 active cases, with approximately 55 issued patents and allowed 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	Applications pending in U.S. and Europe	06/30/2030
LNP	Liposomal Apparatus and Manufacturing Methods	06/28/2002	U.S. Pat. No. 7,901,708; European Pat. No. 1519714	06/28/2023
Manufacturing				
LNP	Systems and Methods for Manufacturing Liposomes	07/27/2005	Application pending in U.S. and Europe	07/27/2026
Manufacturing				
Novel Lipids	Cationic Lipids and Methods of Use	06/07/2004	U.S. Pat. No. 7,745,651; application allowed in Europe	06/07/2025
Novel Lipids	Polyethyleneglycol-Modified Lipid Compounds and Uses Thereof	09/15/2003	U.S. Pat. No. 7,803,397; application pending in Europe	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

[Table of Contents](#)

<u>Invention Category</u>	<u>Title</u>	<u>Priority Filing Date*</u>	<u>Status**</u>	<u>Expiration Date***</u>
Chemical Modifications	Modified siRNA Molecules and Uses Thereof	11/02/2005	Allowed in U.S.; application pending in Europe	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	Applications pending in U.S. and 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, 2011.

* 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 2011 and 2010 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.

[Table of Contents](#)

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 combine 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 losses were \$0.01 million in 2011 and 2010 as compared to \$0.44 million in 2009. 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;

[Table of Contents](#)

- 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 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 2011 was \$16.6 million (2010 - \$21.4 million) and deferred revenue at December 31, 2011 was \$4.5 million (December 31, 2010 - \$4.1 million).

[Table of Contents](#)

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 2011 of \$0.6 million (2010 - \$0.7 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. The estimated volatility of our common stock at the date of issuance, and at each subsequent reporting period, is based on historical volatility that matches the expected remaining life of the warrants. 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 credit for the change in fair value of warrant liability in 2011 of \$0.6 million (2010 - \$nil).

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 October 2009, the FASB issued EITF 08-01, *Revenue Arrangements with Multiple Deliverables* (currently within the scope of FASB Accounting Standards Codification (ASC) Subtopic 605-25). This statement provides principles for allocation of consideration among its multiple-elements, allowing more flexibility in identifying and accounting for separate deliverables under an arrangement. The EITF introduces an estimated selling price method for valuing the elements of a bundled arrangement if vendor-specific objective evidence or third-party evidence of selling price is not available, and significantly expands related disclosure requirements. This standard is effective on a prospective basis for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Alternatively, adoption may be on a retrospective basis, and early application is permitted. We adopted this pronouncement on January 1, 2011. Adoption of the pronouncement did not have a material impact on our financial statements.

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*,

[Table of Contents](#)

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. 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 is not expected to have an impact on our financial position or results of operations.

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. The adoption of this standard is not expected to have a material impact on our financial position or results of operations.

5A. Operating Results

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:

<u>(in millions Cdn\$)</u>	<u>2011</u>	<u>2010</u>
Collaborations and contracts		
Alnylam	\$ 4.1	\$ 6.3
U.S. Government	11.5	3.6
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

Alnylam revenue / Under the Alnylam Manufacturing Agreement we are the exclusive manufacturer of any products required by Alnylam that utilize our technology through to the end of Phase 2 clinical trials. Under the Alnylam Manufacturing Agreement there was a contractual minimum payment for the provision of staff in each of the three years from 2009 to 2011 and Alnylam is reimbursing us for any external costs incurred. Revenue from external costs related to the Alnylam Manufacturing Agreement is being recorded in the period that Alnylam is invoiced for those costs except where we bear the risk of batch failure in which case revenue is recognized only once Alnylam accepts the batch. The total payment for the provision of staff from 2009 to 2011 was the contractual minimum amount of \$11.2 million. From January 1, 2012, at the start of each calendar quarter, Alnylam will prepay for the provision of our staff based on their estimate of work to be performed in that quarter. Any under or over estimate will be reconciled at the end of each quarter. Alnylam will continue to pay for external costs incurred by us on their behalf on a monthly invoice basis.

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.

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. The initial phase of the contract, which is funded under a Transformational Medical Technologies program, is budgeted at US\$34.7 million and is expected to last approximately three years. This initial funding is for the development of TKM-Ebola including completion of pre-clinical 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.

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

[Table of Contents](#)

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 (see Off-Balance Sheet Arrangements). We are now eligible to receive milestone payments from Talon of up to US\$19.0 million upon achievement of further development and regulatory milestones 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.

Revenue guidance for 2012 / Total collaborations and contracts revenues are expected to be at a similar level in 2012 as in 2011. Now that the minimum FTE requirement under the Alnylam Manufacturing Agreement has ended we expect lower Alnylam revenue. However, we expect U.S. Government contract revenue to increase over 2011 levels. BMS's demand for research formulations has recently increased so we expect more BMS revenue in 2012 as compared to 2011.

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 pre-clinical 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.

Research, development, collaborations and contracts expenses guidance for 2012 / Total research, development, collaborations and contracts expenses are expected to decrease modestly in 2012 as compared to 2011 levels. Our compensation expenses will be lower in 2012 than in 2011 following a reduction in workforce in January 2012 of 16 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 8A Legal Proceedings" section of this Annual Report for more information.

General and administrative expenses guidance for 2012 / Total general and administrative expenses are expected to decrease in 2012 as compared to 2011 levels. In 2011 we incurred significant expenses for our lawsuit against Alnylam and AlCana. From March 2012 onwards, under a fixed monthly fee agreement with Orrick, Herrington and Sutcliffe LLP (Orrick), our lead legal counsel for our lawsuit against Alnylam and AlCana, we will be required to reimburse Orrick for expenses incurred but no further payments will be required for professional fees. If we are successful in this lawsuit, we will pay a success fee to Orrick.

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 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

[Table of Contents](#)

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. Each balance sheet date the warrants are revalued and the change in value is recorded in the consolidated statement of operations and comprehensive loss.

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.

The legal and professional costs of establishing the loan of \$0.07 million and the initial fair value of the warrants of \$0.04 million have been included in General and Administrative expenses.

Year ended December 31, 2010 compared to the year ended December 31, 2009

For the fiscal year ended December 31, 2010, our net loss was \$12.4 million (\$1.20 per common share) as compared to a net loss of \$8.7 million (\$0.85 per common share) for 2009.

The primary reason for the increase in net losses is increased research, development, collaborations and contracts spending across our internal and partnered programs. Also, in 2010, we incurred professional and listing fees for our NASDAQ listing.

Revenue / Revenue was \$21.4 million in 2010 as compared to \$14.4 million in 2009. In Q3 2010 we received a \$5.9 million license fee amendment payment from Talon which was subsequently paid on to contingent creditors and is further explained in Off-Balance Sheet Arrangements below. Revenue streams from our ongoing collaborations and contracts changed significantly in 2010 as discussed below.

Revenue is detailed in the following table:

<u>(in millions Cdn\$)</u>	<u>2010</u>	<u>2009</u>
Collaborations and contracts		
Alnylam	\$ 6.3	\$ 8.8
U.S. Government	3.6	—
Roche	4.5	4.8
BMS	0.2	0.2
Other RNAi collaborators	0.4	—
Total collaborations and contracts	14.9	13.8
Alnylam milestone payments	0.5	0.6
Talon license amendment payment	5.9	—
Total revenue	\$21.4	\$14.4

Alnylam revenue / Under an agreement with Alnylam they were required to make collaborative research payments at a minimum rate of US\$2.0 million per annum for the provision of our research staff. This agreement expired on August 13, 2009 and we no longer receive research funding from Alnylam. We are, however, continuing to make LNP research and clinical trial batches for Alnylam under the Alnylam Manufacturing Agreement.

Under the Alnylam Manufacturing Agreement we are the exclusive manufacturer of any products required by Alnylam that utilize our technology through to the end of Phase 2 clinical trials. Under the Alnylam Manufacturing Agreement there was a contractual minimum payment for the provision of staff in each of the three years from 2009 to 2011 and Alnylam is reimbursing us for any external costs incurred. Revenue from external costs related to the Alnylam Manufacturing Agreement is being recorded in the period that Alnylam is invoiced for those costs except where we bear the risk of batch failure in which case revenue is recognized only once Alnylam accepts the batch. The total payment for the provision of staff from 2009 to 2011 was a minimum of \$11.2 million.

In Q2 2009 and in Q3 2010 we received 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.

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. The initial phase of the contract, which is funded under a Transformational Medical Technologies program, is budgeted at US\$34.7 million and is expected to last approximately three years. This initial funding is for the development of TKM-Ebola including completion of pre-clinical development, filing an IND application with the FDA and completing a Phase 1 human safety clinical trial.

[Table of Contents](#)

Under the contract we are being reimbursed for costs incurred, including an allocation of overheads, and we are being paid an incentive fee. The cost of equipment purchased for the contract, and revenue from the reimbursement of that cost, is initially recorded as deferred costs and revenue and is then amortized to the income statement over the expected contract period.

Roche revenue / Under the Roche Product Development Agreement dated May 2009 Roche are paying us for the provision of staff and for certain external costs incurred. We are recognizing revenue from the Roche Product Development Agreement in proportion to the services provided up to the reporting date by comparing actual hours spent to estimated total project hours. Revenue from external costs incurred under the Roche Product Development Agreement is recorded in the period that Roche is invoiced for those costs. The difference between service revenue recognized and cash received is being recorded in the balance sheet as accrued or deferred revenue, as appropriate. 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. 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. The rest of Roche deferred revenue was brought into income in 2010.

We earned \$0.8 million in collaborations revenue during the first half of 2009 for work under a separate Roche Research Agreement that ended in June 2009.

BMS revenue / BMS revenue in 2009 and 2010 relates to a research collaboration agreement. 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 next four years. Revenue from this agreement will be recognized as batches are produced. No batches had yet been produced under the new BMS agreement so deferred revenue as at December 31, 2010 included \$3.2 million in this respect.

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

Talon 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. We are now eligible to receive milestone payments from Talon of up to US\$19.0 million upon achievement of further development and regulatory milestones 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.

Expenses / Research, development, collaborations and contracts / Research, development, collaborations and contracts expenses increased to \$22.1 million in 2010 as compared to \$17.8 million in 2009.

In Q3 2010 we signed a contract with the U.S. Government to develop TKM-Ebola and incurred significant program costs such as materials and pre-clinical 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 labor costs and overheads and an incentive fee.

In 2010 we also incurred more reimbursable costs on our Alnylam collaboration as compared to 2009. Overall costs incurred on our TKM-PLK1, TKM-ApoB and other research and formulation development are at similar levels in 2009 and 2010.

Research, development, collaborations and contracts compensation expenses increased in 2010 as compared to 2009. This was due to increasing staff numbers and an increase in stock option expense in 2010. Our research and development staff numbers have increased to 82 at December 31, 2010 (total staff 92) as compared to 64 (total staff 78) at December 31, 2009. Ordinarily, we issue an annual grant of stock options to all staff and directors at the end of our fiscal year but due to a stock trading black-out our annual grant was delayed until Q1 2010. Our 2010 annual grant of stock options occurred as planned in December 2010. Typically, a portion of our stock options vest immediately so there is a peak in stock option expense in the period when options are granted.

General and administrative / General and administrative expenses increased to \$4.8 million in 2010 from \$4.2 million in 2009. The increase in 2010 generally relates to professional and listing fees for our NASDAQ share listing.

Depreciation of property and equipment / Depreciation of property and equipment was steady at \$1.0 million in 2010 and \$1.0 million in 2009.

Loss on purchase and settlement of exchangeable and development notes / The \$5.9 million license amendment payment and related \$5.9 million loss on the purchase and settlement of exchangeable and development notes. See "Item 5E. Off-Balance Sheet Arrangements" section of this Annual Report for more information.

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, 2011, we had cash and cash equivalents of approximately \$9.2 million as compared to \$12.3 million at December 31, 2010.

Operating activities used cash of \$7.7 million in 2011 as compared to \$11.2 million in 2010. Excluding changes in non-cash operating items, cash used in operating activities in 2011 fell to \$8.8 million as compared to \$10.7 million in 2010 due, largely, to reduced losses as discussed earlier.

Investing activities used \$0.01 million in 2011 as compared to \$0.8 million in 2010. Investing in 2010 relates to facility improvements and manufacturing equipment. Any equipment we acquire under our TKM-Ebola contract is owned by the U.S. Government so is not recorded as a Company investment.

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. After paying underwriter's commission and other unit issue costs the offering generated net cash of \$4.5 million.

In December 2011, we secured a US\$3.0 million term loan from Silicon Valley Bank (SVB). The US\$3.0 million loan from SVB may be drawn down at the discretion of the Company at any time prior to September 30, 2012. The loan matures on June 30, 2015 and carries a fixed interest rate of 8% annually. If we choose to draw down on the loan, principal and interest payments will be made monthly starting on October 1, 2012. We provided SVB with 54,545 warrants at a price of \$1.65 and will provide additional warrants equal to 2% of any draw down on the loan. We have not yet drawn down on the loan. The loan will be secured by the assets of the Company and does not include any financial covenants.

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. We plan to use the net proceeds of the offering for general corporate purposes. The common shares issued pursuant to the private placement are subject to a four-month hold period that expires on June 30, 2012.

We believe our current funds on hand, following the February 29, 2012 private placement, plus expected income, including funds from our collaborative partners and the U.S. Government and access to the loan facility from SVB, will be sufficient to extend our cash runway until the second half 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, 2011 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 have not entered into any 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 our only material commitments to capital expenditure are for lab and manufacturing equipment related to our TKM-Ebola program, and we expect these purchases to be reimbursed by the U.S. Government as the contractor for this program.

5C. Research and Development, Patents and Licences

Cost associated with our research, development, patents and licences are discussed in Item 5.A. "Operating results" and Item 4.B. "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 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.

Table of Contents

(in millions Cdn\$ except per share data) – unaudited

	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011
Revenue								
Collaborations and contracts:								
Alnylam	\$ 0.9	\$ 1.4	\$ 1.8	\$ 2.1	\$ 0.9	\$ 1.0	\$ 1.5	\$ 0.7
U.S. Government	—	—	1.2	2.4	3.4	3.3	2.0	2.8
Roche	1.3	0.9	0.6	1.7	—	—	—	—
Other	0.3	—	0.3	—	—	0.1	0.2	0.2
	<u>2.5</u>	<u>2.3</u>	<u>3.9</u>	<u>6.2</u>	<u>4.3</u>	<u>4.4</u>	<u>3.7</u>	<u>3.7</u>
Alnylam licensing fees and milestone payments	—	—	0.5	—	—	—	0.5	—
Talon license amendment payment	—	—	6.0	—	—	—	—	—
Total revenue	2.5	2.3	10.4	6.2	4.3	4.4	4.2	3.7
Expenses and other income (losses)	<u>6.7</u>	<u>6.3</u>	<u>12.8</u>	<u>8.1</u>	<u>7.4</u>	<u>7.9</u>	<u>5.7</u>	<u>5.5</u>
Net loss	(4.2)	(4.0)	(2.4)	(1.9)	(3.1)	(3.5)	(1.5)	(1.8)
Basic and diluted net loss per share	\$(0.40)	\$(0.38)	\$(0.24)	\$(0.18)	\$(0.30)	\$(0.33)	\$(0.12)	\$(0.15)

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, our Roche partnership which was expanded in May 2009 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. Revenue from the Alnylam Manufacturing Agreement was higher than usual in Q3 2010, Q4 2010 and Q3 2011 when deferred revenue related to minimum FTE payments was recognized based on our estimate of percentage of completion of the annual commitment. Quarterly revenue levels are also affected by the timing of manufacturing third party costs such as manufacturing suite charges. The timing of batch manufacturing is sporadic and manufacturing suite booking fees can precede the date of batch manufacture by many months.

In Q3 2010 we signed a contract with the U.S. Government to develop TKM-Ebola and incurred significant program costs such as materials and pre-clinical studies that have been included in research, development, collaborations and contracts expenses. These third-party costs are being reimbursed by the U.S. Government so 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.

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. The balance of Roche deferred revenue, except for a provision for the stability study work, was recognized as revenue in Q4 2010. The stability studies were completed in 2011 so we now have no further obligation to Roche.

In Q3 2010 and in Q3 2011 we earned US\$0.5 million milestones from Alnylam following their initiation of a Phase 1 human clinical trial enabled by our LNP delivery technology.

In Q3 2010 we received a \$5.9 million license amendment payment from Talon. The \$5.9 million was then paid to certain of our contingent creditors in full settlement of a contingent obligation so is also included as an expense in our Q3 2010 income statement.

We expect revenue to continue to fluctuate particularly due to the variability in demand for our manufacturing services, the development stage of the TKM-Ebola contract and the timing of licensing payments and milestone receipts.

Net losses from Q1 2010 and Q2 2010 were higher due to increased spending on our TKM-ApoB and TKM-PLK1 programs. In those quarters we were manufacturing materials for pre-clinical and clinical trials and conducting toxicology studies in preparation for clinical development of both programs. Losses from Q3 2010 onward have generally been lower than the first half of 2010 as a result of higher revenues. Our Q3 2011 lower expenses and net loss are a result of an unusually

[Table of Contents](#)

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 research and development costs reimbursement.

Fourth quarter of 2011 / Our Q4 2011 net loss was \$1.8 million (\$0.15 per common share) as compared to a net loss of \$1.9 million (\$0.18 per common share) for Q4 2010.

Revenue decreased to \$3.7 million in Q4 2011 as compared to \$6.2 million in Q4 2010. This decrease was largely the result of the winding down of the Roche collaboration in Q4 2010 and a low level of activity under the Alnylam Manufacturing Agreement in Q4 2011.

Research, development, collaborations and contracts expenses decreased to \$3.7 million in Q4 2011 as compared to \$6.6 million in Q4 2010. In Q4 2010, as compared to Q4 2011, we incurred a far greater level of third party costs for our U.S. Government and Alnylam contract work.

General and administrative expenses increased to \$2.0 million in Q4 2011 from \$1.2 million in Q4 2010. The increase primarily relates to legal fees incurred in respect of our lawsuit with Alnylam and AlCana.

5E. Off-Balance Sheet Arrangements

Debt retirement / We had a contingent obligation that arose through a Purchase and Settlement Agreement dated June 20, 2006 whereby we 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 license agreement with Talon we signed a Waiver and Release with 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\$22.8 million. As per the terms of the Waiver and Release we paid the Former Noteholders \$5.9 million (US\$5.75 million) in full settlement of the contingent obligation and we included this in our 2010 other income (losses) as loss on purchase and settlement of exchangeable and development notes. We now have no further obligation to the Former Noteholders and we will retain any future milestones or royalties received from Talon.

Protiva promissory notes / On March 25, 2008, our subsidiary, Protiva, declared dividends 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 sets forth Tekmira's contractual obligations as at December 31, 2011:

	Payments due by period (in millions of dollars)				
	Total	Less than 1 year	2-3 years	4-5 years	More than 5 years
Contractual Obligations	—	—	—	—	—
Long-Term Debt Obligations	—	—	—	—	—
Capital (Finance) Lease Obligations	—	—	—	—	—
Operating Lease Obligations ⁽¹⁾	3.3	1.3	2.0	—	—
Purchase Obligations	—	—	—	—	—
Other Long-Term Liabilities	—	—	—	—	—
Total	<u>3.3</u>	<u>1.3</u>	<u>2.0</u>	<u>—</u>	<u>—</u>

(1) The operating lease for our laboratory and office premises expires in July 2014 but we have the option to extend the lease to 2017 and then to 2022 and then to 2027. The amounts shown in the table are Tekmira's gross obligations. We expect to receive sub-lease income of \$0.2 million in 2012.

In June 2011, we signed a fixed monthly fee agreement with Orrick, Herrington and Sutcliffe LLP (Orrick), our lead legal counsel for our lawsuit with Alnylam and AlCana. Under this agreement, from March 2012 onwards, we will be required to reimburse Orrick for expenses incurred but no further payments will be required for professional fees. If we are successful in this lawsuit we will also pay a success fee to Orrick. We have not recorded this contingent obligation due to uncertainties related to the outcome of the lawsuit. At December 31, 2011, the contingent obligation was \$4.5 million (US\$4.4 million).

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) (4)}	Custer, Washington, U.S.A.	Director
Arthur M. Bruskin ⁽⁴⁾	Huntington Station, New York, U.S.A.	Director
Kenneth Galbraith ^{(2) (4)}	Surrey, British Columbia, Canada	Director
Donald G. Jewell ⁽²⁾	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)
R. Ian Lennox ⁽³⁾	Jupiter, Florida, U.S.A	Director
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
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. Mr. Ian Lennox entered into a settlement agreement with the Ontario Securities Commission, or OSC, in March 2006 with regard to his purchase in the market of 25,000 shares of Labopharm Inc. while he

[Table of Contents](#)

was a director of Labopharm. The purchase was made outside a Labopharm imposed blackout period and Mr. Lennox properly filed all insider trading reports. Subsequent to the share purchase, Labopharm entered into a licensing agreement. The possibility of entering into such agreement had been discussed with the Labopharm board before Mr. Lennox made his share purchases. Mr. Lennox initiated contact with the OSC on the matter and cooperated fully with OSC staff.

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 and is currently a director for the Centre for Drug and Research Development and viDA Therapeutics Inc. and Chairman for Indel Therapeutics Inc. In 2009, Dr. Abrams joined Inimex Pharmaceuticals as President and CEO. He is also an Adjunct Professor at the University of British Columbia.

Arthur M. Bruskin, Ph.D., Director. Dr. Bruskin has served as our Director since May 2008. Dr. Bruskin is currently an independent consultant in the biotechnology and pharmaceutical industry. He earned his BA and MA (Microbiology) at the University of Connecticut and his Ph.D. (Biology) at Indiana University. Following his postdoctoral training at the University of California, San Francisco, Dr. Bruskin took a position at Applied Biotechnology (ABT), a Cambridge, MA biotechnology company where he was responsible for their cancer therapeutic program from 1987 to 1991. Following the merger of ABT with Oncogene Science in 1991 (now OSI Pharmaceuticals (NASDAQ:OSIP)), Dr. Bruskin held a variety of positions at OSI including Executive Vice President, Global Research. Dr. Bruskin was responsible for all of OSI's pre-clinical research in the areas of Oncology and Diabetes and was involved in the discovery and development of Tarceva. After leaving OSI in 2002, Dr. Bruskin has been the Chief Scientific Officer of Interpath Pharmaceuticals Inc. (2005-2006) and the Chief Operating Officer of Eutropics Pharmaceuticals Inc. (2006-2008) and part-time Chief Scientific Officer at America Stem Cell, Inc., a privately held biotechnology company (2009-2010).

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.

[Table of Contents](#)

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).

R. Ian Lennox, M.B.A., Director. Mr. Lennox has served as our Director since May 2008. Mr. Lennox is currently Chairman and CEO of Ricerca Biosciences, LLC, a contract research organization for the pharmaceutical industry and he is also director of several life sciences companies in North America. From 2000 to 2004, Mr. Lennox held leadership positions at MDS Inc., first as president and chief executive officer, drug discovery and development, and later as president and chief executive officer, pharmaceutical and biotechnology markets. Prior to joining MDS, Mr. Lennox was president and chief executive officer of Phoenix International Life Sciences, a NASDAQ Stock Exchange company, and chairman and chief executive officer of Drug Royalty Corporation, a Toronto Stock Exchange listed company. From 1978 to 1997, Mr. Lennox held progressively senior managerial positions at Monsanto Company in the U.S., Europe and Latin America, including six years as president and chief executive officer of Monsanto (Canada), based in Toronto. Mr. Lennox has also served as director of a number of life sciences companies and charitable foundations in North America. Mr. Lennox holds an Honours B.S. degree in physiology and pharmacology and an M.B.A. from the University of Western Ontario. He has also completed the executive management program in finance at the Columbia School of Business.

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.

[Table of Contents](#)

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.

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 CDN \$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, 2011. 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 Option 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 and participation in our Option Plan enables our executive officers to participate in our long term success and aligns their interests with those of the shareholders. We do not believe our compensation policies create significant risk for the Company since the discretionary portion of compensation, that is, share options and bonuses are not formulaic, are based on qualitative measures and are at the full discretion of the Board. 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.

Table of Contents

<u>Name and principal position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Option-based awards ⁽¹⁾ (\$)</u>	<u>Annual incentive cash bonuses ⁽²⁾ (\$)</u>	<u>All other compensation ⁽³⁾ (\$)</u>	<u>Total compensation (\$)</u>
Dr. Mark J. Murray ⁽⁴⁾ 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
	2009	345,000	—	103,500	90,237	538,737
Ian C. Mortimer Executive Vice President, Finance and Chief Financial Officer	2011	285,000	96,395	—	—	381,395
	2010	285,000	56,610	71,250	—	412,860
	2009	285,000	—	85,500	133,550	504,050
Dr. Ian MacLachlan 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
	2009	285,000	—	85,500	8,550	379,050
Dr. Peter Lutwyche Senior Vice President of Pharmaceutical Development	2011	225,000	77,116	—	—	302,116
	2010	221,327	56,610	39,375	—	317,312
	2009	205,000	—	43,050	6,150	254,200
Paul A. Brennan ⁽⁵⁾ Senior Vice President of Business Development	2011	230,000	77,116	—	—	307,116
	2010	73,128	151,517	—	—	224,645
	2009	—	—	—	—	—

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%.
- (2) The Executive Compensation and Human Resources Committee approved the payment of 60% of the available executive bonus pool during 2009. 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.
- (3) All other compensation in 2009 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 2009 all of our full-time employees and executives were eligible for RRSP or equivalent matching payments. In 2010 and 2011 RRSP match payments were suspended to conserve cash. In 2009 Dr. Murray also received a tax gross-up payment of \$46,425 in respect of his earnings prior to the business combination with Protiva. Under Dr. Murray's previous employment agreement, which was replaced effective May 30, 2008 following the business combination with Protiva, he was eligible for a tax gross-up payment which ensures that he is no worse off as a result of paying taxes on his earnings from us in Canada as compared to if he had worked and paid taxes only in the United States. The payment was calculated and paid in 2009 once Dr. Murray had filed his 2008 U.S. and Canadian tax returns. Dr. Murray's employment agreement with Tekmira, effective May 30, 2008, does not include a tax gross-up clause. 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. On May 31, 2009, a year and a day after the business combination with Protiva, Mr. Mortimer received a one time retention bonus of \$125,000.
- (4) Effective January 1, 2011 Dr. Murray's salary was denominated in US dollars and was increased to US\$350,000. The amount shown in the table for 2011 is the Canadian equivalent of US\$350,000. In 2009 and 2010 Dr. Murray's salary was \$345,000 and was denominated in Canadian dollars.
- (5) Mr. Brennan commenced employment with us in September 2010 with an annual salary of \$230,000.

Base Salary. The Named Executive Officers are paid a salary in order to ensure that the compensation package offered by us is in line with that offered by other comparable companies in the biotechnology industry, and as an immediate means of rewarding the Named Executive Officer for efforts expended on our behalf. In the fourth quarter of 2010, LaneCaputo Compensation Inc. was paid \$32,480 to review Executive and Director Compensation. LaneCaputo used the following companies to benchmark compensation: AEterna Zentaris Inc., AVI Biopharma, Inc., Celldex Therapeutics, Inc., Cleveland BioLabs Inc., Curis, Inc., Idera Pharmaceuticals, Inc., Inhibitex, Inc., Inovio Pharmaceuticals, Inc., Neuralstem, Inc., NovaBay Pharmaceuticals, Inc., OncoGenex Pharmaceuticals, Inc., Peregrine Pharmaceuticals Inc., Rexahn Pharmaceuticals, Inc., Sangamo BioSciences, Inc., Transition Therapeutics Inc. and YM BioSciences Inc. Base salaries for Named Executive Officers are evaluated against the responsibilities inherent in the position held and the individual's experience and past performance.

[Table of Contents](#)

Effective January 1, 2009 the base salary of Dr. Murray was increased by 6% to \$345,000 and Dr. Lutwyche's salary was increased 11% to \$205,000. Mr. Mortimer's and Dr. MacLachlan's base salaries remained unchanged at \$285,000.

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 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. 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.

Annual Incentive Cash Bonuses. Our policy is to pay bonuses if and when we achieve major corporate objectives as determined by the Compensation Committee and Board of Directors. Cash bonus payments are at the full discretion of the Board of Directors. Our objectives for 2009, as established by the Board of Directors included: filing an Investigational New Drug (IND) application for TKM-ApoB; advancing TKM-PLK1 toward clinical development; selecting a third product candidate; supporting our pharmaceutical partners by providing research, development and manufacturing services; and, maintaining a strong cash position. For 2009, Dr. Murray, Mr. Mortimer and Dr. MacLachlan were eligible to earn cash bonuses of up to a maximum of 50% of their respective base salaries based on the Board of Directors determination of achievement of corporate goals. For 2009, Dr. Lutwyche was eligible to earn a cash bonus up to a maximum of 35% of his base salary based on the Board of Directors determination of achievement of corporate goals. The Compensation Committee recommended, and the Board of Directors approved, the payment of 60% of the maximum cash bonus for 2009 in May 2009 following the completion of two major corporate objectives: filing an IND application for TKM-ApoB and signing a product development agreement with Roche. The recommendation of our Compensation Committee, and the determination of our Board of Directors, to pay 60% of the maximum cash bonus was based on the significance of the combined achievement of these corporate objectives relative to the remaining corporate objectives described above and a recognition of the collective efforts of our Named Executive Officers in achieving them, but was not derived based on any quantitative weighting of the corporate performance goals or other formulaic process. There were no further bonuses paid or payable in 2009.

Maximum percentage bonus potential for Drs. Murray, MacLachlan and Lutwyche and Mr. Mortimer for 2010 was the same as for 2009. 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 light of the ongoing litigation and in order to preserve cash, no cash bonuses were paid.

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 wishes to maintain a balance of ungranted options for use in future periods.

[Table of Contents](#)

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 vest upon the final resolution of the litigation against Alnylam.

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.

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 “*Equity Compensation Plans*” for a description of the terms of the Corporation’s current share option plan, the 2011 Plan.

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

The following table sets out all option-based awards and share-based awards outstanding as at December 31, 2011, for each Named Executive Officer:

Name	Option-based Awards			Value of unexercised in-the-money options ⁽¹⁾ (\$)
	Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date	
Dr. Mark Murray ⁽²⁾	8,193	0.44	July 29, 2012	9,012
	219,428	0.44	September 12, 2015	241,371
	27,007	0.44	March 1, 2018	29,708
	30,000	4.65	August 30, 2018	0
	25,000	1.80	December 8, 2018	0
	25,000	3.85	January 27, 2020	0
	35,000	2.40	August 9, 2021	0
Ian C. Mortimer	35,000	1.70	December 22, 2021	0
	3,000	7.00	December 14, 2014	0
	15,000	3.10	July 25, 2015	0
	10,000	5.40	March 28, 2016	0
	15,000	3.00	August 2, 2016	0
	10,000	6.50	August 6, 2017	0
	84,000	5.60	March 31, 2018	0
	11,000	1.80	December 8, 2018	0
	16,000	3.85	January 27, 2020	0
	25,000	2.40	August 9, 2021	0
Dr. Ian MacLachlan	25,000	1.70	December 22, 2021	0
	30,000	4.65	August 30, 2018	0
	16,000	1.80	December 8, 2018	0
	16,000	3.85	January 27, 2020	0
	25,000	2.40	August 9, 2021	0
Dr. Peter Lutwyche	25,000	1.70	December 22, 2021	0
	18,000	1.80	December 8, 2018	0
	16,000	3.85	January 27, 2020	0
	20,000	2.40	August 9, 2021	0
Paul A. Brennan	20,000	1.70	December 22, 2021	0
	20,000	8.20	September 6, 2020	0
	20,000	2.40	August 9, 2021	0
	20,000	1.70	December 22, 2021	0

[Table of Contents](#)

Notes:

- (1) This amount is based on the difference between Tekmira's year end TSX share price of \$1.54 and the exercise price of the option.
- (2) Dr. Murray holds options to purchase 377,135 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 254,628 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 "Additional Shares Subject to Issue Under an Equity Compensation Plan".

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

The aggregate value of executive options vesting during the year ended December 31, 2011 measured at their date of vesting by comparing option exercise price to closing market price on that day was:

<u>Name</u>	<u>Option-based awards – Value vested during the year (\$)</u>
Dr. Mark J. Murray	13,813
Ian C. Mortimer	8,840
Dr. Ian MacLachlan	8,840
Dr. Peter Lutwyche	8,840
Paul A. Brennan	0

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, 2011. Receipt of payments on termination is contingent on the Named Executive Officer delivering a release to Tekmira.

<u>Payment Type</u>	<u>Dr. Mark J. Murray</u>	<u>Dr. Ian MacLachlan</u>	<u>Ian C. Mortimer</u>	<u>Dr. Peter Lutwyche</u>	<u>Paul A. Brennan</u>
Involuntary Termination by Tekmira for cause or upon death					
Cash payment	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Option values ⁽¹⁾	\$ 280,091	\$ 0	\$ 0	\$ 0	\$ 0
Benefits ⁽²⁾	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Involuntary Termination by Tekmira without cause					
Cash payment	\$1,034,124	\$ 885,000	\$855,000	\$168,750	\$134,167
Option values ⁽³⁾	\$ 280,091	\$ 0	\$ 0	\$ 0	\$ 0
Benefits ⁽²⁾	\$ 171,813	\$ 18,696	\$ 15,782	\$ 5,837	\$ 4,545
Involuntary Termination by Tekmira without cause or by Executive with good reason after a change in control of the Company					
Cash payment	\$1,034,124	\$ 885,000	\$855,000	\$252,475	\$230,000
Option values ⁽³⁾	\$ 280,091	\$ 0	\$ 0	\$ 0	\$ 0
Benefits ⁽²⁾	\$ 171,813	\$ 18,696	\$ 15,782	\$ 7,783	\$ 7,792

Notes:

- (1) This amount is based on the difference between Tekmira's year end share price of \$1.54 and the exercise price of the options that were vested as at December 31, 2011.
- (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 \$1.54 and the exercise price of the options that were vested as at December 31, 2011 and options that would vest during the severance period.

[Table of Contents](#)

Long-Term Incentive Plan Awards for our Directors

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

Pension Plans or Similar Benefits for Named Executive Officers

The Company has no pension or deferred compensation plans for its Named Executive Officers.

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. Following the business combination with Protiva, the Board reviewed its fee schedule and adjusted it to increase the annual retainer and lower the meeting fees to align with companies comparable to Tekmira. This lowered the overall cash compensation on an annual basis. The new fee schedule came into effect on September 1, 2008, and is 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.

Non-executive directors earned cash compensation of \$260,539 in 2011 as annual retainer and meeting attendance fees. The Company also, reimburses 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 the Company's most recently completed financial year of December 31, 2011 is:

<u>Name</u>	<u>Fees earned (\$)</u>	<u>Option-based awards ⁽¹⁾ (\$)</u>	<u>Total (\$)</u>
Daniel Kisner (Board Chair)	42,847	19,279	62,126
Don Jewell	35,780	19,279	55,059
Frank Karbe (Audit Committee Chair)	39,921	19,279	59,200
Kenneth Galbraith	39,886	19,279	59,165
R. Ian Lennox	34,769	19,279	54,048
Michael J. Abrams	35,015	19,279	54,294
Arthur M. Bruskin	32,321	19,279	51,600

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 2011 are as follows: expected average option term of eight years; a zero dividend yield; a weighted average expected volatility of 115.5%; and, a weighted average risk-free interest rate of 2.51%.

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, 2011, for each director serving for at least a portion of 2011:

<u>Name</u>	<u>Option-Based Awards</u>			<u>Value of unexercised in-the-money options ⁽¹⁾ (\$)</u>
	<u>Number of securities underlying unexercised options (#)</u>	<u>Option exercise price (\$)</u>	<u>Option expiration date</u>	
Daniel Kisner	10,000	3.85	January 27, 2020	0
	5,000	2.40	August 9, 2021	0
	5,000	1.70	December 22, 2021	0

[Table of Contents](#)

Name	Option-Based Awards			Value of unexercised in-the-money options ⁽¹⁾ (\$)
	Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date	
Don Jewell	5,000	1.80	December 8, 2018	0
	5,000	3.85	January 27, 2020	0
	5,000	2.40	August 9, 2021	0
	5,000	1.70	December 22, 2021	0
Frank Karbe	5,000	3.85	January 27, 2020	0
	5,000	2.40	August 9, 2021	0
	5,000	1.70	December 22, 2021	0
Kenneth Galbraith	5,000	3.85	January 27, 2020	0
	5,000	2.40	August 9, 2021	0
	5,000	1.70	December 22, 2021	0
R. Ian Lennox	5,000	1.80	December 8, 2018	0
	5,000	3.85	January 27, 2020	0
	5,000	2.40	August 9, 2021	0
	5,000	1.70	December 22, 2021	0
Michael J. Abrams ⁽²⁾	675	0.44	January 22, 2012	743
	675	0.44	January 21, 2013	743
	675	0.44	January 21, 2014	743
	675	0.44	January 22, 2015	743
	17,044	0.44	September 12, 2015	18,748
	5,445	0.44	December 31, 2015	5,990
	675	0.44	April 3, 2017	743
	13,503	0.44	May 27, 2017	14,853
	5,000	1.80	December 8, 2018	0
	5,000	3.85	January 27, 2020	0
	5,000	2.40	August 9, 2021	0
5,000	1.70	December 22, 2021	0	
Arthur M. Bruskin	4,000	5.60	March 31, 2018	0
	5,000	1.80	December 8, 2018	0
	5,000	3.85	January 27, 2020	0
	5,000	2.40	August 9, 2021	0
	5,000	1.70	December 22, 2021	0

Notes:

- (1) This amount is based on the difference between Tekmira's year end share price of \$1.54 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. The Company 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, the Company 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 the Company wishes 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.

Benefits on Termination of Directors

We do not have any contractual obligations arising 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.

[Table of Contents](#)

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 22, 2011, the date of our last Annual General Meeting:

<u>Name</u>	<u>Director Since</u>
Michael J. Abrams	May 30, 2008 ⁽¹⁾
Arthur M. Bruskin, Ph.D.	May 1, 2008
Kenneth Galbraith	January 28, 2010
Donald G. Jewell	May 30, 2008 ⁽¹⁾
Frank Karbe	January 28, 2010
Daniel Kisner	January 28, 2010
R. Ian Lennox	May 30, 2008 ⁽¹⁾
Mark J. Murray Ph.D.	May 30, 2008 ⁽¹⁾

Notes:

(1) Messrs. Abrams, Jewell, Lennox 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.

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 has 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;

Table of Contents

- 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.

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 (Compensation Committee) are Mr. Lennox, Dr. Abrams and Dr. Kisner. Mr. Lennox 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 the Company's 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, Dr. Bruskin and Dr. Kisner. Mr. Galbraith 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; and,
- 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.

[Table of Contents](#)

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.

Science Committee

The members of our Science Committee are Dr. Bruskin, Dr. Abrams and Dr. Kisner. Dr. Bruskin chairs the Science Committee. Our Board of Directors has determined that each member of our Science 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 Science Committee include:

- review with management and report to the Board of Directors on the research programs of Tekmira and on relevant developments in the field of RNAi research; and
- attend meetings of any external scientific advisory groups.

6D. Employees

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

	2011	2010	2009
Research and development	64	81	74
General and administrative	10	13	11
Total	74	94	85

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 March 1, 2012 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%	20,000	6,250	0.22%
Michael J. Abrams, Director	8,850	0.06%	58,692	2,500	0.39%
Arthur M. Bruskin, Ph.D., Director	3,400	0.02%	24,000	1,500	0.16%
Kenneth Galbraith, Director	15,240	0.11%	15,000	—	0.17%
Donald G. Jewell, Director	471,455	3.37%	20,000	90,000	3.28%
Frank Karbe, Director	5,000	0.04%	15,000	2,500	0.13%
R. Ian Lennox, Director	—	— %	20,000	—	0.11%
Mark J. Murray Ph.D., President, Chief Executive Officer and Director	51,768	0.37%	404,628	10,000	2.63%
Ian MacLachlan, Ph.D., Executive Vice President and Chief Scientific Officer	171,534	1.23%	112,000	5,000	1.63%
Ian C. Mortimer, Executive Vice President, Finance and Chief Financial Officer	32,000	0.23%	214,000	10,000	1.44%
Peter Lutwyche, Ph.D., Senior Vice President, Pharmaceutical Development	38,758	0.28%	74,000	2,500	0.65%
Paul Brennan, M.Sc., Senior Vice President, Business Development	19,000	0.14%	60,000	7,000	0.48%

[Table of Contents](#)

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⁾
R. Hector MacKay-Dunn, Q.C., Corporate Secretary	—	— %	—	—	— %
Total	<u>829,505</u>	<u>5.93%</u>	<u>1,037,320</u>	<u>137,250</u>	<u>11.29%</u>

Notes:

- (1) Based on 13,999,461 common shares issued and outstanding as of March 1, 2012.
- (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 17,754,198 common shares on a fully diluted basis as of March 1, 2012.

Named Executive Officer Outstanding Option-based Awards

The following table sets out all option-based awards and share-based awards outstanding as of February 29, 2012, for each Named Executive Officer:

Name	Option-based Awards		
	Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date
Dr. Mark Murray ⁽¹⁾	8,193	0.44	July 29, 2012
	219,428	0.44	September 12, 2015
	27,007	0.44	March 1, 2018
	30,000	4.65	August 30, 2018
	25,000	1.80	December 8, 2018
	25,000	3.85	January 27, 2020
	35,000	2.40	August 9, 2021
	35,000	1.70	December 22, 2021
Ian C. Mortimer	3,000	7.00	December 14, 2014
	15,000	3.10	July 25, 2015
	10,000	5.40	March 28, 2016
	15,000	3.00	August 2, 2016
	10,000	6.50	August 6, 2017
	84,000	5.60	March 31, 2018
	11,000	1.80	December 8, 2018
	16,000	3.85	January 27, 2020
	25,000	2.40	August 9, 2021
	25,000	1.70	December 22, 2021
Dr. Ian MacLachlan	30,000	4.65	August 30, 2018
	16,000	1.80	December 8, 2018
	16,000	3.85	January 27, 2020
	25,000	2.40	August 9, 2021
Dr. Peter Lutwyche	25,000	1.70	December 22, 2021
	18,000	1.80	December 8, 2018
	16,000	3.85	January 27, 2020
	20,000	2.40	August 9, 2021
Paul A. Brennan	20,000	1.70	December 22, 2021
	20,000	8.20	September 6, 2020
	20,000	2.40	August 9, 2021
	20,000	1.70	December 22, 2021

Notes:

- (1) Dr. Murray holds options to purchase 377,135 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 254,628 common shares of

[Table of Contents](#)

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 “Additional Shares Subject to Issue Under an Equity Compensation Plan”.

Director Outstanding Option-based Awards

The following table sets out all option-based awards and share-based awards outstanding as of February 29, 2012, for each director:

Name	Option-Based Awards		
	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
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
Frank Karbe	5,000	3.85	January 27, 2020
	5,000	2.40	August 9, 2021
	5,000	1.70	December 22, 2021
Kenneth Galbraith	5,000	3.85	January 27, 2020
	5,000	2.40	August 9, 2021
	5,000	1.70	December 22, 2021
R. Ian Lennox	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
Michael J. Abrams ⁽¹⁾	675	0.44	January 21, 2013
	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
Arthur M. Bruskin	5,000	1.70	December 22, 2021
	4,000	5.60	March 31, 2018
	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

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 last AGM on June 22, 2011, shareholders approved an omnibus stock-based compensation plan the 2011 Plan and a 273,889 increase in the number of stock-based compensation awards that Tekmira is permitted to issue. 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.

[Table of Contents](#)

Shareholders have approved the issuance of a maximum of 1,643,144 common shares of Tekmira under the Tekmira Plans which represents approximately 11.7% of the Company's 13,999,461 issued and outstanding common shares as at March 1, 2012.

Since January 1996, the equivalent of 93,721 common shares of Tekmira have been issued pursuant to the exercise of options granted under Tekmira's Plans (which represents approximately 0.7% of the Company's issued and outstanding common shares), and as of March 1, 2012, there were 1,513,118 common shares of Tekmira subject to options outstanding under Tekmira's Plans (which represents approximately 10.8% 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 March 1, 2012 was 36,305 (which represents approximately 0.3% 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, 2011.

Information for Tekmira's Plans

<u>Equity compensation plans approved by securityholders</u>	<u>Number of securities to be issued upon exercise of outstanding options (Column A Securities)</u>	<u>Weighted-average exercise price of outstanding options</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding Column A Securities)</u>
2007 and 2011 Plan	1,413,318	\$ 5.32	136,305

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 Corporation's Corporate Secretary.

Purpose. The purpose of the 2011 Plan is to promote the Corporation's interests and long-term success by providing directors, officers, employees and consultants with greater incentive to further develop and promote the Corporation'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 Corporation, and to assist the Corporation 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 (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 Corporation, 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 determined by the shareholders, and may be increased, decreased or fixed by our Board of Directors, as permitted under the applicable rules and regulations of our regulatory authorities to which we are subject.

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,

Table of Contents

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 share 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

Table of Contents

(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 Corporation'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 Share Option Plan provides that the Board of Directors may, from time to time, grant options to acquire all or part of the shares subject to the Share Option Plan to any person who is an employee or director of the Company or any of its subsidiaries, or any other person or company engaged to provide ongoing management, financial and scientific consulting or like services for the Company or any of its subsidiaries. The exercise price of options granted under the Share Option Plan will be determined by the directors, but will be at least equal to the closing trading price for the common shares of Tekmira on the day before the grant date. The term of option granted may not exceed 10 years from the date of grant of the option.

Table of Contents

Tekmira options may not be exercised after an optionee ceases to be an eligible recipient under the Share Option 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, all unvested options of the optionee will be deemed to have become fully vested immediately before retirement, and the 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 vest, and the options will be exercisable, on the same terms as if the optionee had continued to be an eligible recipient under the Share Option 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.

Any option granted is also subject to certain vesting provisions, typically over three years for employees and immediate vesting for directors. 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 Share Option Plan does not provide for any financial assistance to Plan members in exercising their options.

As specifically provided for in the Share Option 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 Share Option Plan. Any amendment to any provision of the Share Option 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 Share Option Plan that does any of the following:

- increases the number of common shares of Tekmira reserved for issuance under the Share Option Plan;
- 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 Share Option Plan without shareholder approval. Such amendments may include the following:

- amendments to the terms and conditions of this Plan necessary to ensure that the Share Option 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;

Table of Contents

- 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 Share Option Plan;
- a change to the termination provisions of a security or the Share Option Plan which does not entail an extension beyond the original expiry date;
- amendments to the provisions of the Share Option Plan respecting administration of the Share Option Plan and eligibility for participation under the Share Option Plan;
- amendments to the provisions of the Share Option Plan respecting the terms and conditions on which options may be granted pursuant to the Share Option Plan, including the provisions relating to the exercise price, option period, and vesting schedule; 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 represent approximately 2.5% of the Company’s issued and outstanding common shares as at March 1, 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 July 29, 2012 to March 1, 2018. As at March 1, 2012 a total of 31,052 Protiva options had been exercised and 488,020 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, 2012 no person, corporation or other entity beneficially owns, directly or indirectly, or controls more than 5% of our common shares, except as follows:

<u>Name and Municipality of Residence</u>	<u>Number of Common Shares Owned⁽¹⁾</u>	<u>Percentage⁽²⁾</u>
Growth Works Capital Ltd. & Affiliates., Vancouver, British Columbia	1,967,420	14.1%
Totals:	<u>1,967,420</u>	<u>14.1%</u>

Notes:

- (1) For these purposes, beneficial ownership means the sole or shared power to vote or direct the voting or to dispose or direct the disposition of any security. Unless otherwise indicated, each shareholder listed has sole voting or dispositive power with respect to such common shares.
 - (2) Based on 13,999,461 common shares issued and outstanding as of March 1, 2012.
- Each of our common shares entitles the holder thereof to one vote.

[Table of Contents](#)

Geographic Breakdown of Shareholders

As of March 1, 2012, our shareholder register indicates that our common shares are held as follows:

<u>Location</u>	<u>Number of Shares</u>	<u>Percentage of Total Shares</u>	<u>Number of Registered Shareholders of Record</u>
Canada	13,838,731	98.98%	154
United States	159,921	1.01%	12
Other	809	0.01%	4
Total	13,999,461	100%	170

Our securities are recorded in registered form on the books of our transfer agent, Canadian Stock Transfer Company Inc. (formerly 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 March 16, 2011, we filed a complaint against Alnylam for misappropriation and misuse of trade secrets, know-how and other confidential information, unfair and deceptive trade practices, unjust enrichment, unfair competition and false advertising. The suit, filed in the Business Litigation Session of the Massachusetts Superior Court, alleges Alnylam exploited its confidential relationship with us as a collaborator to engage in inappropriate and harmful conduct concerning our proprietary LNP technology, resulting in damage to our intellectual property and business interests. On April 6, 2011, Alnylam filed an answer and counter-claim to our complaint. On June 3, 2011, we filed an amended complaint against Alnylam and expanded our complaint to include AlCana Technologies, Inc. (AlCana). Our amended complaint against Alnylam is for misappropriation and misuse of trade secrets, know-how and other confidential information, unfair and deceptive trade practices, unjust enrichment, unfair competition and false advertising, breach of contract, breach of the implied covenant of good faith and fair dealing, tortious interference with contractual relationships, and civil conspiracy. The suit alleges Alnylam exploited its confidential relationship as our collaborator to misappropriate our proprietary lipid nanoparticle delivery technology, resulting in damage to our intellectual property and business interests. The amended complaint also adds AlCana as a defendant and asserts claims alleging misappropriation of trade secrets, tortious interference with contractual relations, unjust enrichment, unfair and deceptive acts and trade practices, and civil conspiracy against AlCana. We are seeking damages based on Alnylam's conduct as alleged in the amended complaint including termination of Alnylam's license to our technology.

On June 28, 2011 Alnylam filed an amended answer and counter-claim and on July 15, 2011 AlCana filed its answer and counter-claim to our amended complaint. Alnylam's answer and amended counter-claim alleges, in summary, breach of contract: contractual dispute resolution and confidentiality provisions, defamation, breach of covenant not to sue, breach of

[Table of Contents](#)

patent prosecution cooperation and non-use provisions, and breach of an implied covenant of good faith and fair dealing. Alnylam's defamation counter-claim was dismissed by the BLS Court in September 2011 including an award of our attorney's fees and costs. AlCana's answer and amended counter-claim alleges, in summary, breach of contract and breach of an implied covenant of good faith and fair dealing. In December 2011, we disclosed that the BLS Court has set a trial date of October 30, 2012.

On November 16, 2011, we disclosed that we had filed a Notice of Civil Claim in the Supreme Court of British Columbia against certain individuals from AlCana alleging that thousands of confidential documents containing our confidential information and trade secrets were downloaded and taken from us. We also filed a Notice of Application seeking an injunction ordering the documents and derivative materials be returned. We are also seeking general and punitive damages. On January 10, 2012, we disclosed that the Supreme Court of British Columbia granted Tekmira's application for an injunction that orders confidential documents and materials be returned to Tekmira and prohibits the use of Tekmira's confidential information. The injunction also requires the defendants to identify every person and corporation to whom the information was provided or communicated.

On January 17, 2012, we disclosed that Alnylam filed a patent infringement lawsuit against Tekmira in the U.S. District Court of the District of Massachusetts. Isis Pharmaceuticals, Inc. is named as a co-plaintiff in the suit. The context for this infringement suit has arisen out of our ongoing litigation between with Alnylam and AlCana. On March 6, 2012, we disclosed that we responded to the patent infringement lawsuit filed on January 17, 2012 by Alnylam and Isis in the U.S. District Court of Massachusetts by filing a motion to dismiss, seeking to eliminate claims for lack of standing. Tekmira alleges in its motion that Alnylam is seeking to assert rights that it does not have. On March 16, 2012, Alnylam responded with an opposition to Tekmira's motions alleging that Alnylam does have standing to sue Tekmira and that Tekmira's motion to dismiss should be denied.

We are also currently involved in a patent interference proceeding declared by the U.S. Patent and Trademark Office to determine priority of invention to subject matter of Alnylam's U.S. Patent No. 7,718,629 in light of Tekmira's U.S. Patent Application 11/807,872. See "Item 4B Business Overview - Patents and Proprietary Rights" section of this Annual Report for more information.

Dividends

We have 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, 2011.

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 13,999,461 were issued and outstanding as at March 1, 2012, and an unlimited number of Preferred shares without par value of which none were issued and outstanding as at March 1, 2012. In addition, we have outstanding certain incentive options to purchase Common shares as noted in Item 6.B. Compensation of this Annual Report.

[Table of Contents](#)

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, 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
December 31, 2007	—	—	\$19.90	\$ 3.30
Quarter Ended:				
January 1-March 23, 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
December 31, 2010	\$ 7.55	\$ 4.48	\$ 8.75	\$ 5.60
September 30, 2010	—	—	\$ 9.75	\$ 5.95
June 30, 2010	—	—	\$ 9.20	\$ 4.30
March 31, 2010	—	—	\$ 4.80	\$ 3.45
Month Ended				
March 23, 2012	\$ 2.91	\$ 2.10	\$ 2.85	\$ 2.12
February 29, 2012	\$ 2.56	\$ 1.92	\$ 2.58	\$ 1.95
January 31, 2012	\$ 2.66	\$ 1.52	\$ 2.65	\$ 1.41
December 31, 2011	\$ 1.70	\$ 1.40	\$ 1.72	\$ 1.52
November 30, 2011	\$ 1.73	\$ 1.29	\$ 1.75	\$ 1.50
October 31, 2011	\$ 2.05	\$ 1.55	\$ 1.95	\$ 1.62
September 30, 2011	\$ 2.25	\$ 1.63	\$ 2.20	\$ 1.70

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),

[Table of Contents](#)

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 4.B. “*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 4.B. “*Business Overview—Partnerships and Collaborations*”; and,
- License and Collaboration Agreement between Protiva Biotherapeutics Inc. and Halo-Bio RNAi Therapeutics, Inc. described under Item 4.B. “*Business Overview—Partnerships and Collaborations*”; and,
- Loan Agreement Silicon Valley Bank as described under Item 5.B “*Liquidity and Capital Resources.*”

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 10.E. “*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.**

[Table of Contents](#)

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) timber 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. 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

[Table of Contents](#)

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”.

For tax years beginning before January 1, 2013, a dividend paid by the Company to a U.S. Holder who is an individual, estate or trust generally will be taxed at the preferential tax rates applicable to long-term capital gains if the Company is a “qualified foreign corporation” (QFC) and certain holding period and other requirements for the common shares are met. The Company generally will be a QFC as defined under Section 1(h)(11) of the Code if the Company is eligible for the benefits of the Canada - U.S. Tax Convention or its shares are readily tradable on an established securities market in the U.S. However, even if the Company satisfies one or more of these requirements, the Company will not be treated as a QFC if the Company is a “passive foreign investment company” (or “PFIC,” as defined below) for the tax year during which it pays a dividend or for the preceding tax year. Even if the Company satisfies one or more of such requirements, as noted below, there can be no assurance that the Company will not become a PFIC. Thus, there can be no assurance that the Company will qualify as a QFC. See the section below under the heading “Passive Foreign Investment Company Rules” below.

If a U.S. Holder is not eligible for the preferential tax rates discussed above, a dividend paid by the Company to a U.S. Holder generally will be taxed at ordinary income tax rates (and not at the preferential tax rates applicable to long-term capital gains). 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 and 2011. 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. Active business gains arising from the sale of commodities

[Table of Contents](#)

generally are excluded from passive income if substantially all (85% or more) of a foreign corporation's commodities are stock in trade or inventory, depreciable property used in a trade or business or supplies regularly used or consumed in a trade or business and certain other requirements are satisfied.

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, 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. 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

For tax years beginning after December 31, 2012, certain individuals, estates and 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.

Table of Contents

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 \$50,000. 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 a domestic financial institution. 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 and backup withholding tax, at the rate of 28% (increasing to 31% for payments made after December 31, 2012), 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 4.C. “*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.

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, 2011 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

A significant portion of our administrative operations are in Canada. 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 have not entered into any agreements or purchased any instruments to hedge possible currency risks at this time.

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 Depositary 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, 2011, 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, 2011. 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, 2011.

(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, 2011, 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, 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 executive officer or chief financial officer. See "Biographies of Directors and Executive Officers" 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, 2011 and December 31, 2010 are as follows:

	December 31, 2011	December 31, 2010
Audit fees ⁽¹⁾	\$ 208,800	\$ 288,600
Audit-related fees	\$ 0	\$ 0
Tax fees ⁽²⁾	\$ 28,605	\$ 53,941
Other fees	\$ 0	\$ 0
Total fees	\$ 237,405	\$ 342,541

(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

Table of Contents

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.

[Table of Contents](#)

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 10, 2011. 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

<u>Exhibit Number</u>	<u>Description</u>
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).
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).

Table of Contents

<u>Exhibit Number</u>	<u>Description</u>
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
4.23**	Loan Agreement with Silicon Valley Bank dated as of December 21, 2011
4.24**	Employment Agreement with Paul Brennan dated August 24, 2010
4.25**	Tekmira 2011 Omnibus Share Compensation Plan approved by shareholders on June 22, 2011
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.

INDEX TO THE FINANCIAL STATEMENTS

For the period ended December 31, 2011

Management's Responsibility for Financial Reporting	F-3
Report of Independent Registered Public Accounting Firm	F-4
Consolidated Balance Sheet	F-5
Consolidated Statements of Operations and Comprehensive Loss	F-6
Consolidated Statements of Shareholders Equity	F-8
Consolidated Statements of Cash Flows	F-7
Notes to the Consolidated Financial Statements	F-9

[Table of Contents](#)

**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, 2011

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

/s/ Ian C. Mortimer

Dr. Mark J. Murray
President and
Chief Executive Officer

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

March 27, 2012



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, 2011 and December 31, 2010, the consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2011, 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, 2011 and December 31, 2010 and its consolidated results of operations and its consolidated cash flows for each of the years in the three-year period ended December 31, 2011 in accordance with generally accepted accounting principles in the United States of America.

/s/ KPMG LLP
Chartered Accountants

Vancouver, Canada
March 27, 2012

[Table of Contents](#)**TEKMIRA PHARMACEUTICALS CORPORATION****Consolidated Balance Sheets**

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	December 31 2011	December 31 2010
Assets		
Current assets:		
Cash and cash equivalents	\$ 9,184,134	\$ 12,346,010
Accounts receivable	880,693	3,318,729
Accrued revenue	185,356	817,464
Deferred expenses	788,111	557,256
Investment tax credits receivable	331,032	403,580
Finished goods inventory	—	150,731
Prepaid expenses and other assets	424,387	315,057
Total current assets	11,793,713	17,908,827
Property and equipment	18,684,491	18,668,897
Less accumulated depreciation and impairment	(16,486,912)	(15,555,481)
Property and equipment net of accumulated depreciation and impairment (note 4)	2,197,579	3,113,416
Total assets	\$ 13,991,292	\$ 21,022,243
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities (note 11)	\$ 3,972,551	\$ 6,151,923
Deferred revenue (note 3)	2,807,898	1,982,264
Warrants (notes 5 and 6(a))	205,044	—
Total current liabilities	6,985,493	8,134,187
Deferred revenue, net of current portion (note 3)	1,690,529	2,155,478
Total liabilities	8,676,022	10,289,665
Stockholders' equity:		
Common shares (note 6)		
Authorized - unlimited number with no par value Issued and outstanding:		
12,148,636 (December 31, 2010 - 10,338,702)	233,501,253	229,491,529
Additional paid-in capital	30,661,704	30,151,810
Deficit	(258,847,687)	(248,910,761)
Total stockholders' equity	5,315,270	10,732,578
Total liabilities and stockholders' equity	\$ 13,991,292	\$ 21,022,243

Basis of presentation and future operations (note 1)

Contingencies and commitments (note 10)

Subsequent event (note 12)

See accompanying notes to the consolidated financial statements.

[Table of Contents](#)**TEKMIRA PHARMACEUTICALS CORPORATION****Consolidated Statements of Operations and Comprehensive Loss**

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	Year ended December 31		
	2011	2010	2009
Revenue (note 3)			
Collaborations and contracts	\$ 16,122,843	\$ 14,923,860	\$13,831,916
Licensing fees and milestone payments	524,100	514,129	596,500
License amendment payment	—	5,916,750	—
Total revenue	16,646,943	21,354,739	14,428,416
Expenses			
Research, development, collaborations and contracts	19,898,969	22,133,983	17,764,379
General and administrative	6,312,487	4,780,745	4,152,540
Depreciation of property and equipment	975,512	1,038,573	988,659
Loss on purchase and settlement of exchangeable and development notes (note 3(f))	—	5,916,750	—
Total expenses	27,186,968	33,870,051	22,905,578
Loss from operations	(10,540,025)	(12,515,312)	(8,477,162)
Other income (losses)			
Interest income	124,852	106,957	163,696
Foreign exchange losses	(14,522)	(7,125)	(435,691)
Warrant issuance costs (note 6(a))	(80,000)	—	—
Change in fair value of warrant liability (note 6(a))	572,769	—	—
Net loss and comprehensive loss	\$ (9,936,926)	\$(12,415,480)	\$(8,749,157)
Loss per common share			
Basic and diluted	\$ (0.88)	\$ (1.20)	\$ (0.85)
Weighted average number of common shares			
Basic and diluted	11,318,766	10,332,941	10,325,023

See accompanying notes to the consolidated financial statements.

[Table of Contents](#)

TEKMIRA PHARMACEUTICALS CORPORATION

Consolidated Statements of Cash Flow

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	Year ended December 31		
	2011	2010	2009
OPERATING ACTIVITIES			
Loss for the period	\$ (9,936,926)	\$(12,415,480)	\$ (8,749,157)
Items not involving cash:			
Depreciation of property and equipment	975,512	1,038,573	988,659
Stock-based compensation expense	626,119	650,620	265,685
Foreign exchange (gains) losses arising on foreign currency cash balances	(20,095)	7,187	325,742
Warrant issuance costs	80,000	—	—
Change in fair value of warrant liability	(572,769)	—	—
Fair value of warrants issued in conjunction with debt facility	35,004	—	—
Net change in non-cash operating items:			
Accounts receivable	2,438,036	(2,265,834)	(420,456)
Accrued revenue	632,108	(817,464)	—
Deferred expenses	(230,855)	(557,256)	—
Investment tax credits receivable	72,548	(123,448)	124,321
Inventory	150,731	(150,731)	174,524
Prepaid expenses and other assets	(109,330)	(88,076)	(126,621)
Accounts payable and accrued liabilities	(2,179,372)	498,096	1,180,215
Deferred revenue	360,685	2,975,305	703,343
Net cash provided by (used in) operating activities	(7,678,604)	(11,248,508)	(5,533,745)
INVESTING ACTIVITIES			
Proceeds from (acquisition of) short-term investments, ne	—	—	5,730,507
Acquisition of property and equipment	(59,675)	(830,948)	(1,699,508)
Net cash provided by (used in) investing activities	(59,675)	(830,948)	4,030,999
FINANCING ACTIVITIES			
Proceeds from issuance of common shares and warrants, net of issuance costs	4,545,647	—	—
Issuance of common shares pursuant to exercise of options	10,661	34,913	7,886
Net cash provided by (used in) financing activities	4,556,308	34,913	7,886
Foreign exchange gains (losses) arising on foreign currency cash balances	20,095	(7,187)	(325,742)
Increase (Decrease) in cash and cash equivalents	(3,161,876)	(12,051,730)	(1,820,602)
Cash and cash equivalents, beginning of period	12,346,010	24,397,740	26,218,342
Cash and cash equivalents, end of period	\$ 9,184,134	\$ 12,346,010	\$24,397,740
Supplemental cash flow information			
Investment tax credits received	\$ 102,464	\$ 36,613	\$ 275,965
Fair value of warrants issued in conjunction with public offering	\$ 742,809	\$ —	\$ —
Fair value of warrants issued in conjunction with debt facility	\$ 35,004	\$ —	\$ —

See accompanying notes to the consolidated financial statements.

[Table of Contents](#)

TEKMIRA PHARMACEUTICALS CORPORATION

Consolidated Statements of Stockholders' Equity

For the years ended December 31, 2011, 2010 and 2009

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	<u>Number of shares</u>	<u>Share capital</u>	<u>Additional paid-in capital</u>	<u>Deficit</u>	<u>Total stockholders' equity</u>
Balance, December 31, 2008	10,324,735	\$229,412,230	\$29,272,005	\$(227,746,124)	\$ 30,938,111
Stock-based compensation	—	—	265,685	—	265,685
Issuance of common shares pursuant to exercise of options	3,852	14,527	(6,641)	—	7,886
Net loss	—	—	—	(8,749,157)	(8,749,157)
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	<u>12,148,635</u>	<u>\$233,501,253</u>	<u>\$30,661,704</u>	<u>\$(258,847,687)</u>	<u>\$ 5,315,270</u>

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 the useful lives of property and equipment for the purpose of amortization, 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.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements
(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, promissory notes and a loan facility.

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 Company has not yet drawn down any funds under its loan facility.

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.

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:

	<u>Rate</u>
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

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

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 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.

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 are 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 stock options and warrants. At December 31, 2011, potential common shares of 2,830,635 were excluded from the calculation of net loss per common share because their inclusion would be anti-dilutive (December 31, 2010 – 1,627,280, December 31, 2009 – 1,637,408).

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.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

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. Future 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. Future 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 future 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 future 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 on historical volatility that matches the expected remaining life of the warrants. 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.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

In October 2009, the FASB issued EITF 08-01, *Revenue Arrangements with Multiple Deliverables* (currently within the scope of FASB Accounting Standards Codification (ASC) Subtopic 605-25). This statement provides principles for allocation of consideration among its multiple-elements, allowing more flexibility in identifying and accounting for separate deliverables under an arrangement. The EITF introduces an estimated selling price method for valuing the elements of a bundled arrangement if vendor-specific objective evidence or third-party evidence of selling price is not available, and significantly expands related disclosure requirements. This standard is effective on a prospective basis for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Alternatively, adoption may be on a retrospective basis, and early application is permitted. The Company adopted this pronouncement on January 1, 2011. Adoption of the pronouncement did not have a material impact on the Company's financial statements.

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 the Company's 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 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 is not expected to have an impact on the Company's financial position or results of operations.

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 is not expected to have a material impact on the Company's financial position or results of operations.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements
(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		
	2011	2010	2009
Collaborations and contracts			
Alnylam (a)	\$ 4,142,796	\$ 6,258,535	\$ 8,831,250
U.S. Government (b)	11,432,163	3,560,711	—
Roche (c)	40,232	4,499,689	4,757,842
BMS (d)	432,106	227,995	165,776
Other RNAi collaborators (e)	75,546	376,930	77,048
Total research and development collaborations and contracts	16,122,843	14,923,860	13,831,916
Alnylam licensing fees and milestone payments (a)	524,100	514,129	596,500
Talon license amendment payment (f)	—	5,916,750	—
Total revenue	\$16,646,943	\$21,354,739	\$14,428,416

The following table sets forth deferred collaborations and contracts revenue:

	December 31	
	2011	2010
U.S. Government (b)	\$1,593,946	\$ 760,924
Roche (c)	—	40,232
BMS current portion (d)	1,213,952	1,181,108
Deferred revenue, current portion	2,807,898	1,982,264
BMS long-term portion (d)	1,690,529	2,155,478
Total deferred revenue	\$4,498,427	\$4,137,742

(a) 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”) 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.

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 dated August 14, 2007 (the “Alnylam Cross-License”). Alnylam was granted a non-exclusive license to the Protiva intellectual property. Under the Alnylam Cross-License, Alnylam was required to make collaborative research payments at a minimum rate of US\$2,000,000 per annum for the provision of the Company’s research staff. The research collaboration under the Alnylam Cross-License expired on August 13, 2009.

Manufacturing agreement with Alnylam

Under a manufacturing agreement with Alnylam (the “Alnylam Manufacturing Agreement”) effective January 1, 2009, the Company is 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 pays the Company for the provision of staff and for external costs incurred. Time charged to Alnylam is 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

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

three years ending December 31, 2011. From January 1, 2012, at the start of each calendar quarter, Alnylam will prepay for the provision of the Company's staff based on their estimate of work to be performed in that quarter. Any under or over estimate will be redressed at the end of each quarter. Alnylam will continue to pay for external costs incurred by the Company on their behalf on a monthly invoice basis.

Licensing fees and milestone payments

The Company is eligible to receive up to US\$16,000,000 in milestone payments for each RNAi therapeutic advanced by Alnylam or its partners that utilize the Company's technology. The Company is also eligible for royalties on product sales. These milestones and royalties will pass through Alnylam.

In the year ended December 31, 2011, the Company received a \$524,100 (US\$500,000) milestone from Alnylam in respect of the initiation of Alnylam's ALN-PCS Phase 1 human clinical trial. In the year ended December 31, 2010, the Company received a \$514,129 (US\$500,000) milestone payment from Alnylam in respect of the initiation of Alnylam's ALN-TTR01 Phase 1 human clinical trial. In the year ended December 31, 2009, the Company received a \$596,500 (US\$500,000) milestone payment from Alnylam in respect of the initiation of Alnylam's ALN-VSP Phase 1 human clinical trial.

(b) 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, which is expected to last approximately three years and is 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.

(c) 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.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements
(Expressed in Canadian dollars)

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.

Under a separate February 11, 2009 research agreement with Roche the Company received \$923,151 (US\$765,000) that was recorded as revenue in 2009.

(d) Bristol-Myers Squibb collaboration

On May 10, 2010 the Company announced the expansion of its research collaboration with Bristol-Myers Squibb Company (“Bristol-Myers Squibb”). Under the new agreement, Bristol-Myers Squibb use small interfering RNA (“siRNA”) molecules formulated by the Company in LNP technology to silence target genes of interest. Bristol-Myers Squibb 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 Bristol-Myers Squibb 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. Bristol-Myers Squibb have a first right to negotiate a licensing agreement on certain RNAi products developed by the Company that evolve from Bristol-Myers Squibb validated gene targets.

Revenue from the May 10, 2010 agreement with Bristol-Myers Squibb is being recognized as the Company produces the related LNP batches.

(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 has been recorded as license amendment revenue. The Company is now eligible for future Talon milestones of up to US\$19,000,000 upon achievement of further development and regulatory milestones and is also eligible to receive 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.

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. The Company has no further obligation to the Former Noteholders and will retain any future milestones or royalties received from Talon.

(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

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

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.

4. Property and equipment

<u>December 31, 2011</u>	<u>Cost</u>	<u>Accumulated depreciation and impairment</u>	<u>Net book value</u>
Lab equipment	\$ 7,688,286	\$ (6,984,194)	\$ 704,092
Leashold improvements	7,212,104	(5,976,916)	1,235,188
Computer hardware and software	3,120,072	(2,869,622)	250,450
Furniture and fixtures	664,029	(656,180)	7,849
	<u>\$18,684,491</u>	<u>\$(16,486,912)</u>	<u>\$2,197,579</u>
<u>December 31, 2010</u>	<u>Cost</u>	<u>Accumulated depreciation and impairment</u>	<u>Net book value</u>
Laboratory equipment	\$ 7,668,582	\$ (6,554,699)	1,113,883
Leasehold improvements	7,256,186	(5,730,396)	1,525,790
Computer and office equipment	3,080,100	(2,621,522)	458,578
Furniture and fixtures	664,029	(648,864)	15,165
	<u>\$18,668,897</u>	<u>\$(15,555,481)</u>	<u>3,113,416</u>

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). The loan may be drawn down at the Company’s discretion at any time prior to September 30, 2012. The loan matures on June 30, 2015 and carries a fixed interest rate of 8% annually. If the Company draws down on the loan, principal and interest payments will be payable each month starting on October 1, 2012.

In part payment for establishing the loan, the Company has 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 has been recorded as a liability.

At December 31, 2011, the Black-Scholes value of the warrants was \$35,004 and is 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 Company will provide additional warrants with a value equal to 2% of any draw down on the loan. The Company has not yet drawn down on the loan. The loan is secured by the assets of the Company.

The legal and professional costs of establishing the loan of \$70,095 and the initial fair value of the warrants of \$35,004 have been included in General and Administrative expenses.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

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 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 statement of loss.

On the date of issuance, the Black-Scholes aggregate value of the 894,950 warrants was \$742,809 and is 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.

At December 31, 2011, the Black-Scholes value of the warrants was \$170,040 and is based on an assumed risk-free interest rate of 1.28%, volatility of 40%, a zero dividend yield and an expected life of 4.5 years. The change in the Black-Scholes value of the warrants from their date of issuance to December 31, 2011 of \$572,769 is reflected in the consolidated statement of operations and comprehensive loss as a "Change in the fair value of warrant liability".

On February 29, 2012, the Company completed a private placement which is described in note 12, subsequent events.

(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) 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 to employees, directors and consultants of the Company. The exercise price of the options is determined by the Company's Board of

[Table of Contents](#)

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

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.

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, 2008	917,685	\$ 11.25	\$ 32,546
Options granted	2,640	4.85	
Options exercised	(3,852)	2.05	11,515
Options forfeited, cancelled or expired	<u>(50,845)</u>	30.90	
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	<u>(47,873)</u>	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	<u>(71,547)</u>	27.42	
Balance, December 31, 2011	<u>1,413,318</u>	<u>\$ 5.32</u>	<u>\$ 1,800</u>

Options under the 2007 Plan and 2011 Plan expire at various dates from April 14, 2012 to December 22, 2021.

The following table summarizes information pertaining to stock options outstanding at December 31, 2011 under the Company's 2007 Plan and 2011 Plan:

Range of Exercise prices	Options outstanding December 31, 2011			Options exercisable December 31, 2011	
	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	312,006	8.5	\$ 1.71	216,756	\$ 1.71
\$ 2.40 to \$ 2.60	234,200	9.6	2.40	35,300	2.40
\$ 3.00 to \$ 3.85	318,600	6.5	3.51	250,711	3.42
\$ 4.60 to \$ 5.90	384,549	6.4	5.30	359,229	5.34
\$ 6.45 to \$11.60	118,596	5.3	7.09	107,861	6.99
\$49.20 to \$69.00	<u>45,367</u>	<u>1.4</u>	<u>53.37</u>	<u>45,367</u>	<u>53.37</u>
\$ 1.50 to \$69.00	<u>1,413,318</u>	<u>7.2</u>	<u>\$ 5.32</u>	<u>1,015,224</u>	<u>\$ 6.31</u>

At December 31, 2011, there were 1,015,224 options exercisable (December 31, 2010 - 861,549; December 31, 2009 - 754,076) with a weighted average exercise price of \$6.31. The weighted average remaining contractual life of exercisable options as at December 31, 2011 was 6.3 years. The aggregate intrinsic value of options exercisable at December 31, 2011 was \$1,800.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

A summary of the Company's non-vested stock option activity and related information for the year ended December 31, 2011 is as follows:

	Number of optioned common shares	Weighted average fair value
Non-vested at December 31, 2010	221,883	\$ 3.47
Options granted not yet vested	299,450	2.06
Options vested	(113,926)	3.09
Non-vested options forfeited	(9,313)	3.61
Non-vested at December 31, 2011	398,094	\$ 2.51

The weighted average remaining contractual life for options expected to vest at December 31, 2011 was 9.4 years and the weighted average exercise price for these options was \$2.77 per share.

The aggregate intrinsic value of options expected to vest as at December 31, 2011 was \$nil (December 31, 2010 - \$175,905; December 31, 2009 - \$197,827).

The total fair value of options that vested during the year ended December 31, 2011 was \$351,542 (2010 - \$468,105; 2009 - \$496,263).

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, 2011. 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		
	2011	2010	2009
Dividend yield	0.00%	0.00%	0.00%
Expected volatility	116.26%	116.90%	144.00%
Risk-free interest rate	2.51%	2.60%	2.50%
Expected average option term	9.6 years	6.6 years	5.0 years
Fair value of options granted	\$ 2.00	\$ 3.82	\$ 4.35

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(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 statements of operations and comprehensive loss as follows:

	Year ended December 31		
	2011	2010	2009
Research, development, collaborations and contracts expenses	\$494,634	\$533,508	\$207,234
General and administrative expenses	131,485	117,112	58,451
Total	\$626,119	\$650,620	\$265,685

At December 31, 2011, there remains \$735,008 of unearned compensation expense related to unvested employee stock options to be recognized as expense over a weighted-average period of approximately 8 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 as of May 30, 2008, expire at various dates from January 22, 2011 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. To December 31, 2009, none of the Protiva Options had been exercised, forfeited or cancelled.

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

The weighted average remaining contractual life of exercisable Protiva Options as at December 31, 2011 was 4.0 years.

The aggregate intrinsic value of Protiva Options outstanding at December 31, 2011 was \$363,230. The intrinsic value of Protiva Options exercised in the year ended December 31, 2011 was \$42,615 (2010 - \$2,688; 2009 - \$nil).

Awards outstanding and available for issuance

Combining all of the Company's share-based compensation plans, at December 31, 2011, the Company has 1,744,835 options outstanding and a further 136,305 Awards available for issuance.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

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, 2011 include \$nil in funding from the US Army Medical Research Institute for Infectious Diseases (2010 - \$191,194; 2009 - \$775,292).

The Company's estimated claim for refundable Scientific Research and Experimental Development investment tax credits for the year ended December 31, 2011 is \$20,905 (2010 - \$196,556; 2009 - \$139,502).

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 26.5% (year ended December 31, 2010 – 28.5%; December 31, 2009 – 30.0%) to the loss before income taxes as shown in the following tables:

	Year ended December 31		
	2011	2010	2009
Computed taxes (recoveries) at Canadian federal and provincial tax rates	\$(2,633,285)	\$(3,538,412)	\$(2,624,747)
Differences due to change in enacted tax rates	712,236		635,462
Difference due to change in tax rate on opening deferred taxes	3,427,057	—	—
Permanent and other differences	143,992	1,409,918	927,938
Change in valuation allowance	(1,650,000)	2,880,000	1,061,347
Utilization of non-capital loss carryforwards	—	(751,506)	—
Income tax (recovery) expense	\$ —	\$ —	\$ —

As at December 31, 2011, the Company has investment tax credits available to reduce Canadian federal income taxes of \$11,093,450 (December 31, 2010 - \$9,277,707) and provincial income taxes of \$5,500,315 (December 31, 2010 - \$4,470,380) and expiring between 2012 and 2031.

At December 31, 2011, the Company has scientific research and experimental development expenditures of \$50,575,034 (December 31, 2010 - \$44,061,609) available for indefinite carry-forward and \$19,037,156 (December 31, 2010 - \$18,991,636) of net operating losses due to expire between 2027 and 2031 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.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

Significant components of the Company's deferred tax assets are shown below:

	Year ended December 31	
	2011	2010
Deferred tax assets:		
Non-capital loss carryforwards	\$ 4,438,000	\$ 4,088,000
Research and development deductions	9,295,000	11,015,000
Book amortization in excess of tax	2,779,000	2,938,000
Share issue costs	45,000	146,000
Warrant liability	65,000	—
Revenue recognized for tax purposes in excess of revenue recognized for accounting purposes	1,125,000	1,034,000
Tax value in excess of accounting value in lease inducements	49,000	87,000
Accounting value in excess of tax value in intangible assets	49,000	75,000
Provincial investment tax credits	973,000	1,082,000
Total deferred tax assets	18,818,000	20,465,000
Valuation allowance	(18,818,000)	(20,465,000)
Net deferred tax assets	\$ —	\$ —

9. Contingencies and commitments**Litigation**

On March 16, 2011 the Company filed a complaint against Alnylam. On April 6, 2011 Alnylam filed an answer and counter-claim to the Company's complaint. On June 3, 2011, the Company filed an amended complaint against Alnylam and expanded its complaint to include AlCana Technologies, Inc. ("AlCana"). On June 28, 2011 Alnylam filed an amended answer and counter-claim and on July 15, 2011 AlCana filed its answer and counter-claim to the Company's amended complaint.

The Company's amended complaint against Alnylam is for misappropriation and misuse of trade secrets, know-how and other confidential information, unfair and deceptive trade practices, unjust enrichment, unfair competition and false advertising, breach of contract, breach of the implied covenant of good faith and fair dealing, tortious interference with contractual relationships, and civil conspiracy. The suit, filed in the Business Litigation Session of the Massachusetts Superior Court ("BLS Court"), alleges Alnylam exploited its confidential relationship as a collaborator with the Company to misappropriate the Company's proprietary lipid nanoparticle delivery technology, resulting in damage to the Company's intellectual property and business interests. The amended complaint also adds AlCana as a defendant and asserts claims alleging misappropriation of trade secrets, tortious interference with contractual relations, unjust enrichment, unfair and deceptive acts and trade practices, and civil conspiracy against AlCana. The Company is seeking damages based on Alnylam's conduct as alleged in the amended complaint including termination of Alnylam's license to the Company's technology.

Alnylam's answer and amended counter-claim alleges, in summary, breach of contract: contractual dispute resolution and confidentiality provisions, defamation, breach of covenant not to sue, breach of patent prosecution cooperation and non-use provisions, and breach of an implied covenant of good faith and fair dealing. Alnylam's defamation counter-claim was dismissed by the BLS Court in September 2011 including an award of attorney's fees and costs. The BLS Court has set a trial date of October 30, 2012.

AlCana's answer and amended counter-claim alleges, in summary, breach of contract and breach of an implied covenant of good faith and fair dealing.

The Company has signed an agreement with its legal counsel with respect to this litigation that includes success-based contingent fees.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

On November 16, 2011, the Company disclosed that it had filed a Notice of Civil Claim in the Supreme Court of British Columbia against certain individuals from ALCana alleging that thousands of confidential documents containing the Company's confidential information and trade secrets were downloaded and taken. The Company also filed a Notice of Application seeking an injunction ordering the documents and derivative materials be returned. The Company is also seeking general and punitive damages. On January 10, 2012, the Company disclosed that the Supreme Court of British Columbia had granted its application for an injunction that orders confidential documents and materials be returned to the Company and prohibits the use of the Company's confidential information. The injunction also requires the defendants to identify every person and corporation to whom the information was provided or communicated.

On January 17, 2012, the Company disclosed that Alnylam filed a patent infringement lawsuit against Tekmira in the U.S. District Court of Massachusetts. Isis Pharmaceuticals, Inc. is named as a co-plaintiff in the suit. The context for this infringement suit has arisen out of the Company's ongoing litigation with Alnylam and ALCana.

The Company has not recorded an estimated liability associated with Alnylam's answer and amended counter-claim or patent infringement lawsuit due to the uncertainties related to both the likelihood and the amount of any potential loss. The Company has not recorded an estimated liability for contingently payable success-based legal fees due to uncertainties related to the outcome of the lawsuit. At December 31, 2011, the contingent obligation was \$4,524,765 (US\$4,449,129).

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, contracted sub-lease income and net commitment for rent and estimated operating costs, are as follows:

	<u>Lease commitment</u>	<u>Sub-lease income</u>	<u>Net commitment</u>
Year ended December 31, 2012	\$1,285,000	\$(186,000)	\$1,099,000
Year ended December 31, 2013	1,285,000	—	1,285,000
Year ended December 31, 2014	750,000	—	750,000
	<u>\$3,320,000</u>	<u>\$(186,000)</u>	<u>\$3,134,000</u>

The Company's lease expense, net of sub-lease income, for the year ended December 31, 2011 of \$933,528 has been recorded in the consolidated statements of operations and comprehensive loss in research, development, collaborations and contracts and general and administrative expenses (2010 - \$931,606; 2009 - \$1,008,290).

The Company has netted \$194,281 of sub-lease income against lease expense in the year ended December 31, 2011 (year ended December 31, 2010 - \$194,281; 2009 - \$191,376).

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, 2011, 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 royalties on the share of future product revenue, if any, for Marqibo that is received by the Company. To December 31, 2011 the Company had not made any royalty payments to TPC.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements
(Expressed in Canadian dollars)

Contingently payable promissory notes

On March 25, 2008, Protiva declared dividends totaling US\$12,000,000. The dividend was 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(h)). 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 (the "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 and development expense in the consolidated statement of operations and comprehensive loss.

Under the Agreement, the maximum future license fees and other contingent payments are US\$1,960,000 and the Company will pay up to US\$12,700,000 in milestones on each product developed plus royalties.

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, 2011 were \$747,720 and represent 85% of total accounts receivable as at that date (December 31, 2010 - \$2,031,980 and 61%). Accounts receivable from Alnylam as at December 31, 2011 were \$27,178 and represent 3% of total accounts receivable as at that date (December 31, 2010 - \$836,655 and 25%).

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, 2011 was the accounts receivable balance of \$880,693 (December 31, 2010 - \$3,318,729).

All accounts receivable balances were current as at December 31, 2011 and December 31, 2010.

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, cash balances and a debt facility.

The Company's liquidity risk is primarily attributable to its cash, cash equivalents and debt facility. 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. Under the terms of the debt facility, if a material adverse event occurs prior to draw down, the lender may choose to cancel the facility.

[Table of Contents](#)

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements
(Expressed in Canadian dollars)

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, cash equivalents and debt facility funds available (note 5) less accounts payable and accrued liabilities.

	December 31	
	2011	2010
Cash, cash equivalents and short term investments	\$ 9,184,134	\$12,346,010
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	(3,972,551)	(6,151,923)
	<u>\$ 7,127,583</u>	<u>\$ 6,194,087</u>

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 has not entered into any agreements or purchased any instruments to hedge possible currency risks at this time.

The Company's exposure to US dollar currency expressed in Canadian dollars was as follows:

	December 31	
	2011	2010
Cash and cash equivalents	\$ 1,259,029	\$ 1,067,205
Accounts receivable	780,176	2,042,065
Accounts payable and accrued liabilities	(2,365,191)	(3,485,715)
	<u>\$ (325,986)</u>	<u>\$ (376,445)</u>

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.

TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Consolidated financial statements

(Expressed in Canadian dollars)

11. Supplementary information

Accounts payable and accrued liabilities is comprised of the following:

	December 31	
	2011	2010
Trade accounts payable	\$1,284,737	\$3,035,273
Research and development accruals	228,942	1,241,630
Professional fee accruals	1,669,838	1,030,405
Restructuring cost accruals	36,134	34,999
Deferred lease inducements	196,966	346,098
Other accrued liabilities	555,934	463,518
	<u>\$3,972,551</u>	<u>\$6,151,923</u>

12. Subsequent event**Private Placement Financing**

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 \$4,066,922. 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.

On the date of issuance, the Black-Scholes aggregate value of the 924,302 warrants was \$794,900 and is 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.

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, 2012

INDEX TO THE EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
1.1*	Notice of Articles and Articles of the Company
2.1*	Subscription Agreement, between the Company and Alnylam Pharmaceuticals, Inc., dated March 28, 2008
2.2*	Subscription Agreement, between the Company and Roche Finance Ltd., dated March 31, 2008
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
4.2†*	Amended and Restated License Agreement, between Inex Pharmaceuticals Corporation and Hana Biosciences, Inc, dated April 30, 2007
4.3†*	Sublicense Agreement, between Inex Pharmaceuticals Corporation and Alnylam Pharmaceuticals, Inc., dated January 8, 2007
4.4†*	Amended and Restated License and Collaboration Agreement, between the Company and Alnylam Pharmaceuticals, Inc., effective as of May 30, 2008
4.5†*	Amended and Restated Cross-License Agreement, between Alnylam Pharmaceuticals, Inc. and Protiva Biotherapeutics Inc., dated May 30, 2008
4.6†*	License Agreement, between Inex Pharmaceuticals and Aradigm Corporation, dated December 8, 2004
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
4.8†*	Development, Manufacturing and Supply Agreement, between the Company and Alnylam Pharmaceuticals, Inc., dated January 2, 2009
4.9†*	Executive Employment Agreement with Ian Mortimer, dated March 26, 2008
4.10*	Executive Employment Agreement with Ian MacLachlan, dated May 30, 2008
4.11*	Executive Employment Agreement with Mark Murray, dated May 30, 2008
4.12*	Executive Employment Agreement with Peter Lutwyche, dated January 1, 2009
4.13*	Share Option Plan amended through May 12, 2009 (including form stock option agreements)
4.14*	Lease Agreement with Canada Lands Company CLC Limited dated December 15, 1997, as amended
4.15*	Form of Indemnity Agreement
4.16*	Award Contract with USASMDC/ARSTRAT effective date July 14, 2010
4.17†*	License Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation executed on July 30, 2001
4.18†*	Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated July 11, 2006

Table of Contents

<u>Exhibit Number</u>	<u>Description</u>
4.19†*	Second Amendment Agreement between the University of British Columbia and Inex Pharmaceuticals Corporation dated January 8, 2007
4.20†*	Consent Agreement of the University of British Columbia to Inex/Alnylam Sublicense Agreement dated January 8, 2007
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.
4.22†**	License and Collaboration Agreement between the Company and Halo-Bio RNAi Therapeutics, Inc. as of August 24, 2011
4.23**	Loan Agreement with Silicon Valley Bank dated as of December 21, 2011
4.24**	Employment Agreement with Paul Brennan dated August 24, 2010
4.25**	Tekmira 2011 Omnibus Share Compensation Plan approved by shareholders on June 22, 2011
8.1*	List of Subsidiaries
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.

† Portions of this exhibit have been omitted based on an application for confidential treatment from the SEC. The omitted portions of these exhibits have been submitted separately with the SEC.

LICENSE AND COLLABORATION AGREEMENT

BETWEEN

PROTIVA BIOTHERAPEUTICS INC.

AND

HALO-BIO RNAI THERAPEUTICS, INC.

LICENSE AND COLLABORATION AGREEMENT

TABLE OF CONTENTS

Article 1 INTERPRETATION	1
1.1 Definitions	1
1.2 Headings	12
1.3 Number and Gender	12
Article 2 COLLABORATION AND TECHNOLOGY TRANSFER	12
2.1 Collaboration	12
2.2 Collaboration Costs and Expenses	13
2.3 Technology Transfer	13
Article 3 LICENSE	14
3.1 License Grant by Halo-Bio	14
3.2 License Fees	17
3.3 Milestones	18
3.4 Sublicensing Revenue	20
3.5 Royalties	22
3.6 Sublicensing	23
3.7 Desirable Third Party License For Sublicensed Combination Products	25
3.8 Necessary Third Party License	25
3.9 Compulsory Licenses	26
3.10 Reports and Payment	26
3.11 Withholding Taxes	27
3.12 Foreign Payments	27
3.13 Late Payments	28
3.14 Records	28
3.15 Audits	28
Article 4 INTELLECTUAL PROPERTY	29
4.1 Inventions	29
4.2 Disclosure of Inventions During the Term	29
4.3 Perfection of Ownership Rights	30
Article 5 PATENT PROSECUTION	30
5.1 Prosecution and Maintenance of Licensed Patents	30
5.2 Prosecution and Maintenance of Patent Rights not relating to Multivalent RNAs	31
5.3 Updating Patent Table	31
5.4 Consultation and Reporting	32
5.5 Abandonment, Withdrawal or Discontinuance	33
5.6 Prosecuting Infringement Proceedings	34
5.7 Breach of Confidence Proceedings	35
5.8 Defense of Infringement Proceedings	35

5.9	Procedures	36
5.10	Product Trademarks	36
5.11	Software Patent Rights	36
Article 6 DEVELOPMENT & COMMERCIALIZATION		36
6.1	Protiva's Diligence Efforts	36
6.2	Halo-Bio's Assistance	37
Article 7 CONFIDENTIALITY AND PUBLICATION		38
7.1	Confidential Information	38
7.2	Permitted Disclosures	39
7.3	Return of Confidential Information	40
7.4	Injunctive Relief	40
7.5	Publication	40
7.6	Publicity	41
7.7	Disclosure of Technology	42
Article 8 REPRESENTATIONS & WARRANTIES		42
8.1	Mutual Representations and Warranties	42
8.2	Halo-Bio Representations and Warranties	43
8.3	Protiva Representations and Warranties	44
8.4	Performance by Affiliates	44
8.5	No Inconsistent Agreements with Third Parties	44
8.6	No Implied Warranties	44
Article 9 LIMITATION OF LIABILITY		45
9.1	No Consequential Damages	45
Article 10 INDEMNIFICATION & INSURANCE		45
10.1	Indemnification by Protiva	45
10.2	Indemnification by Halo-Bio	46
10.3	Conditions for Indemnification	47
10.4	Settlement	47
10.5	Insurance	47
Article 11 TERM & TERMINATION		48
11.1	Term	48
11.2	Termination for Invalidity Challenge	49
11.3	Termination for Material Breach	49
11.4	Termination for Bankruptcy or Insolvency	50
11.5	Protiva's Termination for Convenience	52
11.6	Consequences of Termination	53
Article 12 GENERAL		54
12.1	Amendment	54
12.2	Assignment	54
12.3	Counterparts & Facsimile	54

12.4	Entire Agreement	54
12.5	Enurement	55
12.6	Force Majeure	55
12.7	Further Assurances	55
12.8	Governing Law and Jurisdiction	55
12.9	Headings	55
12.10	International Sale of Goods Act	56
12.11	No Implied Rights	56
12.12	No Third Party Rights	56
12.13	No Waiver of Rights	56
12.14	Notice	57
12.15	Relationship of the Parties	57
12.16	Rights and Remedies	57
12.17	Severability	57
12.18	Surviving Terms	58
12.19	Export	58

LICENSE AND COLLABORATION AGREEMENT

THIS LICENSE AND COLLABORATION AGREEMENT is dated as of August 24th, 2011 (the “Effective Date”) between HALO-BIO RNAI THERAPEUTICS, INC. (“Halo-Bio”), a Washington corporation having a principal place of business at 4111 E. Madison, Box 140, Seattle, Washington 98112, U.S.A. and PROTIVA BIOTHERAPEUTICS INC. (“Protiva”), a Canadian corporation and wholly-owned subsidiary of TEKIRA PHARMACEUTICALS CORPORATION (“Tekmira”), having a principal place of business at 100-8900 Glenlyon Parkway, Burnaby, B.C., Canada V5J 5J8.

WHEREAS:

- A. Protiva develops, owns or controls Intellectual Property Rights (as hereinafter defined) relating to its proprietary RNA technology and Protiva Formulations (as hereinafter defined) and is in the business of researching, developing and commercializing nucleic acid based therapeutics; and
- B. Halo-Bio develops, owns or controls Intellectual Property Rights relating to its proprietary Multivalent RNAs (as hereinafter defined); and
- C. Protiva wishes to enter into a research collaboration with and to obtain an exclusive license from Halo-Bio for the research, development and commercialization of pharmaceutical products utilizing Multivalent RNAs; and Halo-Bio is willing to enter into such research collaboration and grant such exclusive licenses and rights, upon the terms and conditions set forth below.

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, and for other good and valuable consideration the receipt of which is hereby acknowledged, the Parties agree as follows:

Article 1 INTERPRETATION

1.1 Definitions

For the purposes of this Agreement, the following terms will have the meanings set forth below:

- (a) “Affiliate” means, in respect of a Person, any entity that controls or is controlled by such Person, or is under common control with such Person. For purposes of this definition, an entity shall be deemed to control another entity if it owns or controls, directly or indirectly, at least fifty percent (50%) of the voting equity of another entity (or other comparable interest for an entity other than a corporation).

- (b) “**Agreement**” means this License and Collaboration Agreement and all schedules hereto.
- (c) “**Business Day**” means a day other than Saturday, Sunday or a statutory holiday in the Province of British Columbia, Canada, or a Federal holiday in the State of Washington, U.S.A.
- (d) “**Calendar Quarter**” means the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31.
- (e) “**Calendar Year**” means each successive period of twelve (12) months commencing on January 1 and ending on December 31.
- (f) “**Change of Control**” means any transaction or series of related transactions with respect to Tekmira, Protiva or its Affiliates (the “company”), whereby
- (i) the company merges, reorganizes, amalgamates or consolidates with another entity, and the shareholders of the company owning at least fifty percent (50%) of the outstanding voting securities of the company immediately prior to such transaction(s) own less than fifty percent (50%) of the outstanding voting securities of the company or the surviving or successor entity as a result of such transaction(s); or
 - (ii) any Third Party that was not, as of just prior to the transaction, the beneficial owner, directly or indirectly, of more than fifty percent (50%) of the voting securities of the company becomes (after such transaction(s)) the beneficial owner, directly or indirectly, of more than fifty percent (50%) of the voting securities of the company whether as a result of issuances, redemptions, repurchases or transfers of voting equity or otherwise; or
 - (iii) the company sells, transfers or otherwise disposes of all or substantially all of its assets to which this Agreement relates; or
 - (iv) direct or indirect control of the company is acquired by a Third Party, including control of its management and policies.
- (g) “**Combination Product**” means a single product or a co-packaged product in dosage form that includes one or more Multivalent RNAs and one or more Other APIs. All reference to Product in this Agreement shall be deemed to include Combination Products, to the extent applicable.
- (h) “**Confidential Information**” means any and all information and data, including, without limitation, collaboration plans, activities, results, the Technology and all other scientific, pre-clinical, clinical, regulatory, manufacturing, marketing, financial and commercial information or data, whether communicated in writing or orally or by any other method, which is provided by one Party to the other Party in connection with this Agreement.

- (i) **“Core Patent Countries”** means those countries or regions identified in **Schedule 1** attached hereto.
- (j) **“Cover”, “Covering”, “Covers” or “Covered”** means, with respect to a Patent Right, that in the absence of an assignment of rights to, or a license granted to, a Person under a Valid Claim included in such Patent Right, the practice by such Person of an Invention claimed in such Patent Right would infringe such Valid Claim (or in the case of a Patent Right that is a patent application, would infringe a Valid Claim in such patent application if it were to issue as a patent).
- (k) **“Damages”** shall have the meaning set forth at Section 10.1.
- (l) **“Dollar” and “\$”** means the lawful money of the United States of America.
- (m) **“Drug Delivery”** means the delivery or administration of one or more nucleic acid constructs as an active pharmaceutical ingredient(s) by way of one or more Protiva Formulations or any other drug delivery particle, vehicle and/or mechanism.
- (n) **“Enablement Deliverables”** means those items described in **Schedule 2** attached hereto.
- (o) **“Enablement Software”** means the software described in **Schedule 2** attached hereto, in both object code form and source code form, to be delivered and licensed to Protiva pursuant to Subsection 3.1(c).
- (p) **“Field”** means the treatment and/or prophylaxis of diseases in humans.
- (q) **“First Commercial Sale”** shall mean, in respect of a particular country in the Territory, the first sale of a Product by Protiva or an Affiliate or a Sublicensee in such country following the receipt or issuance of regulatory approval for the sale of the Product in that country or, if no such regulatory approval or similar marketing approval is required, the date upon which the Product is first commercially launched in such country.
- (r) **“Halo-Bio Indemnitees”** shall have the meaning set forth at Section 10.1.
- (s) **“including”** means “including without limitation”.

- (t) **“IND Submission”** means the collection, assembly and presentation of an Investigational New Drug application, or equivalent, to a Regulatory Authority in support of a first-in-man Phase I Trial and which has been accepted by the Regulatory Authority, thereby allowing the Phase I Trial to commence.
- (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 Patent Rights;
 - (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 technology and discoveries, inventions, developments, improvements, Know-How, writings or rights conceived, discovered, invented, developed, created, made or reduced to practice.
- (w) **“Joint IP”** means the Inventions described in Subsection 4.1(c), provided, however, for clarity, Joint IP does not include the current patent application set forth on Schedule 2 or the provisional patent application to be filed by Halo-Bio before October 31, 2011 for purposes of the Software Patent Rights; and if any Patent Rights resulting such patent applications could become Joint IP due to additional inventive work by Protiva (e.g., resulting in continuations-in-part), the exclusions with respect to Joint IP in Paragraph 3.1(b)(i) and Subsection 3.1(f) and the exclusive license grant in Paragraph 3.1(a)(ii) shall not apply with respect to such Patent Rights and related Technology.
- (x) **“Know-How”** means any and all technical information and know-how owned or controlled by a Party, including without limitation, data, instructions, processes, formulae, trade secrets, expert opinions and other information (in written or other tangible form) including, without limitation, any biological, chemical, pharmacological, toxicological, clinical, assay, control and

manufacturing data, biological materials, manufacturing or related technology, analytical methodology, chemical and quality control procedures, protocols, techniques, improvements and results of experimentation and testing.

- (y) **“Lead Product Candidate”** means a Product as to which Protiva or its Affiliate is conducting GLP studies after notice to Hal-Bio and that has not been shown to have unacceptable characteristics in such studies at the time of sublicensing.
- (z) **“Large Company”** means a Third Party that has, or any of its Affiliates has, a market capitalization in excess of three billion dollars (\$3,000,000,000).
- (aa) **“Licensed Patent”** means, subject to Subparagraph 5.4(b)(ii)(A) and Sections 5.5 and 11.2:
 - (i) the patents and patent applications, and patents issuing therefrom, filed on or prior to the Effective Date and listed in the table of patents attached hereto as **Schedule 3** (the **“Patent Table”**), and all patents and patent applications that are filed on or after the Effective Date that claim benefit of priority of one or more of the patents or patent applications listed in the Patent Table and have claims that Cover the making, using or selling of Multivalent RNAs in the Field;
 - (ii) all patents and patent applications filed either prior to the Effective Date or after the Effective Date and during the Term that Cover the making, using or selling of Multivalent RNAs in the Field and that are owned solely or jointly by Halo-Bio or its Affiliates (including Halo-Bio’s undivided interest in any Patent Rights included in Joint IP); and
 - (iii) any and all Patent Rights in any country, of the foregoing patents and patent applications set out in Paragraphs 1.1(aa)(i) and 1.1(aa)(ii) above; provided, however, that:
 - (iv) Licensed Patents do not include Patents Rights that Cover drug delivery technology, formulations, methods of discovering new compositions or methods of drug delivery, software or research and development tools for designing or discovering Multivalent RNAs, including the Enablement Software and the Software Patent Rights; and
 - (v) for purposes of this definition, “Affiliates” shall be limited to Affiliates of Halo-Bio as of the Effective Date and, after the Effective Date, Affiliates that are subsidiaries of Halo-Bio, but “Affiliates” shall not include entities that hereafter acquire (or acquire control, directly or indirectly, of) Halo-Bio or such acquiror’s Affiliates.

- (bb) “**Major Market**” means the United States, France, Italy, Germany, Great Britain or Spain.
- (cc) “**Multivalent RNA**” means a polynucleotide complex composed of at least three polynucleotides, wherein each polynucleotide is hybridized, along all or part of its length, to at least two of the other polynucleotides of the complex and wherein one or more of the polynucleotides optionally includes a targeting region that is capable of hybridizing to a target nucleic acid sequence. Each polynucleotide can be, for example, from 10 to 60 nucleotides in length. The targeting region(s) within a polynucleotide can be capable of hybridizing to a target nucleic acid sequence that is the same or different than the target nucleic acid sequence(s) to which the targeting region(s) of the other polynucleotides of the complex hybridize. A Multivalent RNA may be synthesized *in vitro* (e.g., by chemical synthesis) or, for example, it may be processed from a precursor within a living cell. For example, a precursor can be a linear polynucleotide that includes each of the polynucleotides of the Multivalent RNA, which is introduced into a living cell and is cleaved therein to form a Multivalent RNA. The term “Multivalent RNA” includes such a precursor that is intended to be cleaved inside a living cell. The term “Multivalent RNA” also encompasses, by way of example, the tripartite polynucleotide complexes described, specifically or generically, in the published international patent application having international application number PCT/US2010/036962. For greater certainty, “Multivalent RNA” does not include siRNA or miRNA.
- (dd) “**Net Sales**” means, with respect to a Product, the aggregate gross invoice prices for all units of such Product sold by Protiva, its Affiliates and their respective Sublicensees to Third Parties after deducting, if not previously deducted, from the amount invoiced:
- (i) trade and quantity discounts actually given, including early-pay cash discounts;
 - (ii) returns, rebates, charge backs and other allowances actually given;
 - (iii) retroactive price reductions that are actually granted; and
 - (iv) bad debt, sales or excise taxes, transportation and insurance, custom duties, and other governmental charges actually incurred or accounted for in accordance with generally accepted accounting principles in the United States or Canada, if applicable, consistently applied; provided, however, such deduction for bad debts must have been recognized for accounting purposes as not collectible and shall be added back to Net Sales to the extent that reserves for bad debts are reduced;

For clarity, Net Sales shall not include funds derived from:

- (v) the transfer or sale of Product between any of Protiva and its Affiliates;
- (vi) the transfer or sale of Product to a Third Party for the development or analytical, preclinical or clinical testing of a Product;
- (vii) the transfer or sale of reasonable quantities of Product to a Third Party for samples, donations or compassionate use; and
- (viii) the sublicensing of Products to Third Parties and any Sublicensing Revenue derived from such Third Parties.

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 in Paragraphs 1.1(dd)(i) through 1.1(dd)(iv) and be calculated using one of the following methods:

- (ix) 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
- (x) if no such separate sales are made of the Product or the Other APIs during the applicable accounting period, or if either the Product or the Other APIs have not been sold separately for at least one (1) year, the annual Net Sales for the purpose of determining royalties payable shall be reduced by [*] in such country in the Territory for such Calendar Year.

(ee) "**Notice of Abandonment**" shall have the meaning set forth in Subsection 5.5(a).

(ff) "**Other API**" means an active, proprietary pharmaceutical ingredient that is not a Multivalent RNA and that, if administered independently, would have a clinical effect.

(gg) "**Party**" means Protiva or Halo-Bio, and "**Parties**" means Protiva and Halo-Bio.

[*] 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.

- (hh) **“Patent Prosecution Fees”** shall have the meaning set forth in Subsection 5.4(b).
- (ii) **“Patent Rights”** means all patents (including all reissues, extensions, substitutions, confirmations, re-registrations, re-examinations, invalidations, supplementary protection certificates and patents of addition) and patent applications (including all provisional applications, continuations, continuations-in-part and divisionals).
- (jj) **“Patent Table”** shall have the meaning set forth in Paragraph 1.1(aa)(i).
- (kk) **“Person”** means a natural person, a corporation, a partnership, a trust, a joint venture, a limited liability company, any Regulatory Authority or any other entity or organization.
- (ll) **“Phase I Trial”** means a clinical trial of a drug product in human volunteers or patients the purpose of which is preliminary determination of safety and tolerability of a dose regime.
- (mm) **“Phase II Trial”** means:
- (i) a dose exploration, dose response, duration of effect, kinetics, dynamic relationship or preliminary efficacy and safety study of a drug product; or
 - (ii) a controlled dose-ranging clinical trial to evaluate further the efficacy and safety of a drug product and to define the optimal dosing regimen.
- A Phase II Trial is distinct from and follows a Phase I Trial.
- (nn) **“Phase III Trial”** means a controlled pivotal clinical trial of a drug product that is prospectively designed to demonstrate statistically whether such drug product is effective and/or safe for use in a manner sufficient to obtain regulatory approval to market such drug product.
- (oo) **“Product”** means one or more Multivalent RNAs that are formulated as a single product, in single dosage form, for use in the Field and to have their therapeutic effect through interaction with one or more specific Targets. Such Product may be administered alone or in combination with Other API as a Combination Product and may be delivered in free form or by means of a Drug Delivery system.
- (pp) **“Protiva Formulations”** means Protiva’s proprietary formulations for the delivery of therapeutic and/or prophylactic agents, such as small molecules and/or nucleic acid constructs, including formulations licensed from Third Parties.

- (qq) **“Protiva Indemnitees”** shall have the meaning set forth in Section 10.2.
- (rr) **“Protiva Inventions”** shall have the meaning set forth in Section 4.1(b).
- (ss) **“Regulatory Authority”** means any governmental authority in the United States or abroad and such other governmental agency, whether federal, provincial, state or municipal, regulating the manufacture, importation, distribution, marketing and/or sale of therapeutic substances.
- (tt) **“Research Collaboration”** means a collaboration between Protiva (or any of its Affiliates) and one or more Third Parties to develop any Product.
- (uu) **“Software Patent Rights”** means the Patent Rights related to the provisional patent application to be filed in the United States by Halo-Bio before October 31, 2011 which is currently described as “method and computer programs for designing polynucleotides for multivalent RNA interference”.
- (vv) **“Sublicensee”** means a Person (other than an Affiliate of Protiva) to whom Protiva or its Affiliate grants a sublicense (or an option for a sublicense) of the rights granted to Protiva by Halo-Bio under this Agreement. Without limiting the generality of the foregoing, a Sublicensee shall be deemed to include any Person who is granted a sublicense hereunder pursuant to the terms of the outcome or settlement of any infringement or threatened infringement or threatened infringement action.
- (ww) **“Sublicensing Revenue”** means upfront payments, license fees, option fees and milestone payments received by Protiva or its Affiliates from a Sublicensee, or from a Third Party to whom Protiva or its Affiliates has granted a right to co-promote, sell or distribute a Product, by way of cash, or credit or any barter, benefit advantage or concession pursuant to:
- (i) any sublicense agreement relating to the Technology and/or any Products, and
 - (ii) any other related agreement pertaining to Intellectual Property Rights owned or controlled by Protiva or its Affiliates for use in connection with such Technology or Product or any agreement pertaining to a right to co-promote, sell or otherwise distribute a Product.

Sublicensing Revenue shall not include:

- (iii) any amounts exchanged between Protiva and its Affiliates for the transfer of Products for any purpose;

- (iv) any amounts paid
 - (A) as royalties or otherwise based upon the sale of Product (including the profit on supply of Products or materials for commercial sale, but not sales milestone payments),
 - (B) as reimbursements of actual costs reasonably incurred for patent filing, prosecution or maintenance,
 - (C) for the manufacture and supply of goods and materials (except to the extent that the consideration paid to Protiva or its Affiliates exceeds the fair market value of comparable charges for manufacturing and supply of goods and materials, in which case such excess shall be Sublicensing Revenue), or
 - (D) as reimbursements of actual direct costs and indirect costs reasonably incurred for research, development or other services (except to the extent that the consideration paid to Protiva or its Affiliates exceeds the fair market value of comparable research, development or other services, in which case such excess shall be Sublicensing Revenue);
- (v) any loan or other debt financing instrument issued by a Sublicensee to Protiva or its Affiliate except to the extent that the interest charged for such loan or other debt instrument is less than fair market value (in which case only such difference between the interest rate charged and the interest rate at fair market value shall constitute Sublicensing Revenue) or to the extent that the principal of the loan or other debt instrument is forgiven (in which case only such forgiven amount shall constitute Sublicensing Revenue);
- (vi) any equity investment in Protiva or its Affiliate by a Sublicensee, except to the extent that such investment is made at greater than fair market value measured at the time the shares, options or other securities evidencing any such investment are granted (in which case only the excess premium shall constitute Sublicensing Revenue). For the purposes of this Section, if the shares of either Protiva or its Affiliate are not listed on any stock exchange, the fair market value shall be based on the price at which shares of either Protiva or its Affiliate, as the case may be, have been issued to investors (who are not industry-related strategic investors or collaborative research partners) in the then most recent bona fide arm's length private placement financing completed within the preceding twelve (12)

months having gross proceeds of at least [*]. If no such private placement financing has been completed, the Parties will appoint a mutually acceptable Person as an independent evaluator to determine the value of such equity.

- (xx) “**Target**” means a molecular structure that specifically interacts with a Multivalent RNA and that is a site, or potential site, of therapeutic intervention by the Multivalent RNA. By way of non-limiting example, a Target can be one or more of the following types of structures: peptide, polypeptide; nucleic acid molecule (e.g., DNA or RNA); virus; or a naturally occurring interfering RNA or miRNA or precursor thereof.
- (yy) “**Technology**” means, collectively:
- (i) all Patent Rights in and to the Licensed Patents;
 - (ii) all Intellectual Property Rights, other than Patent Rights, that are owned by Halo-Bio or its Affiliates, whether solely or jointly, as of the Effective Date and that are necessary or useful to make, use or sell Multivalent RNAs in the Field; and
 - (iii) all additional Intellectual Property Rights, other than Patent Rights, that are hereafter owned by Halo-Bio or its Affiliates, whether solely or jointly (including any Joint IP), during the Term and that are necessary or useful to make, use or sell Multivalent RNAs in the Field;
- provided, however, that:
- (iv) Technology does not include Intellectual Property Rights related to (A) drug delivery technology, formulations, methods of discovering new compositions or methods of drug delivery, software or research and development tools for designing or discovering Multivalent RNAs, including the Enablement Software, or (B) research reagents generated for use in the development of drugs that are not Products; and
 - (v) for purposes of this definition, “Affiliates” shall be limited to Affiliates of Halo-Bio as of the Effective Date and, after the Effective Date, Affiliates that are subsidiaries of Halo-Bio, but “Affiliates” shall not include entities that hereafter acquire (or acquire control, directly or indirectly, of) Halo-Bio or such acquiror’s Affiliates.
- (zz) “**Technology Transfer**” means the transfer of the Technology.
- (aaa) “**Term**” shall have the meaning set forth in Section 11.1.

[*] 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.

- (bbb) “**Territory**” means all of the countries in the world, and their territories and possessions.
- (ccc) “**Third Party**” means any Person other than a Party and its Affiliates.
- (ddd) “**Valid Claim**” means, with respect to each country in the Territory:
- (i) a claim of an issued and unexpired Licensed Patent, which claim has not been revoked or held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction that is not appealable or has not been appealed within the time allowed for appeal, and which has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue, re-examination or disclaimer or otherwise, and
 - (ii) a claim of a patent application which has been pending less than seven (7) 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.
- (eee) “**Work Plan**” means the list of research and development activities agreed between the Parties attached hereto as **Schedule 4**.

1.2 Headings

The division of this Agreement into Articles and Sections and the insertion of headings are for convenience of reference only and will not affect the construction or interpretation of this Agreement.

1.3 Number and Gender

Unless the context requires otherwise, words importing the singular include the plural and vice versa and words importing gender include all genders.

Article 2 COLLABORATION AND TECHNOLOGY TRANSFER

2.1 Collaboration

- (a) The Parties will use commercially reasonable efforts to collaborate on:
- (i) the conduct of Technology Transfer by Halo-Bio to Protiva in accordance with the Technology Transfer protocol developed under Section 2.3; and

- (ii) the development of the Technology and of Products Covered by the Licensed Patents as specifically set forth in the Work Plan.
- (b) Subject to the mutual agreement of the Parties, including payment terms, Halo-Bio may, at its discretion, assist Protiva beyond the Technology Transfer and the Work Plan as follows:
 - (i) with respect to the Technology, providing scientific expertise, guidance and feedback to the development process and assisting in the design of Multivalent RNAs against certain Targets for experimental/methodological studies in the Field; and
 - (ii) with respect to the design of Multivalent RNAs, providing scientific expertise, guidance and feedback to designs proposed by Protiva and assisting in the design of Multivalent RNAs for the Field against certain Targets for the development of specific Products Covered by the Licensed Patents.
- (c) Halo-Bio and Protiva will each perform its obligations during the Technology Transfer and the Work Plan with the requisite care, skill and diligence in accordance with applicable laws and industry standards, and by individuals who are appropriately trained and qualified.

2.2 Collaboration Costs and Expenses

- (a) Halo-Bio will bear its own costs and expenses in performing the activities assigned to Halo-Bio in the Work Plan and Technology Transfer protocol. For clarity, these costs and expenses include Halo-Bio's costs and expenses for travel, meals, accommodations, meetings, communications, and provision of documentation, incurred by Halo-Bio and its employees.
- (b) Protiva will bear all other costs and expenses during the Technology Transfer and the Work Plan, including its own costs and expenses and those costs and expenses for the provision of RNAs, Protiva Formulations and other materials for Drug Delivery, as applicable.

2.3 Technology Transfer

A preliminary version of the Technology Transfer protocol, setting out the Technology Transfer responsibilities placed on the Parties and a preliminary timeline for the completion of the Technology Transfer [*] is set out in **Schedule 5**. As soon as practicable after the Effective Date, the Parties will finalize the Technology Transfer protocol setting forth each Party's tasks and responsibilities, which shall include, to the extent applicable:

- (a) a description of all design processes, analytical methods, equipment, manufacturing methodology, annealing methods and other information to be transferred (but not Enablement Software, which is not Technology, but which will be transferred pursuant to Subsection 3.1(d));

[*] 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) a description of phases of activities with estimated timelines for the completion of each phase;
- (c) a defined set of acceptance criteria or deliverables to establish whether each phase of Technology Transfer has successfully been conducted;
- (d) a list of all material suppliers, contractors and service providers that might be associated with the design, manufacture and supply of Multivalent RNAs for the Field; and
- (e) a list of all equipment required for the design and testing of Multivalent RNAs for the Field, and if applicable, equipment specifications accompanied by plans for equipment qualification, operational qualification and performance qualification.

Article 3 LICENSE

3.1 License Grant by Halo-Bio

- (a) Subject to the terms and conditions in this Agreement and during the Term, Halo-Bio hereby grants to Protiva:
 - (i) an exclusive, worldwide, royalty-bearing license under all Intellectual Property Rights in and to the Technology (which includes Halo-Bio's undivided interest in Joint IP) to make, have made, use, sell, offer for sale and import Products for all uses in the Field, in and for the Territory; and
 - (ii) an exclusive, worldwide right and license under all of its Intellectual Property Rights in and to all Joint IP to make, have made, use, sell, offer for sale and import Products for any purpose whatsoever, outside of the Field.

It is understood and agreed that the exclusive license under Paragraph 3.1(a)(i) shall include the right of Protiva to grant sublicenses and sub-sublicenses to any Person, while the exclusive license under Paragraph 3.1(a)(ii) shall include the right of Protiva to grant sublicenses to its Affiliates but exclude the right of Protiva to grant sublicenses to Third Parties.

- (b) Halo-Bio reserves a non-exclusive worldwide, royalty-free right and license (without the right to sublicense) to use the Technology (which includes Halo-Bio's undivided interest in Joint IP) to perform the Technology Transfer and the Work Plan for Protiva in the Field.
- (c) Subject to the terms and conditions in this Agreement, Protiva hereby grants to Halo-Bio a non-exclusive worldwide right and license (without the right to sublicense) under its Intellectual Property Rights in and to any Protiva Inventions to perform the Technology Transfer and the Work Plan for Protiva.
- (d) Halo-Bio will use commercially reasonable efforts to deliver the Enablement Deliverables to Protiva [*] in accordance with **Schedule 2**. Subject to the terms of this Agreement, Halo-Bio hereby grants to Protiva, for no additional consideration other than the amount payable under this Agreement, an exclusive, worldwide license to use, reproduce and modify the Enablement Software (in both object code form and source code form) for internal use solely to design Multivalent RNAs for use in Products for the Field in the Territory by Protiva, its Affiliates and its Sublicensees. It is understood and agreed that the exclusive license under this Subsection 3.1(d) includes rights under the Software Patent Rights (to the extent Covering the use of the Enablement Software) and the right of Protiva to grant sublicenses and sub-sublicenses for internal use, provided that such sublicenses and sub-sublicenses are made in connection with the sublicense of the Technology and the right to commercialize Products, are coterminous with such Technology and Product sublicense and are subject to the same conditions, scope and territory as such Technology and Product sublicense. The Parties agree that the Enablement Deliverables will include both the object code form and source code form of the Enablement Software, provided that Halo-Bio will not provide source code for any third party software. If Halo-Bio improves the algorithm underlying the Enablement Software, which improvement would be necessary or useful for designing Multivalent RNAs, Halo-Bio shall inform Protiva of such improvement and, upon request of Protiva, Halo-Bio will prepare and license to Protiva hereunder an upgrade to the Enablement Software, at Protiva's reasonable cost and expense.
- (e) Protiva shall not use the Technology, Enablement Software or Software Patent Rights outside the Field or for any purpose not licensed hereunder.
- (f) It is recognized and agreed that Halo-Bio may use, and has retained the right to use, the Technology (excluding Halo-Bio's undivided interest in Joint IP):
- (i) to supply Multivalent RNAs to Third Parties for use as reagents in the research and development of drugs that are not Products; 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.

(ii) to supply Multivalent RNAs to Third Parties for use in the research and development of drugs that may contain Multivalent RNAs or are otherwise based on Multivalent RNAs, for use outside of the Field;

provided that, notwithstanding the foregoing, Halo-Bio hereby agrees that, for the period commencing [*] (the “**Initial Restricted Period**”):

(iii) Halo-Bio will not make, have made, use, sell or offer for sale, any Multivalent RNAs for or to any Third Party; and

(iv) Halo-Bio will not design any Multivalent RNAs for any Third Party or otherwise provide to any Third Party any services based on the Multivalent RNAs and the Technology;

for any purpose whatsoever, whether inside or outside the Field, without the consent of Protiva. In addition, Halo-Bio agrees that Protiva shall have an option to extend the restrictive covenants set out in Paragraphs 3.1(f)(iii) and 3.1(f)(iv) for [*] (the “**Additional Restricted Period**”), commencing [*], which option shall be exercisable by delivery of written notice by Protiva to Halo-Bio prior to the expiration of the Initial Restricted Period. In consideration of the extension of the restrictive covenants for the Additional Restricted Period, Protiva will pay to Halo-Bio [*], in the form of a wire transfer to Halo-Bio’s bank account, [*]. Protiva may, at any time, shorten the duration of the Additional Restricted Period to such period as it may notify Halo-Bio, in which case the payment hereunder shall be correspondingly reduced on a pro-rata basis.

(g) Protiva acknowledges that Halo-Bio may desire to license Joint IP outside the Field, and Protiva agrees to license back to Halo-Bio the Joint IP, on a case by case basis:

(i) to make, have made, use, sell, offer for sale or import Multivalent RNAs for or to Third Parties; and

(ii) to design Multivalent RNAs for Third Parties or provide to Third Parties services based on the Technology;

[*] 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.

on such terms and conditions as may be mutually agreed by the Parties, provided that, in Protiva's opinion, the granting of such licenses and the exercise of such rights by Halo-Bio would not be detrimental to the development and commercialization of Products by Protiva within the Field.

3.2 License Fees

As partial consideration for the grant by Halo-Bio to Protiva of the licenses and other rights hereunder, Protiva will pay to Halo-Bio a license fee having the components set forth in the table below, subject to the occurrence of the corresponding triggering event during the Term:

	Triggering Event	License Fee Component
1	[*]	[*]
2	[*]	[*]
3	[*]	[*]
4	[*]	[*]
5	[*]	[*]
6	[*]	[*]
7	[*]	[*]

For the purposes of this Section 3.2:

(a) [*];

(b) [*];

[*] 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) [*];
- (d) subject to Subsection 3.2(b), each license fee component shall be paid no later than forty-five (45) days following the event triggering such payment; and
- (e) each license fee component is non-refundable and non-creditable.

3.3 Milestones

(a) As partial consideration for the grant by Halo-Bio to Protiva of the licenses and other rights hereunder, Protiva will pay to Halo-Bio the milestone payments for each Product set forth in the tables below, subject to the occurrence of the corresponding milestone event during the Term:

(i) If the following milestones are achieved by Protiva or its Affiliate prior to a Change of Control of Tekmira, Protiva or such Affiliate involving a Large Company:

	Milestone Event	Milestone Payment
1	[*]	[*]
2	[*]	[*]
3	[*]	[*]
4	[*]	[*]
5	[*]	[*]

(ii) If the following milestones are achieved by Protiva or its Affiliate after a Change of Control of Tekmira, Protiva or such Affiliate involving a Large Company:

	Milestone Event	Milestone Payment
1	[*]	[*]
2	[*]	[*]
3	[*]	[*]
4	[*]	[*]
5	[*]	[*]

[*] 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.

The Parties acknowledge and agree that the milestone payments under Paragraphs 3.3(a)(i) and 3.3(a)(ii) shall not be triggered by the achievement of the corresponding milestones by any Sublicensees of Protiva or Sublicensees of Protiva's Affiliates, provided that the Sublicensee is not an Affiliate of Protiva or a former Affiliate of Protiva. However, if a former Affiliate of Protiva received sublicense rights prior to or in connection with a Change of Control, it shall be treated as if it were still an Affiliate of Protiva for purposes of milestone payments under this Section 3.3.

- (b) Each milestone is payable only once per Product; provided that:
- (i) in the event of a Change of Control of Tekmira, Protiva or its Affiliate involving a Large Company prior to achievement of milestone #4 in respect of a Product, Protiva will pay to Halo-Bio, upon the achievement of the next milestone event for such Product, an additional amount on account of the difference between the aggregate of the milestone payments actually paid by Protiva pursuant to Paragraph 3.3(a)(i) and the aggregate of the corresponding milestone payments that would have been paid pursuant to Paragraph 3.3(a)(ii) if all of the milestones for the Product had been achieved after the Change of Control, including the next milestone; and
 - (ii) in the event of a Change of Control of Tekmira, Protiva or its Affiliate involving a Large Company after achievement of milestone #4 in respect of a Product and such Large Company or its Affiliate was obligated to pay additional Sublicensing Revenue to Protiva or its Affiliates with respect to the Product (i.e. Sublicense revenue was anticipated after achievement of approval in the first Major Market), Protiva will pay to Halo-Bio [*].
- (c) For the purposes of this Section 3.3, a Product shall be considered the same Product provided that the intended Targets remain the same and, for greater certainty, any change of Drug Delivery systems or change in the Drug Delivery system used in conjunction with the Multivalent RNAs, any chemical modification(s) to the Multivalent RNAs, any change in dosage strength, any change in the sequence of the Multivalent RNAs for the intended Target, or any addition of or change in any Other APIs delivered together with the Multivalent RNAs, which occurs prior to regulatory approval does not constitute a new Product if the intended Targets remain the same. Notwithstanding the foregoing and for purposes of this Section 3.3 only, if, after a Product receives marketing approval in one or more of the Major Markets, any change is made to the

[*] 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.

Multivalent RNAs of the Product for reasons unrelated to patient safety and marketing approval for the change requires the filing of a complete New Drug Application (NDA) (rather than a supplemental NDA), then such Product shall constitute a new Product for the purposes of this Section 3.3.

- (d) No milestones shall be payable by Protiva for activities associated with the development (i.e., Phase I, II and II Trials) of Products :
 - (i) whose primary use and development will be in countries in Africa and South America or in India, provided that if such Products are subsequently approved in a Major Market, the milestones hereunder will be payable retroactively by Protiva;
 - (ii) for the treatment of any disease, including, without limitation, Ebola, pursuant to a contract with the United States Department of Defense.
- (e) Each milestone payment shall become due and payable no later than forty-five (45) days following achievement of the applicable milestone and is non-refundable and non-creditable.

3.4 Sublicensing Revenue

- (a) In addition to any amounts payable as outlined under Section 3.3, Protiva will pay to Halo-Bio, a percentage of any Sublicensing Revenue actually received by Protiva or its Affiliates, which percentage is taken from one of the following tables based on the status of development, the Drug Delivery system and the time at which the sublicense (or option to sublicense) is granted:
 - (i) if Protiva sublicenses the Technology without concurrently licensing or sublicensing any proprietary Drug Delivery system owned or controlled by Protiva (whether or not a Sublicensee contributes additional technology relating to Drug Delivery):

[*]	[*]			
[*]	[*]	[*]	[*]	[*]

[*] 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) if Protiva sublicenses the Technology concurrently with licensing or sublicensing a proprietary Drug Delivery system owned or controlled by Protiva:

	[*]			
	[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]	[*]

[*] 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) The timeframes set forth in Subsection 3.4(a) for determining the applicable percentage pertains to the date when the sublicense was granted (or option to sublicense granted) and not the dates on which Sublicensing Revenue was received thereunder.
- (c) The percentage of Sublicensing Revenue due Halo-Bio shall become due and payable no later than forty-five (45) days after receipt of Sublicensing Revenue by Protiva or its Affiliates.
- (d) Notwithstanding anything to the contrary in this Section 3.4, Protiva shall have no obligation to pay to Halo-bio its respective share of any Sublicensing Revenue unless and until Protiva or its Affiliates actually receive such Sublicensing Revenue from their Sublicensees.

3.5 Royalties

- (a) As partial consideration for the grant by Halo-Bio to Protiva of the licenses and other rights hereunder and subject to the terms of this Agreement, Protiva will pay to Halo-Bio, without duplication, royalties on Net Sales of Product by Protiva, its Affiliates or their Sublicensees, in the Territory, as follows:
 - (i) for all Products sold in the Territory where the Product is Covered by a Licensed Patent solely owned by Halo-Bio or jointly owned by Halo-Bio with Protiva or its Affiliate, either in the country of manufacture or the country of sale, the following royalty rates apply:

<u>Aggregate Calendar Year Net Sales in the Territory</u>	<u>Royalty (% of Net Sales)</u>
[*]	[*]

[*] 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.

<u>Aggregate Calendar Year Net Sales in the Territory</u>	<u>Royalty (% of Net Sales)</u>
[*]	[*]
[*]	[*]

and

- (ii) for all Products sold in the Territory where the Product is only Covered by a Licensed Patent jointly owned by Halo-Bio with any Person (and not Covered by a Licensed Patent solely owned by Halo-Bio or jointly owned by Halo-Bio with Protiva or its Affiliate), either in the country of manufacture or the country of sale, the following royalty rates apply:

<u>Aggregate Calendar Year Net Sales in the Territory</u>	<u>Royalty (% of Net Sales)</u>
[*]	[*]
[*]	[*]

where such royalties shall accrue until the date of expiration of the last Valid Claim within the Licensed Patents Covering the Product in the country of manufacture or sale, as applicable.

- (b) No multiple royalties shall be due or payable under this Section 3.5 because the sale or manufacture of any Product is or shall be Covered by more than one Valid Claim under the Licensed Patents in the country of manufacture and/or the country of sale.
- (c) Royalties on Net Sales shall be payable on a Product-by-Product basis regardless of the number of Targets with which each Product interacts; provided, however, for purposes of this Section 3.5, Products shall be considered the same Product if their intended Target(s) remains the same, even though changes have been made to the Product, including, for example, any changes in or additions of Multivalent RNAs or Other API contained in the Product.

3.6 Sublicensing

- (a) Protiva shall be entitled to grant sublicenses of its rights under this Agreement to its Affiliates (for a term as long as they remain Affiliates) provided that:
- (i) such Affiliate agree in writing to be bound by the terms and conditions of this Agreement;

[*] 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) Protiva unconditionally guarantees the performance of such Affiliate as if such Affiliate were a signatory to this Agreement to the extent the performance or lack of performance is a breach of this Agreement; and
- (iii) the obligations and liability of such Affiliate will be joint and several and Halo-Bio shall not be obliged to seek recourse against such Affiliate before enforcing its rights against Protiva.

For greater certainty, any default or breach by such Affiliate of any term of this Agreement will also constitute a breach by Protiva under this Agreement and Halo-Bio will be entitled to exercise its rights hereunder, in addition to any other rights and remedies to which it may be entitled.

- (b) The exclusive license granted by Halo-Bio to Protiva in Subsection 3.1(a) shall be further sublicensable to Third Parties without Halo-Bio's prior written consent provided that such sublicenses comply with the requirements of Subsections 3.6(c), 3.6(d) and 3.6(e).
- (c) Each sublicense granted by Protiva pursuant to this Section 3.6 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. Agreements with any Sublicensee shall contain the following provisions:
 - (i) a requirement that such Sublicensee submit applicable sales or other reports consistent with those required hereunder;
 - (ii) an audit requirement similar to the requirement set forth herein; and
 - (iii) a requirement that such Sublicensee complies with the confidentiality and non-use provisions with respect to both Parties' Confidential Information.
- (d) Protiva will notify Halo-Bio within ten (10) Business Days after execution of each sublicense (including any amendment or termination thereof) and provide a copy of the fully executed sublicense agreement (and any amendment) to Halo-Bio within the same time frame (with reasonable redactions permitted to protect the confidentiality of the Sublicensee and Protiva) provided that such redactions do not include provisions necessary to demonstrate compliance with the requirements of this Agreement, which shall be treated as Confidential Information of Protiva.
- (e) Protiva will be responsible for the making of all payments due under this Agreement with respect to its Sublicensees' activities, the making of any reports under this Agreement with respect to Net

Sales of Products by its Sublicensees, and the compliance by the Sublicensees with all applicable terms of this Agreement. The grant of any Sublicenses will not relieve Protiva of or reduce its obligations to Halo-Bio under this Agreement. The term of any sublicense will be limited to the term of this Agreement and will terminate upon the expiration or the termination of this Agreement for any reason.

3.7 Desirable Third Party License For Sublicensed Combination Products

It is foreseeable that a specific Combination Product may contain Multivalent RNAs in addition to Other APIs to create a combination product such that the Product may be subject to multiple payment obligations by Protiva to multiple parties. Halo-Bio and Protiva agree that if a specific Combination Product is subject to payment obligations by Protiva to one or more Third Parties due to such Third Parties' Intellectual Property Rights for the Other API being in the sublicense (and results in Sublicensing Revenue), then any amount due to Halo-Bio set forth in Section 3.4 (Sublicensing Revenue) shall be adjusted by [*]. If the Parties are unable to come to agreement on said respective values, the issue will be determined by a single independent evaluator mutually agreed between the Parties. For greater certainty, notwithstanding anything in this Section, the consideration due Halo-Bio in respect of such Product shall [*].

3.8 Necessary Third Party License

If, during the Term:

- (a) Halo-Bio and/or Protiva determines that it is necessary to seek a license from any Third Party in order to avoid infringement in the manufacture, use or sale of Multivalent RNAs that are Covered by one or more Licensed Patents;
- (b) if as a result of any complaint alleging infringement or violation of any patent or other Intellectual Property Rights is made against Protiva, its Affiliates or its Sublicensee with respect to the manufacture, use or sale of Multivalent RNAs that are Covered by one or more Licensed 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.

and a settlement, consent judgment or award of damages determined by a court of competent jurisdiction requires Protiva to make payment to a Third Party in satisfaction of such complaint; or

- (c) if an independent, mutually acceptable Third Party patent attorney determines that such a license is required;

Protiva will pay all royalties, damages or other amounts to such Third Party, and the applicable royalties in each country payable by Protiva to Halo-Bio will be reduced by the amount of royalties paid by Protiva with respect to such necessary Third Party license for the country; provided, however, that in no event shall the royalties due to Halo-Bio under this Agreement with respect to such country be reduced to [*].

3.9 Compulsory Licenses

In the event that a government agency in any country grants or compels Protiva, its Affiliates or their Sublicensees to grant, to any Third Party a right to commercialize a particular Product, Protiva may, at its sole option, elect to change the royalty rate payable by Protiva under Section 3.5 for the Product in such country to [*].

3.10 Reports and Payment

- (a) Protiva will deliver to Halo-Bio within forty-five (45) days after the end of each Calendar Quarter a written report showing its computation of royalties due under this Agreement upon Net Sales by Protiva, its Affiliates and their respective Sublicensees during such Calendar Quarter, and setting out:
 - (i) all Net Sales segmented in each such report according to sales by Protiva, each of its Affiliates, and each Sublicensee, as well as on a country-by-country basis, and quarter-by-quarter basis;
 - (ii) deductions from gross revenues by the categories for same set out in the definition of Net Sales; 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.

- (iii) the rates of exchange used to convert such royalties to Dollars from the currency in which such sales were made. For the purposes hereof, such conversion calculations are to be made on a quarterly basis and the rates of exchange to be used for converting royalties hereunder to Dollars shall be those in effect for the purchase of Dollars as certified by the noon buying rate of the Federal Reserve Bank of New York on the first Business Day of the quarter with respect to which the payment is due.
- (b) Protiva, simultaneously with the delivery of each such report, shall tender payment in Dollars of all royalties shown to be due thereon.
- (c) Protiva shall make all payments due under this Agreement in Dollars by wire transfer of funds via the Federal Reserve Wire Transfer System to Halo-Bio's account as designated in writing by Halo-Bio to Protiva.
- (d) Royalty payments on Net Sales shall continue to be due on a country-by-country basis, Product-by-Product basis from the date of the First Commercial Sale to the expiry of the last Valid Claim of the Licensed Patents.

3.11 Withholding Taxes

Any tax which Protiva is required to pay or withhold with respect to license fees, milestone payments and royalty payments to be made to Halo-Bio hereunder shall be deducted from the amount otherwise due to Halo-Bio; provided that, in regard to any such deduction, Protiva shall give Halo-Bio such assistance, which shall include the provision of such documentation as may be required by governmental agencies, as may reasonably be necessary to enable Halo-bio to evidence such payment, claim exemption therefrom, or obtain a repayment thereof, or a reduction thereof, and shall upon request provide such additional documentation from time to time as is needed to confirm payment of tax.

3.12 Foreign Payments

Where payments are due Halo-Bio under this Agreement for sales of a Product in a country where, by reason of currency regulations or taxes of any kind, it is impossible or illegal for Protiva or any Affiliates or Sublicensees, as the case may be, to transfer such payments to Halo-Bio, such payments shall be deposited in whatever currency is allowable by the Person not able to make the transfer for the benefit or credit of Halo-Bio in an accredited bank in that country that is reasonably acceptable to Halo-Bio.

3.13 Late Payments

Any payment that is not paid on or before the date such payment is due under this Agreement shall bear interest at a rate equal to the Bank of Canada prime lending rate prevailing at the time of late payment plus three percentage points (3%) interest compounded monthly, calculated based on the number of days that payment is delinquent until full payment has been made.

3.14 Records

Protiva will keep, and will require all Affiliates and their respective Sublicensees to keep, full, true and accurate books of accounts and other records containing all information and data which may be necessary to ascertain and verify the royalties payable hereunder for a period of three (3) years after the date such royalties became due.

3.15 Audits

- (a) During the Term, after the First Commercial Sale of Product and for a period of one (1) year following termination of this Agreement, Halo-bio shall have the right from time to time (not to exceed once during each Calendar Year) to have either its internal financial audit personnel or an independent firm of accountants (i.e., a certified public accountant or like Person reasonably acceptable to Protiva) inspect such books, records and supporting data of Protiva and its Affiliates and Sublicensees, provided such audit shall not cover such records for more than the preceding three (3) years. Such independent firm of accountants shall perform these audits at Halo-Bio's expense upon reasonable prior written notice and during regular business hours, and shall agree as a condition to such audit to maintain the confidentiality of all information disclosed or observed in connection with such audit and to disclose to Halo-Bio only whether there has been compliance with the obligations under this Agreement with respect to the accuracy of the royalty statement, payments and permitted deductions and offsets.
- (b) If the result of such audit demonstrates an underpayment by Protiva to Halo-Bio of five percent (5%) or more, Protiva shall pay for the reasonable costs of such audit, and shall immediately pay to Halo-Bio the underpayment together with interest thereon at the Royal Bank of Canada prime lending rate prevailing at the time, plus three percentage points (3%) compounded monthly from the time such payment were due.

Article 4 INTELLECTUAL PROPERTY

4.1 Inventions

Subject to Section 4.2, as between Protiva and Halo-Bio:

- (a) all Inventions of any kind whatsoever first conceived, reduced to practice, developed or created by Halo Bio or its Affiliates, alone or with any Third Party, prior to or during the Term relating to Multivalent RNAs shall be owned by Halo-Bio;
- (b) all Inventions of any kind whatsoever first conceived, reduced to practice, developed or created by Protiva or its Affiliates, alone or with any Third Party, prior to or during the Term relating to Multivalent RNAs (“**Protiva Inventions**”), shall be owned by Protiva; and
- (c) all Inventions of any kind whatsoever first conceived, reduced to practice, developed or created jointly by the Parties or their Affiliates or others acting on behalf of each of the Parties or their Affiliates during the Term relating to Multivalent RNAs (as further clarified in Subsection 1.1(w), “**Joint IP**”), shall be jointly owned by the Parties.

Inventorship and authorship will be determined under the applicable rules and precedents prevailing in the United States.

4.2 Disclosure of Inventions During the Term

- (a) If, after the Effective Date and during the Term, Halo-Bio becomes the owner, solely or jointly, of any additional Intellectual Property Rights that constitute Technology, whether developed in the performance of this Agreement or outside the framework of this Agreement, and whether or not patentable, Halo-Bio will notify Protiva in writing thereof. Halo-Bio and Protiva shall, throughout the Term, undertake periodic meetings to provide status updates on any additional Intellectual Property Rights that constitute Technology 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.
- (b) If, as of the Effective Date, Protiva or its Affiliates are owners, or after the Effective Date and during the Term, Protiva or its Affiliates or Sublicensees become owners, solely or jointly, of any Intellectual Property Rights relating to Multivalent RNAs, whether developed in the performance of this Agreement or outside the framework of this Agreement, Protiva will provide to Halo-Bio

written notice of any patent applications in respect thereof made by or on behalf of Protiva that Cover Multivalent RNAs, provided, that the foregoing shall not apply to any Intellectual Property Rights that relate to Drug Delivery.

- (c) Protiva and its Affiliates shall not, in Protiva's name or the name of any of its Affiliates and omitting the name of Halo-Bio, file any patent applications or pursue patents that Cover the Technology first conceived, reduced to practice, developed or created by Halo-Bio, without the prior written consent of Halo-Bio.

4.3 Perfection of Ownership Rights

- (a) Each Party will ensure that its employees and contractors who perform any obligations under this Agreement have entered into written agreements with such Party whereby its employees and contractors assign to such Party all ownership rights in any Intellectual Property Rights made or developed by such employees and contractors in their course of work for such Party.
- (b) Each Party will report to the other Party in writing within fifteen (15) days of becoming aware of any patentable Inventions made during the Term and relating to Multivalent RNAs.

Article 5 PATENT PROSECUTION

5.1 Prosecution and Maintenance of Licensed Patents

- (a) All patent applications included in the Licensed Patents (including those arising from Joint IP included in the Technology) and, upon issuance, all resulting issued patents therefrom, shall be filed, prosecuted and maintained by Protiva, in its discretion which shall be exercised in good faith, in accordance with this Article 5.
- (b) Without limiting the generality of the foregoing, during the Term, in respect of all Licensed Patents and Patent Rights in and to the Joint IP, Protiva shall be responsible, in its discretion which shall be exercised in good faith, for:
 - (i) the initial filing in the Core Patent Countries of [*];
 - (ii) the continued prosecution of any pending patent applications;
 - (iii) the maintenance of all such issued patents; 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 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 therefor;

and shall be responsible for and pay the costs and expenses thereof incurred after the Effective Date.

(c) Notwithstanding the foregoing, neither Party shall have the right to make an election under the *Cooperative Research and Technology Enhancement Act of 2004*, 35 U.S.C. § 103(c)(2)-(c)(3) when exercising its rights under this Section 5.1 without the prior written consent of the other Party.

5.2 Prosecution and Maintenance of Patent Rights not relating to Multivalent RNAs

To the extent either Party solely or jointly conceives, identifies, invents, or discovers any Invention not relating to Multivalent RNAs during the Term:

- (a) Protiva will be solely responsible, in its discretion, for the filing, prosecution and maintenance of any Patent Rights Covering such Inventions made by officers, employees or contractors of Protiva or its Affiliates, solely or jointly with officers, employees or contractors of Halo-Bio or its Affiliates;
- (b) Halo-Bio will be solely responsible, in its discretion, for the filing, prosecution and maintenance of any Patent Rights Covering such Inventions solely made (or jointly made with Third Parties) by officers, employees or contractors of Halo-Bio or its Affiliates; and
- (c) each Party shall bear its own costs and expenses of patent filing, prosecution and maintenance of the Patent Rights set forth in this Section 5.2.

5.3 Updating Patent Table

The Patent Table will be deemed to be a living document continually updated by notice from Protiva to Halo-Bio of patent filing, prosecution, maintenance and discontinuation of any Licensed Patents. By way of non-limiting example, a patent application shall be deemed to have been added to the Patent Table on the date that such patent application is submitted to the US Patent and Trademarks Office or any foreign equivalent.

5.4 Consultation and Reporting

- (a) On a timely basis, Protiva will consult with Halo-Bio on all material actions to be taken with respect to the filing, prosecution and maintenance of the Licensed Patents, including claims and any proposed amendments thereto. Halo-Bio will have the right to comment on Protiva's proposed actions and to identify any process, uses or Products arising out of the Technology that may be patentable and Protiva will reasonably consider such comments, but Protiva shall have final good-faith determination over the scope and breadth of patent protection to be pursued.
- (b) If Halo-Bio desires additional claims to be filed, prosecuted and maintained under the Licensed Patents for Halo-Bio or its sublicensees' uses outside the Field, Halo-Bio shall:
- (i) notify Protiva in writing setting forth the specific claims, jurisdiction and nature of patent protection required by Halo-Bio; and
 - (ii) either (A) request that a divisional application with such additional claims be filed for Halo-Bio to prosecute or (B) agree to assume all costs and expenses (including Protiva's external patent counsel costs) incurred by Protiva in pursuing such patent protection ("**Patent Prosecution Fees**").
- All Patent Prosecution Fees shall be due and payable to Protiva within thirty (30) days of Halo-Bio's receipt each invoice, with interest on late payment calculated in accordance with Section 3.13. Protiva reserves the right to offset any unpaid Patent Prosecution Fees and accrued interest against any payments due by Protiva to Halo-Bio hereunder.
- (c) Protiva will disclose to Halo-Bio, on a timely basis:
- (i) the complete text of each patent application and issued patent within the Licensed Patents; 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 Licensed Patents.

5.5 Abandonment, Withdrawal or Discontinuance

(a) If Protiva elects to:

- (i) discontinue pursuing one or more patent applications, patent protection or patent maintenance pertaining to any of the Licensed Patents (including those relating to the 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 Licensed Patents (including those relating to the Joint IP) in any specific jurisdiction for any reason;

Protiva will provide Halo-Bio with 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 sixty (60) days prior to any deadline imposed by a patent office, to enable Halo-Bio to assume and continue the filing, prosecution or maintenance of the patent applications or patents identified in the Notice of Abandonment (the “**Abandoned Patents**”).

(b) The Notice of Abandonment will clearly state the patent application, patent protection, and/or patent maintenance for the Abandoned Patents. Halo-Bio, 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. In addition, if within sixty (60) days of receiving an Invention disclosure from Halo-Bio, Protiva does not file a patent application for the Invention described therein that Halo-Bio believes could become a Licensed Patent:

- (i) Halo-Bio may prepare and file a patent application for the Invention;
- (ii) a Notice of Abandonment will be deemed to have been given upon Protiva’s receipt of the Invention disclosure and the patent application for the Invention, when filed by Halo-Bio, will be deemed an Abandoned Patent, including all Patent Rights related thereto, including foreign counterparts.

(c) Both Parties agree that, notwithstanding anything to the contrary in this Agreement, effective upon, sixty (60) days after the Notice of Abandonment, Protiva will have no further obligations with respect to the filing, prosecution, maintenance, protection and related costs for the Abandoned Patents. Unless otherwise agreed by the Parties, the specific jurisdictions for which the Abandoned Patents apply shall remain within the Territory and any Abandoned Patents assumed and continued by Halo-Bio shall remain or be deemed to remain within the Licensed

Patents; provided, however, with respect to such Abandoned Patents, Protiva's license rights under Section 3.1 shall become non-exclusive, without any reduction in royalties or other payments due hereunder and, in respect of the abandonment of [*] (and any Patent Rights related thereto) in a Core Patent Country, neither Protiva nor its Sublicensees shall thereafter have any right to grant any additional sublicenses or sub-sublicenses (as the case may be) in such Core Patent Country, other than those existing on the date of such abandonment.

5.6 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 Licensed Patents 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) Protiva shall have the first right, in its sole discretion and sole expense and using counsel of its choice and reasonably acceptable to Halo-Bio, 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 Licensed Patent in the Field;
- (b) if Protiva does not take steps to prosecute such claim or litigation within thirty (30) days after receipt of notice thereof, Halo-Bio 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 Licensed Patents 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 Licensed 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;

[*] 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.

- (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 Halo-Bio and Protiva 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: [*];
- (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 5.6(d) or from such other parties to the litigation).

5.7 Breach of Confidence Proceedings

In the event of an alleged breach of confidentiality respecting Confidential Information or any Third Party use of Confidential Information, Halo-Bio and Protiva agree that they shall reasonably cooperate to enjoin such Third Party's use of such Confidential Information.

5.8 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 Patent Rights or unauthorized use or misappropriation of its know-how, due to the use of the Intellectual Property Rights in and to the Technology or the making, using or selling of Products covered by the Licensed 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 10.

[*] 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.

5.9 Procedures

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 join as a party to the suit and will execute and cause its Affiliates to execute all document necessary for the initiating Party to initiate litigation to prosecute and maintain such action. In addition, at the initiating Party's request, the other Party shall provide reasonable assistance to the initiating Party in connection with an infringement suit at no charge to the initiating Party except for reimbursement by the initiating Party of reasonable out-of-pocket expenses incurred by the other Party in rendering such assistance.

5.10 Product Trademarks

Protiva shall own the trademarks for any 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 any infringement by a Third Party of any Product trademark, and for claims of infringement of the rights of a Third Party by the use of a Product's trademark.

5.11 Software Patent Rights

It is recognized and agreed that Halo-Bio has retained the right to file, prosecute, maintain, defend and enforce the Software Patent Rights, at Halo-Bio's sole cost and expense.

Article 6 DEVELOPMENT & COMMERCIALIZATION

6.1 Protiva's Diligence Efforts

- (a) Protiva will use commercially reasonable efforts to develop, manufacture and commercialize the Technology and Products Covered by Licensed Patents, including preparing, filing, prosecuting or causing to be prepared, filed and prosecuted the regulatory submission for each Product.
- (b) Protiva may subcontract to consultants, agents, contract research organizations, contract manufacturers and any other service provider any of Protiva's development efforts without the prior written consent of Halo-Bio.

- (c) Protiva will conduct its development, manufacturing and commercialization activities at its own cost and expense and with the requisite care, skill and diligence in accordance with applicable laws and industry standards, and by individuals who are appropriately trained and qualified.
- (d) No later than forty-five (45) days after each Calendar Year, Protiva will deliver to Halo-Bio a written report to keep Halo-Bio fully informed of the progress of the development, manufacture and commercialization of the Technology and of each Product, and the plans for development, manufacture and commercialization thereof for the new Calendar Year, of Protiva and its Affiliates and Sublicensees.

6.2 Halo-Bio's Assistance

Subject to Protiva's obligations under Article 7, Halo-Bio may, at its discretion, provide assistance to Protiva in its efforts to sublicense Protiva's licensed rights to the Technology and one or more Products by:

- (a) providing Protiva with Confidential Information and non-confidential information relating to the Technology for the preparation of presentation material for bona fide actual or prospective Sublicensees, underwriters, investors, lenders or other financing sources;
- (b) communicating with bona fide actual or prospective Sublicensees, underwriters, investors, lenders or other financing sources to present the Technology, using mutually agreed upon presentation materials;
- (c) cooperating with bona fide actual or prospective Sublicensees, underwriters, investors, lenders or other financing sources on their due diligence activities; and
- (d) identifying potential Persons to work on behalf of the Parties to identify potential Sublicensees.

Notwithstanding the foregoing, Protiva shall have final determination over the selection of Sublicensees and the making of all sublicense agreements. For clarity, Protiva will not be required to seek Halo-Bio's prior approval of any term sheet, negotiation strategy, negotiation term, or the final terms and conditions of any sublicense agreement.

7.1 Confidential Information

- (a) The Parties agree that all “Confidential Information” disclosed between the Parties pursuant to the Mutual Non-Disclosure Agreement executed by the Parties dated April 15, 2010 and the Feasibility Research Agreement executed by the Parties dated July 7, 2010 shall be kept confidential and not disclosed except in accordance with the terms of such agreements.
- (b) All Confidential Information disclosed by one Party to the other Party hereunder shall be maintained in confidence by the receiving Party and shall not be disclosed to a Third Party or used for any purpose except as set forth herein without the prior written consent of the disclosing Party, except to the extent that such Confidential Information:
 - (i) is known by the receiving Party at the time of its receipt, and not through a prior disclosure by the disclosing Party, as documented by the receiving Party’s business records;
 - (ii) is in the public domain by use and/or publication before its receipt from the disclosing Party, or thereafter enters the public domain through no fault of the receiving Party;
 - (iii) is subsequently disclosed to the receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality to the disclosing Party; or
 - (iv) is developed by the receiving Party independently of Confidential Information received from the disclosing Party, as documented by the receiving Party’s business records.
- (c) Notwithstanding the obligations of confidentiality and non-use set forth above and in Sections 7.5 (Publication) and 7.6 (Publicity), a receiving Party may provide Confidential Information disclosed to it, and disclose the existence and terms of this Agreement, as may be reasonably required:
 - (i) to perform its obligations and to exploit its rights under this Agreement, including to its respective employees, directors, Affiliates, agents, consultants, advisors and/or other Third Parties for the performance of its obligations hereunder (or for such entities to determine their interest in performing such activities) in accordance with this Agreement in each case who are obligated to keep such Confidential Information confidential;
 - (ii) to comply with requirements of governmental or other Regulatory Authorities in order to obtain patents or perform its obligations or exploit its rights under this Agreement, provided that such Confidential Information shall be disclosed only to the extent reasonably necessary to do so;

- (iii) to comply with applicable law, 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 such Confidential Information shall be disclosed only to the extent required by law; and
- (iv) to support due diligence investigations by any bona fide actual or prospective underwriters, investors, lenders or other financing sources and any bona fide actual or prospective collaborators or strategic partners and consultants and advisors of such Party, provided that such persons are obligated to keep such Confidential Information confidential.

7.2 Permitted Disclosures

- (a) 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 and Sections 7.5 (Publication) and 7.6 (Publicity), 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 and Sections 7.5 (Publication) and 7.6 (Publicity), 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.
- (b) 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.

7.3 Return of Confidential Information

Except as required to comply with applicable requirements of Regulatory Authorities, and as otherwise specified in this Agreement, within thirty (30) days of receipt of a written request from the disclosing Party after termination of this Agreement, the receiving Party will return to the disclosing Party or destroy, at the disclosing Party's sole discretion, all Confidential Information of the disclosing Party, including all such information that is electronically stored by the receiving Party, all reproductions thereof and all samples of materials in the form provided by the disclosing Party to the receiving Party, in the receiving Party's possession or control and confirm such destruction or delivery to the disclosing Party in writing, as applicable. The receiving Party's legal counsel shall have the right to retain one copy of the disclosing Party's Confidential Information solely for the purpose of determining compliance with this Agreement.

7.4 Injunctive Relief

Each Party acknowledges the competitive and technical value and the sensitive and confidential nature of the Confidential Information and agrees that monetary damages will be inadequate to protect the other party's interests against any actual or threatened material breach of this Agreement. Accordingly, each party consents to the granting of specific performance and injunctive or other equitable relief to the other party in respect of any actual or threatened breach of this Agreement, without proof of actual Damages. These specific remedies are in addition to any other remedy to which the Parties may be entitled at law or in equity.

7.5 Publication

- (a) Each Party recognizes the mutual interest in obtaining valid patent protection and in protecting business interests and trade secret information prior to publishing any results relating to the Technology. Except for disclosures permitted pursuant to this section and Sections 7.1 (Confidential Information) and 7.2 (Permitted Disclosures) and Subsection 7.5(d), Halo-Bio and its Affiliates and their respective employees and consultants wishing to make a publication or a public presentation relating to Multivalent RNAs and the Technology may make such publication request and shall deliver to Protiva a copy of the proposed written publication or an outline of an oral disclosure at least thirty (30) days prior to submission for publication or presentation.
- (b) Protiva shall have the right:
 - (i) to edit such publication or presentation at its sole discretion;

- (ii) to agree to such publication or presentation subject to a reasonable delay in order to protect patentable information; and
 - (iii) to deny the publication request for any reason.
- (c) Protiva shall be free to publish any and all data generated by Protiva during the Term relating to Multivalent RNAs without seeking Halo-Bio's prior review or consent, provided that Protiva makes good faith efforts to protect patentable information prior to such publication and does not disclose Halo-Bio's Confidential Information.
- (d) For the avoidance of doubt, subject to its obligations under Section 7.1 (Confidential Information), Protiva may make publications and public presentations relating to its solely owned Confidential Information without any obligation to permit Halo-Bio to review or comment on such publication or disclosure. Halo-Bio may make publications and public presentations relating to its solely owned Confidential Information provided it does not publish or present the use of its confidential Technology (i.e., constituting a trade secret) in the Field or otherwise materially undermines the Intellectual Property Rights granted to Protiva under this Agreement.

7.6 Publicity

- (a) Except as set forth in Sections 7.1 (Confidential Information), 7.2 (Permitted Disclosures), 7.5 (Publication) and Subsection 7.6(b) (Publicity), no disclosure of the existence of, or the terms of, this Agreement, may be made by either Party, and no Party 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 expressly permitted by the terms hereof.
- (b) The Parties expect that upon the Effective Date of this Agreement Protiva will, and Halo-Bio may, issue separate press releases publicizing the execution of this Agreement and that prior to the execution of this Agreement, Halo-Bio and Protiva shall agree in writing upon any such press releases. After such initial press releases, neither Party shall issue a press release or public announcement relating to this Agreement without the prior written approval of the other Party, which approval shall not be unreasonably withheld, except that a Party may:
- (i) once a press release or other written statement is approved in writing by both Parties, make subsequent public disclosure of the information contained in such press release or other written statement without the further approval of the other Party; and

- (ii) issue a press release or public announcement as required, in the reasonable judgment of such Party, by applicable law, 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.

7.7 Disclosure of Technology

With respect to information pertaining to the Technology that is useful in the Field and that is not generally available to the public, Halo-Bio agrees that, in dealing with such information in exercising its rights under this Agreement, it will exercise the same degree of care in safeguarding such information from public disclosure as Protiva is required to exercise with respect to such information pursuant to this Article 7, including limiting disclosure to those who are under an obligation of confidentiality.

Article 8 REPRESENTATIONS & WARRANTIES

8.1 Mutual Representations and Warranties

Each Party represents and warrants to the other Party that as of the Effective Date of this Agreement:

- (a) it is duly organized and validly existing under the laws of its jurisdiction of incorporation or formation, and has full corporate or other power and authority to enter into this Agreement to which it is a party, and to carry out the provisions hereof;
- (b) the person or persons executing this Agreement to which it is a party on its behalf has been duly authorized to do so by all requisite corporate action;
- (c) this Agreement to which it is a party are legally binding upon it and enforceable in accordance with its terms; and
- (d) neither Party nor any of its Affiliates has been debarred or is subject to debarment and neither Party nor any of its Affiliates will use in any capacity, any person or entity that has been debarred pursuant to Section 306 of the United States Federal *Food, Drug, and Cosmetic Act*, or that is the subject of a conviction described in such Section. Each Party agrees to inform the other Party in writing immediately if it or any Person that is performing activities permitted by this Agreement is debarred or is the subject of a conviction described in Section 306, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to the best of the notifying Party's knowledge, is threatened, relating to the debarment or conviction of the notifying Party or any Person or entity used in any capacity by such Party or any of its Affiliates in connection with this Agreement.

8.2 Halo-Bio Representations and Warranties

Halo-Bio represents and warrants to Protiva that as of the Effective Date of this Agreement:

- (a) Halo-Bio has not, and will not during the Term, grant any right to any Third Party which would conflict with the rights granted to Protiva hereunder. It has maintained in full force and effect all filings (including patent filings) necessary in Halo-Bio's reasonable judgement to perform its obligations hereunder. Further, the execution and delivery of this Agreement, the performance of Halo-Bio's obligations hereunder, and the licenses and sublicenses to be granted pursuant to this Agreement do not conflict with or violate any requirement of applicable laws or regulations existing as of the Effective Date;
- (b) the current Licensed Patents are set forth in **Schedule 3**;
- (c) all employees of Halo-Bio, including, without limitation, Todd Hauser, have executed assignment of inventions agreements with Halo-Bio assigning to Halo-Bio all of such employees' right, title and interest in and to any and all Inventions relating to Multivalent RNAs that they may develop during the course of their relationship with Halo-Bio and requiring such employees to execute, assign and deliver any documents and any other instruments of conveyance and transfer that may be reasonably required;
- (d) all inventors listed in the Licensed Patents have assigned their Patent Rights to Halo-Bio;
- (e) Halo-Bio has not assigned, transferred, conveyed or otherwise encumbered its right, title and interest in the Technology and in a manner that conflicts with any rights granted to Protiva hereunder;
- (f) there are no claims, judgments or settlements actually made or, to Halo-Bio's knowledge, threatened, against or amounts with respect thereto owed by, Halo-Bio relating to the Technology, nor any pending or threatened claims or litigation relating to the Technology licensed to Protiva; and
- (g) to Halo-Bio's knowledge and belief, the Technology does not infringe any Third Party Intellectual Property Rights.

8.3 Protiva Representations and Warranties

Protiva represents and warrants to Halo-Bio that as of the Effective Date of this Agreement:

- (a) the execution and delivery of this Agreement, the performance of Protiva's obligations hereunder, and the licenses and sublicenses to be granted pursuant to this Agreement do not conflict with or violate any requirement of applicable laws or regulations existing as of the Effective Date;
- (b) Protiva and its Affiliates have not filed any patent applications that are specifically directed to Multivalent RNA; and
- (c) all employees and independent contractors of Protiva and its Affiliates have executed assignment of inventions agreements with Protiva and its Affiliates assigning to Protiva or such Affiliates all of such employees' right, title and interest in and to any and all Inventions relating to Multivalent RNAs that they may develop during the course of their relationship with Protiva or its Affiliates.

8.4 Performance by Affiliates

The Parties recognize that each may perform some or all of its obligations under this Agreement through one or more Affiliates, provided, however, that:

- (a) Tekmira shall remain responsible and be guarantor of the performance of Protiva and its or Protiva's Affiliates; and
- (b) Halo-Bio shall remain responsible and be guarantor of the performance by its Affiliates.

Protiva and Halo-Bio shall each cause their Affiliates, and Tekmira shall cause Protiva and its or Protiva's Affiliates, to comply with the provisions of this Agreement in connection with such performance.

8.5 No Inconsistent Agreements with Third Parties

Each Party represents and warrants that the execution, delivery and performance of this Agreement does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party and by which it may be bound, or with its charter or by-laws.

8.6 No Implied Warranties

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 PRODUCTS, GOODS, TECHNOLOGY, ENABLEMENT DELIVERABLES, ENABLEMENT SOFTWARE, SOFTWARE PATENT RIGHTS, THE COLLABORATION, RIGHTS OR OTHER SUBJECT MATTER OF THIS AGREEMENT AND HEREBY DISCLAIMS ALL IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. 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 SUCH PRODUCTS WILL BE ACHIEVED.

Article 9 LIMITATION OF LIABILITY

9.1 No Consequential Damages

EXCEPT FOR EITHER PARTY'S LIABILITY FOR INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF THE OTHER PARTY OR BREACH OF THE OBLIGATIONS RESPECTING CONFIDENTIAL INFORMATION OF THE OTHER PARTY, NO PARTY WILL BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY NATURE ARISING FROM SUCH PARTY'S ACTIVITIES UNDER THIS AGREEMENT; PROVIDED, HOWEVER, THAT THIS LIMITATION SHALL NOT LIMIT THE INDEMNIFICATION OBLIGATION OF SUCH PARTY UNDER SECTIONS 10.1 OR 10.2 FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES RECOVERED BY A THIRD PARTY.

Article 10 INDEMNIFICATION & INSURANCE

10.1 Indemnification by Protiva

Protiva shall indemnify, hold harmless, and defend Halo-Bio and its Affiliates and their respective directors, officers, employees, consultants and agents (collectively, the "**Halo-Bio Indemnitees**") from and against any and all Third Party claims, suits, losses, liabilities, damages, costs, fees and expenses (including reasonable legal fees) (collectively, "**Damages**") arising out of or resulting from, directly or indirectly,

- (a) any breach of, or inaccuracy in, any representation or warranty made by Protiva in this Agreement or any breach or violation of any covenant or agreement of Protiva in or pursuant to this Agreement;

- (b) the negligence or wilful misconduct by or of Protiva and its Affiliates and Sublicensees and their respective directors, officers, employees, consultants and agents;
- (c) the performance by Protiva of its obligations during the Technology Transfer and the Work Plan; or
- (d) the development, manufacturing or commercialization of Products or exercise of its license rights under this Agreement.

Notwithstanding the foregoing, Protiva shall have no obligation to indemnify the Halo-Bio Indemnitees to the extent that the Damages arise out of or result from, directly or indirectly:

- (e) any breach of, or inaccuracy in, any representation or warranty made by Halo-Bio in this Agreement;
- (f) any breach or violation of any covenant or agreement of Halo-Bio in or pursuant to this Agreement; or
- (g) the negligence or wilful misconduct by or of any of the Halo-Bio Indemnitees.

10.2 Indemnification by Halo-Bio

Halo-Bio shall indemnify, hold harmless, and defend Protiva and its Affiliates and their respective directors, officers, employees, consultants and agents (collectively, the "**Protiva Indemnitees**") from and against any and all Damages arising out of or resulting from, directly or indirectly:

- (a) any breach of, or inaccuracy in, any representation or warranty made by Halo-Bio in this Agreement or any breach or violation of any covenant or agreement of Halo-Bio in or pursuant to this Agreement;
- (b) the negligence or wilful misconduct by or of Halo-Bio, its Affiliates, and their respective directors, officers, employees, consultants and agents; or
- (c) the performance by Halo-Bio of its obligations during the Technology Transfer and the Work Plan.

Notwithstanding the foregoing, Halo-Bio shall have no obligation to indemnify the Protiva Indemnitees to the extent that the Damages arise out of or result from, directly or indirectly:

- (d) any breach of, or inaccuracy in, any representation or warranty made by Protiva in this Agreement;
- (e) any breach or violation of any covenant or agreement of Protiva in or pursuant to this Agreement; or
- (f) the negligence or wilful misconduct by or of any of the Protiva Indemnitees.

10.3 Conditions for Indemnification

- (a) In the event of any such claim against any Protiva Indemnitee or Halo-Bio Indemnitee (individually, an “**Indemnitee**”), the indemnified Party shall promptly notify the other Party in writing of the claim and the indemnifying Party shall manage and control, at its sole expense, the defense of the claim and its settlement. The Indemnitee shall cooperate with the indemnifying Party and may, at its option and expense, be represented in any such action or proceeding.
- (b) Notwithstanding the foregoing, if the indemnifying Party believes that any of the exceptions to its obligation of indemnification of the Indemnitees set forth in Sections 10.1 or 10.2 may apply, the indemnifying Party shall promptly notify the Indemnitees, which shall then have the right to be represented in any such action or proceeding by separate counsel at their expense; provided, that the indemnifying Party shall be responsible for payment of such expenses if the Indemnitees are ultimately determined to be entitled to indemnification from the indemnifying Party.

10.4 Settlement

Neither Party will be liable or bound by any settlement of any claim or suit made without its prior written consent.

10.5 Insurance

- (a) Protiva shall secure and maintain in full force and effect throughout the Term at its sole cost and expense and for at least three (3) years thereafter, public liability, product liability and errors and omissions insurance in reasonable amounts from a reputable insurance carrier having a minimum AM Best rating of “A”. Such product liability insurance shall insure against all liability, including personal injury, physical injury, or property damage arising out of the research, development, manufacture, marketing, distribution and sale of the Product.

- (b) Protiva shall furnish to Halo-Bio a certificate from and demonstrating the insurance requirements set forth above. The insurance certificate shall confirm the insured shall endeavor to provide thirty (30) days prior written notice to Halo-Bio in the event of cancellation.
- (c) Halo-Bio shall secure and maintain in full force and effect throughout the Term, at its sole cost and expense, insurance of the types and in such commercially reasonable and appropriate amounts as is adequate for its business as currently conducted and as is customary for similarly sized companies engaged in similar businesses in similar industries.

Article 11 TERM & TERMINATION

11.1 Term

- (a) The licenses granted by Halo-Bio to Protiva in this Agreement shall become effective on the Effective Date and unless earlier terminated in accordance with this Article 11, shall expire, on a country-by-country basis, in respect of each Product, upon the expiration of the last to expire of the Licensed Patents containing a Valid Claim Covering such Product in the country of manufacture or country of sale (the “**Term**”). For clarity, the Term (and royalty obligation hereunder) shall be extended to include any Patent Term Extension, Patent Term Adjustment, Supplementary Protection Certificate or other government granted period of exclusivity that prevents a Third Party from practicing the claimed Invention.
- (b) Upon expiration (but not early termination) of the Term on a Product-by-Product and country-by-country basis, Protiva shall have:
 - (i) a perpetual, fully paid-up, worldwide, non-exclusive license to use the Technology covering the Product (including the right to sublicense) to make, have made, use, sell, offer for sale and import the Product in the Field in such country, without accounting to Halo-Bio; and
 - (ii) a perpetual, non-exclusive, worldwide license to use, reproduce and modify the Enablement Software (in both object code form and source code form) to design Multivalent RNAs for use in Products in the Field in such country. It is understood and agreed that the non-exclusive license under this Paragraph 11.1(b)(ii) includes the right of Protiva to grant sublicenses and sub-sublicenses, provided that such sublicenses and sub-sublicenses are granted in connection with the sublicense of the Technology and Products pursuant to Subsection 3.1(d).

11.2 Termination for Invalidity Challenge

If Protiva or one of its Affiliates or Sublicensees intends to assert or actually asserts in any court or other governmental agency of competent jurisdiction that a Licensed Patent is invalid, unenforceable, or should not issue (whether in the form of petition for declaratory relief, claims, counterclaims, defenses, interferences, petitions for re-examination, oppositions or otherwise) or that no issued Valid Claim embodied in such patent excludes a Third Party from making, having made, using, selling, offering for sale, importing or having imported a Product in such jurisdiction:

- (a) Protiva will not less than sixty (60) days prior to making any such assertion, provide to Halo-Bio a complete written disclosure of each and every basis then known to Protiva or its Affiliate for such assertion and, with such disclosure, will provide Halo-Bio with a copy of any document or publication upon which Protiva or its Affiliate intends to rely in support of such assertion; and
- (b) Halo-Bio shall be entitled, upon not less than thirty (30) days prior written notice to Protiva, to terminate the license granted to Protiva for such Licensed Patent in the applicable jurisdiction; provided, however, that Halo-Bio shall not terminate such license if within thirty (30) days of Protiva's receipt of Halo-Bio's notification hereunder, Protiva has:
 - (i) confirmed by written notice to Halo-Bio that Protiva and its Affiliates and Sublicensees no longer intend to challenge the validity or enforceability of any Licensed Patent; and
 - (ii) provided to Halo-Bio, documentation to confirm the withdrawal of the applicable filing, submission or other process commenced in any court or other governmental agency of competent jurisdiction to challenge any Licensed Patent.

Upon termination of such license, such Licensed Patent shall be removed from the definition of "Licensed Patents".

11.3 Termination for Material Breach

Either Party shall be entitled to terminate this Agreement by written notice to the other Party in the event that the other Party is in material breach of its obligations hereunder and fails to remedy any such breach within sixty (60) days (or in the case of breach of any payment obligation, within twenty (20) days) after notice thereof by the Party alleging breach. Any such notice shall:

- (a) specifically state that the Party not in default intends to terminate this Agreement in the event that the other Party fails to remedy the breach; and

- (b) expressly set forth the actions required of the other Party to remedy the breach.

If such breach is not corrected, the Party not in breach shall have the right to terminate this Agreement by giving written notice to the other Party provided the notice of termination is given within nine (9) months after such notice of breach has been given.

11.4 Termination for Bankruptcy or Insolvency

- (a) This Agreement may be terminated by Halo-Bio by providing written notice to Protiva upon:
- (i) the bankruptcy, liquidation or dissolution of Protiva or Tekmira or Protiva or Tekmira makes an assignment for the benefit of creditors;
 - (ii) the filing of any voluntary petition for bankruptcy, dissolution, liquidation or winding-up of the affairs of Protiva or Tekmira; or
 - (iii) the filing of any involuntary petition for bankruptcy, dissolution, liquidation or winding-up of the affairs of Protiva or Tekmira which is not dismissed within one hundred twenty (120) days after the date on which it is filed or commenced.
- (b) This Agreement may be terminated by Protiva by providing written notice to Halo-Bio upon:
- (i) the bankruptcy, liquidation or dissolution of Halo-Bio or Halo-Bio makes an assignment for the benefit of creditors;
 - (ii) the filing of any voluntary petition for bankruptcy, dissolution, liquidation or winding-up of the affairs of Halo-Bio; or
 - (iii) the filing of any involuntary petition for bankruptcy, dissolution, liquidation or winding-up of the affairs of Halo-Bio which is not dismissed within one hundred twenty (120) days after the date on which it is filed or commenced. Notwithstanding the bankruptcy of Halo-Bio, or the impairment of performance by Halo-Bio of its obligations under this Agreement as a result of bankruptcy of Halo-Bio, to the extent that Halo-Bio retains the rights necessary to grant the licenses granted in this Agreement, Protiva shall be entitled to retain the licenses granted herein, subject to Halo-Bio's rights to terminate this Agreement as provided in this Agreement.

- (c) In the event Halo-Bio shall:
- (i) make an assignment for the benefit of creditors, or petition or apply to any tribunal for the appointment of a custodian, receiver, or trustee for all or a substantial part of its assets;
 - (ii) commence any proceeding under any bankruptcy, dissolution, or liquidation law or statute of any jurisdiction whether now or hereafter in effect;
 - (iii) have had 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;
 - (iv) take 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
 - (v) permit 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:

- (vi) in the event of a rejection of this Agreement or any agreement supplementary hereto, Protiva shall be permitted to receive and use any 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;
- (vii) 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 Halo-Bio or the bankruptcy trustee or receiver, Halo-Bio 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;
- (viii) 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

- (ix) 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 Bankruptcy Code or comparable provision of the laws of any other country.
- (d) Notwithstanding anything to the contrary in this Section 11.4:
 - (i) Each Party will provide the other Party with thirty (30) days prior written notice of its regulatory filings in respect of any reorganization or arrangement it proposes;
 - (ii) any reorganization or arrangement involving Halo-Bio, 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 Section 11.4 and shall not give rise to the remedies set forth in this Section 11.4; and
 - (iii) if Protiva asserts any rights under Paragraphs 11.4(c)(vi), 11.4(c)(vii), 11.4(c)(viii) or 11.4(c)(v), Protiva shall continue to be bound by all liabilities and obligations imposed upon Protiva and its Affiliates and Sublicensees, and any remedies available to Halo-Bio under this Agreement.

11.5 Protiva's Termination for Convenience

If at any time Protiva determines for any reason that it no longer wishes to license the Technology, Protiva will notify Halo-Bio in writing stating the effective date of the termination of this Agreement on at least seven (7) days prior written notice thereof, if given within the first three (3) years of the Term, or on at least sixty (60) days prior written notice, if given after the first three (3) years of the Term; provided, however, that if such early termination is less than sixty (60) days prior to any deadline imposed by a patent office with respect Licensed Patents, Protiva will continue the prosecution of such Licensed Patents in good standing during such sixty (60) day period, at its cost and expense. Commencing on the effective date of termination of this Agreement, Protiva shall have no obligation to pay to Halo-Bio, any further license fees, milestone payments, Sublicensing Revenue or royalties set forth in this Agreement; provided, however, such termination will be without prejudice to Halo-Bio's right to receive from Protiva all payment obligations that have accrued prior to the effective date of termination.

11.6 Consequences of Termination

Upon termination of this Agreement pursuant to this Article 11,

- (a) neither Party will be relieved of any obligations incurred or accrued prior to termination;
- (b) each Party will promptly return to the other Party all written Confidential Information and all copies thereof (except for one archival copy to be retained solely for the purpose of confirming compliance with the terms of this Agreement); provided, however, that to the extent any license survives termination of this Agreement, the licensed Party shall be entitled to retain Confidential Information relating to the subject matter of such surviving license;
- (c) if this Agreement is terminated, the Parties will arrange for the orderly transfer by Protiva to Halo-Bio of the filing, prosecution and maintenance of all Licensed Patents;
- (d) if this Agreement is terminated by Protiva pursuant to Section 11.5 or by Halo-Bio pursuant to Sections 11.2, 11.3 or 11.4, Protiva hereby grants to Halo-Bio, effective upon termination, a non-exclusive, worldwide, fully paid up, royalty-free license (with right to grant sublicenses and sub-sublicenses) under the Intellectual Property Rights in and to any Protiva Inventions to make, have made, use, sell, offer for sale and import Products and Multivalent RNAs for use either within or outside of the Field, in and for the Territory, provided that Protiva shall be under no obligation to grant to Halo-Bio any license or other legal right in and to, any Intellectual Property Rights that relate to Drug Delivery; and
- (e) if this Agreement is terminated by Halo-Bio pursuant to Sections 11.3 or 11.4, in addition to the consequences set out in Subsection 11.6(d), Halo-Bio shall provide for the continuation of all sublicense agreements in place between Protiva and its Sublicensees that are not Affiliates of Protiva as direct licenses from Halo-Bio to such Sublicensees under the terms and conditions of this Agreement or Halo-Bio shall grant to such Sublicensees equivalent rights in new licenses from Halo-Bio under the terms and conditions of this Agreement, provided that, in each case, the Sublicensee is not in breach of any material provision of the applicable sublicense agreement or this Agreement, has paid all past due amounts owing to Halo-Bio by Protiva, has its rights to the Technology and Enablement Software limited in scope and territory to those set forth in the original sublicense agreement with Protiva and compensates Halo-Bio, if requested by Halo-Bio, for any payments Halo-Bio would have received from Protiva under Section 3.4 if the sublicense were still in effect.

Article 12 GENERAL

12.1 Amendment

No amendment, modification, supplement, termination or waiver of any provision of this Agreement will be effective unless in writing signed by the Parties and then only in the specific instance and for the specific purpose given.

12.2 Assignment

Neither Party may assign this Agreement in whole or in part without the prior written consent of the other Party; provided, however, that either Party may assign this Agreement and its rights and obligations hereunder, in whole or in part, to a party that acquires, by merger, sale of assets or otherwise, all or substantially all of the business of such party to which the subject matter of this Agreement relates, on written notice to the other Party. Any permitted assignee shall assume all obligations of its assignor under this Agreement. No assignment shall relieve any Party of responsibility for the performance of any accrued obligation that such Party then has under this Agreement.

12.3 Counterparts & Facsimile

This Agreement may be executed in any number of counterparts (either originally or by facsimile), each of which shall be deemed to be an original, and all of which taken together shall be deemed to constitute one and the same instrument, and it shall not be necessary in making proof of the agreement to produce or account for more than one such counterpart.

12.4 Entire Agreement

This Agreement (including Schedules), together with the agreements referenced in Section 7.1, constitutes the entire agreement between the Parties concerning the subject matter hereof, and supersedes all written or oral prior agreements or understandings with respect thereto. The schedules attached hereto shall be deemed to form an integral part of this Agreement.

12.5 Enurement

This Agreement shall enure to the benefit of and be binding upon the Parties hereto and their respective successors and permitted assigns

12.6 Force Majeure

In the event that either Party is prevented from performing or is unable to perform any of its obligations under this Agreement due to any act of God; fire; casualty; flood; war; strike; lockout; failure of public utilities; injunction or any act, exercise, assertion or requirement of governmental authority; epidemic; destruction of production facilities; riots; insurrection; inability to procure or use materials, labor, equipment, transportation or energy; or any other cause beyond the reasonable control of the Party invoking this Section if such Party shall have used its reasonable efforts to avoid such occurrence, such Party shall give notice to the other Party in writing promptly, and thereupon the affected Party's performance shall be excused and the time for performance shall be extended for the period of delay or inability to perform due to such occurrence.

12.7 Further Assurances

Each Party shall co-operate with the other, and execute and deliver, or cause to be executed and delivered, all such other documents and instruments and take all such other actions as such Party may be reasonably requested by the other Party to take from time to time, consistent with the terms of this Agreement in order to implement the provisions and purposes of this Agreement.

12.8 Governing Law and Jurisdiction

This Agreement shall be governed by and construed in accordance with the laws of the State of New York, USA without regard to conflict of law provisions. The courts of the State of Washington will have exclusive jurisdiction to determine all disputes and claims arising between the Parties and the Parties hereby consent to such jurisdiction.

12.9 Headings

The headings in this Agreement are solely for convenience of reference and shall not be used for purposes of interpreting or construing the provisions hereof.

12.10 International Sale of Goods Act

The Parties acknowledge and agree that the International Sale of Goods Act and the United Nations Convention on Contracts for the International Sale of Goods have no application to this Agreement.

12.11 No Implied Rights

Nothing in this Agreement will be deemed or implied to be the grant by one Party to the other of any right, title or interest in any product (including Product), Confidential Information, trade mark, trade dress or any other Intellectual Property Rights or any other proprietary right of the other, except as is expressly provided for herein.

12.12 No Third Party Rights

No provision of this Agreement will be deemed or construed in any way to result in the creation of any rights or obligation in any Person not a party to this Agreement.

12.13 No Waiver of Rights

No condoning, excusing or overlooking by any Party of any default or breach by the other Party in respect of any terms of this Agreement shall operate as a waiver of such Party's rights under this Agreement in respect of any continuing or subsequent default or breach, and no waiver shall be inferred from or implied by anything done or omitted by such Party, save only an express waiver in writing.

12.14 Notice

Notices provided under this Agreement to be given or served by either Party on the other will be given in writing and served personally, by prepaid registered mail return receipt requested, by a reputable courier company or by means of facsimile, to the following respective addresses or to such other addresses as the Parties may hereafter advise each other in writing. Each such notice shall be deemed delivered (i) on the date delivered if by personal delivery, (ii) on the date telecommunicated if by facsimile, and (iii) on the date upon which the return receipt is signed or delivery is refused, as the case may be, if mailed:

If to Halo-Bio:

Halo-Bio RNAi Therapeutics, Inc.
4111 E. Madison, Box 140
Seattle, Washington 98112
USA

Attention: Todd Hauser, CEO

Phone: +1 (206) 254-0200 or 1 (800) 516-5446

Fax: +1 (206) 254-0300

If to Protiva:

Protiva Biotherapeutics Inc.
100-8900 Glenlyon Parkway
Burnaby, B.C. V5J 5J8
Canada

Attention: Vice President, Business Development

Tel: +1 (604) 419-3200

Fax: +1 (604) 419-3201

12.15 Relationship of the Parties

It is not the intent of the Parties hereto to form any partnership or joint venture. Each Party shall, in relation to its obligations hereunder, be deemed to be and shall be an independent contractor, and nothing in this Agreement shall be construed to give such Party the power or authority to act as agent for the other Party for any purpose, or to bind or commit the other Party in any way whatsoever.

12.16 Rights and Remedies

The rights and remedies available under this Agreement shall be cumulative and not alternative and shall be in addition to and not a limitation of any rights and remedies otherwise available to the Parties at law or in equity. No exercise of a specific right or remedy by any Party precludes it from or prejudices it in exercising another right or pursuing another remedy or maintaining an action to which it may otherwise be entitled either at law or in equity.

12.17 Severability

If any one or more of the provisions contained in this Agreement is found by any court or arbitrator for any reason, to be invalid, illegal or unenforceable in any respect in any jurisdiction:

- (a) such provision shall be severable from the remainder of the Agreement in the jurisdiction in which such provision was found to be invalid, illegal or unenforceable;
- (b) the validity, legality and enforceability of such provision will not in any way be affected or impaired thereby in any other jurisdiction and the validity, legality and enforceability of the

remaining provisions contained herein will not in any way be affected or impaired thereby, unless in either case as a result of such determination this Agreement would fail in its essential purpose; and

- (c) the Parties will use their best efforts to substitute for any provision that is invalid, illegal or unenforceable in any jurisdiction a valid, legal and enforceable provision which achieves to the greatest extent possible the economic, legal and commercial objectives of such invalid, illegal or unenforceable provision and of this Agreement.

12.18 Surviving Terms

Notwithstanding any termination or expiration of the Term, any accrued obligations and the provisions of Article 1, Sections 3.10 through 3.15, Article 4, Article 7, Article 8, Article 9, Article 10, Article 11 and Article 12 will survive the termination or expiration of this Agreement.

12.19 Export

Protiva acknowledges that the transfer of certain commodities and technical data is subject to United States laws and regulations controlling the export of such commodities and technical data, including all Export Administration Regulations of the U.S. Department of Commerce. These laws and regulations,

among other things, prohibit or require a license for the export of certain types of technical data to certain specified countries. Protiva hereby agrees and gives its written assurance that it will comply with all United States laws and regulations controlling the export of commodities and technical data and that it will be responsible for any violation of such laws and regulations by it, its Affiliates or its Sublicensees.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as a sealed instrument in their names by their properly and duly authorized officers or representatives.

HALO-BIO RNAI THERAPEUTICS, INC.

by its authorized signatory:

Per: /s/ Todd M. Hauser
Name: Todd M. Hauser
Title: CEO

PROTIVA BIOTHERAPEUTICS INC.

by its authorized signatory:

Per: /s/ Mark J. Murray
Name: Mark J. Murray
Title: President and Chief Executive Officer

For the limited purpose set forth in Section 8.4 above and for confirming to Halo-Bio the representations and warranties set forth in Section 8.3 above with respect to itself, Protiva and their Affiliates and Sections 8.1 and 8.5 with respect to Protiva:

TEKMIRA PHARMACEUTICALS CORPORATION.

by its authorized signatory:

Per: _____
Name: _____
Title: _____

SCHEDULE 1
CORE PATENT COUNTRIES

[*]

[*] 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.

[*]

[*] 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 3
PATENT TABLE

[*]

[*] 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 4
WORK PLAN**

HALO-BIO MULTIVALENT CO-DEVELOPMENT WORKPLAN

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*] 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 5
TECHNOLOGY TRANSFER PROTOCOL - PRELIMINARY**

[*]

[*]

[*]

	<u>[*]</u>	<u>[*]</u>	<u>[*]</u>
[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]

[*]

[*]

	<u>[*]</u>	<u>[*]</u>	<u>[*]</u>
[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]

[*] 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.

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*]

[*] 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.

[*]

[*]

[*]

[*]

[*]

[*] [*] [*]

[*] [*] [*]

[*] 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.

LOAN AGREEMENT

THIS LOAN AGREEMENT (this “**Agreement**”) dated as of December 21, 2011 (the “**Effective Date**”) between **SILICON VALLEY BANK**, a California corporation (“**Bank**”), and **TEKMIRA PHARMACEUTICALS CORPORATION**, a British Columbia corporation (“**Parent**”) and **PROTIVA BIOTHERAPEUTICS INC.**, a British Columbia corporation (each a “**Co-Borrower**” and collectively “**Co-Borrowers**”), provides the terms on which Bank shall lend to Co-Borrowers and Co-Borrowers shall repay Bank. The parties agree as follows:

1 **ACCOUNTING AND OTHER TERMS**

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the PPSA to the extent such terms are defined therein.

2 **LOAN AND TERMS OF PAYMENT**

2.1 Promise to Pay. Co-Borrowers hereby unconditionally promise to pay Bank the outstanding principal amount of all Credit Extensions and accrued and unpaid interest thereon as and when due in accordance with this Agreement.

2.1.1 **Term Loans.**

(a) **Availability.** Subject to the terms and conditions of this Agreement, during the Draw Period, Bank shall make advances (each a “**Term Loan**” and, collectively, “**Term Loans**”) not exceeding the Term Loan Amount. Each Term Loan shall be in increments of Five Hundred Thousand Dollars (\$500,000).

(b) **Repayment.** The Term Loans shall be “interest only” through the end of the Draw Period, with interest payable on the first day of each month. Co-Borrowers shall repay each Term Loan in (i) thirty three (33) equal installments of principal, plus (ii) monthly payments of accrued interest (each a “**Term Loan Payment**”). Beginning on October 1, 2012, each Term Loan Payment shall be payable on the first day of each month. Co-Borrowers’ final Term Loan Payment is due on the Term Loan Maturity Date, when all outstanding principal for the Term Loans plus all accrued and unpaid interest thereon shall be due and payable.

(c) **Mandatory Prepayments.** If the Term Loans are accelerated following the occurrence of an Event of Default, Co-Borrowers shall immediately pay to Bank amount equal to the sum of: (i) all outstanding principal of the Term Loans plus accrued interest thereon through the prepayment date, (ii) the Prepayment Fee, plus (iii) all other sums, that shall have become due and payable, including Bank Expenses and interest at the Default Rate with respect to any past due amounts.

(d) **Permitted Prepayment of Term Loans.** Co-Borrowers shall have the option to prepay all, but not less than all, of the Term Loans advanced by Bank under this Agreement, provided Co-Borrowers (i) provide written notice to Bank of their election to prepay the Term Loans at least ten (10) Business Days prior to such prepayment, and (ii) pay to Bank on the date of such prepayment, an amount equal to the sum of (A) all outstanding principal of the Term Loans plus accrued interest thereon through the prepayment date, (B) the Prepayment Fee, plus (C) all other sums, that shall have become due and payable, including Bank Expenses, if any, and interest at the Default Rate with respect to any past due amounts.

2.2 **Intentionally Omitted.**

2.3 Payment of Interest on the Credit Extensions.

(a) Interest Rate for Term Loans. Subject to Section 2.3(b), the principal amount outstanding under each Term Loan shall accrue interest at a per annum rate equal to eight percent (8.00%) which interest shall be payable monthly.

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is five percentage points (5.00%) above the rate that is otherwise applicable thereto (the “**Default Rate**”) unless Bank otherwise elects from time to time in its sole discretion to impose a smaller increase. Fees and expenses which are required to be paid by Co-Borrowers pursuant to the Loan Documents (including, without limitation, Bank Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest rate applicable to the Obligations. Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Bank.

(c) Intentionally Omitted.

(d) Computation; 360-Day Year. In computing interest, the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; *provided, however*, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension. Interest shall be computed on the basis of a 360-day year for the actual number of days elapsed.

(e) Debit of Accounts. Bank may debit any of Co-Borrowers’ Deposit Accounts maintained with Bank (if any) for principal and interest payments or any other amounts Co-Borrowers owe Bank when due. These debits shall not constitute a set-off.

(f) Interest Payment Date. Unless otherwise provided, interest is payable monthly on the first calendar day of each month.

(g) Interest Act (Canada). For the purpose of the Interest Act (Canada), the yearly rate of interest to which interest calculated on the basis of a year of 360, 365 or 366 days, as the case may be, is equivalent to the rate of interest determined as herein provided multiplied by the number of days in such year and divided by 360, 365 or 366, as the case may be. Further, subject to subsection (h) below, in this Agreement all interest shall be calculated using the nominal rate method and not the effective rate method and the “deemed re-investment principle” shall not apply to such calculations.

(h) Notwithstanding any provisions of this Agreement, in no event shall the aggregate “interest” (as defined in Section 347 of the *Criminal Code* (Canada)) payable by Co-Borrowers under the Loan Documents exceed the effective annual rate of interest on the “credit advanced” (as defined in Section 347 of the *Criminal Code* (Canada)) under this Agreement lawfully permitted by that Section and, if any payment, collection or demand pursuant to this Agreement in respect of “interest” (as defined in Section 347 of the *Criminal Code* (Canada)) is determined to be contrary to the provisions of that Section, such payment, collection or demand shall be deemed to have been made by mutual mistake of Co-Borrowers and Bank and the amount of such payment or collection shall be refunded to Co-Borrowers. For the purposes of this subsection (h) the effective annual rate of interest shall be determined in accordance with generally accepted actuarial practices and principles over the relevant term and, in the event of a dispute, a certificate of a Fellow of the Canadian Institute of Actuaries appointed by Bank will be prima facie evidence of such rate.

2.4 Fees. Co-Borrowers shall pay to Bank:

(a) Commitment Fee. A fully earned, non-refundable commitment fee of Nine Thousand Dollars (\$9,000) on the Effective Date;

(b) Prepayment Fee. The Prepayment Fee when due pursuant to the terms of Section 2.1.1; provided however, the Prepayment Fee shall be waived if Co-Borrower refinances the Term Loans with another lending group at Bank; and

(c) Bank Expenses. All Bank Expenses (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due.

2.5 Payments; Application of Payments.

(a) All payments (including prepayments) to be made by Co-Borrowers under any Loan Document shall be made in immediately available funds in U.S. Dollars, without setoff or counterclaim, before 12:00 p.m. Pacific time on the date when due. Payments of principal and/or interest received after 12:00 p.m. Pacific time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

(b) Bank shall apply the whole or any part of collected funds against the Term Loan or credit such collected funds to a depository account of a Co-Borrower with Bank (or an account maintained by an Affiliate of Bank), the order and method of such application to be in the sole discretion of Bank. Co-Borrowers shall have no right to specify the order or the accounts to which Bank shall allocate or apply any payments required to be made by Co-Borrowers to Bank or otherwise received by Bank under this Agreement when any such allocation or application is not specified elsewhere in this Agreement.

2.6 Currency Indemnity.

(a) Indemnity. If: (i) any amount payable under, or in connection with any matter relating to or arising out of, the Loan Documents is received by Bank in a currency (the "**Payment Currency**") other than that agreed to be payable hereunder or thereunder (the "**Agreed Currency**"), whether voluntarily or pursuant to an order, judgment or decision of any court, tribunal, arbitration panel or administrative agency or as a result of any bankruptcy, receivership, liquidation or other insolvency type proceedings or otherwise; and (ii) the amount so produced by converting the Payment Currency so received into the Agreed Currency is less than the relevant amount of the Agreed Currency; then: (iii) the amount so received shall constitute a discharge of the liability of Co-Borrowers under or in connection any of the Loan Documents only to the extent of the amount received following the conversion described in paragraph (ii) above; and (iv) Co-Borrowers shall indemnify and save Bank harmless from and against such deficiency and any loss or damage arising as a result thereof.

Any conversion pursuant to this Section 2.6(a) shall be made at such prevailing rate of exchange on the date the Payment Currency is received by Bank and in such market as is determined by Bank as being the most appropriate for such conversion. Co-Borrowers shall in addition pay the costs of such conversion.

(b) Independent Obligation. The indemnity set out in Section 2.6(a): (i) is an obligation of Co-Borrowers which is separate and independent from all other obligations of Co-Borrowers under any of the Loan Documents; (ii) gives rise to a separate and independent cause of action; (iii) applies irrespective of any indulgence granted by or on behalf of Bank; and (iv) continues in full force and effect notwithstanding, and does not merge with, any order, judgment or decision of any court, tribunal, arbitration panel or administrative agency or as a result of any bankruptcy, receivership, liquidation or other insolvency type proceeding or otherwise as to any amount due under this Agreement and the Security or in connection herewith or therewith.

3 CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Bank's obligation to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, such documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate, including, without limitation:

(a) duly executed original signatures to the Loan Documents;

(b) duly executed original signatures to the Warrant;

(c) duly executed original signatures to the Blocked Account Agreements and Control Agreements (if any);

(d) each Co-Borrower's Operating Documents and a Certificate of Good Standing of each Co-Borrower issued by the Registrar of Companies for British Columbia as of a date no earlier than thirty (30) days prior to the Effective Date;

(e) duly executed original signatures to the completed Borrowing Resolutions for each Co-Borrower;

(f) copies, dated as of a recent date, of PPSA searches, as Bank shall request, accompanied by satisfactory written evidence that the Liens indicated in any such searches either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;

(g) the Perfection Certificates of Co-Borrowers and Guarantor, together with the duly executed original signatures thereto;

(h) the duly executed original signatures to the Secured Guaranty Documents, together with duly executed original signatures to the completed Borrowing Resolutions for Guarantor;

(i) evidence satisfactory to Bank that the insurance policies required by Section 6.5 hereof are in full force and effect, together with appropriate evidence showing lender loss payable and/or additional insured clauses and cancellation notice to Bank (or endorsements reflecting the same) in favor of Bank; and

(j) payment of the fees and Bank Expenses then due as specified in Section 2.4 hereof.

3.2 Conditions Precedent to all Credit Extensions. Bank's obligations to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) except as otherwise provided in Section 3.4(a), timely receipt of an executed Payment/Advance Form;

(b) in respect of Credit Extensions other than the initial Credit Extension, the duly executed original signatures to an Additional Warrant;

(c) the representations and warranties in this Agreement shall be true, accurate, and complete in all material respects on the date of the Payment/Advance Form and on the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, and no Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Co-Borrowers' representation and warranty on that date that the representations and warranties in this Agreement remain true, accurate, and complete in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; and

(d) in Bank's sole discretion, there has not been a Material Adverse Change.

3.3 Covenant to Deliver. Co-Borrowers agree to deliver to Bank each item required to be delivered to Bank under this Agreement as a condition precedent to any Credit Extension. Co-Borrowers expressly agree that a Credit Extension made prior to the receipt by Bank of any such item shall not constitute a waiver by Bank of Co-Borrowers' obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Bank's sole discretion.

3.4 Procedures for Borrowing.

(a) **Term Loans.** Subject to the prior satisfaction of all other applicable conditions to the making of a Term Loan set forth in this Agreement, to obtain a Term Loan, Co-Borrowers shall notify Bank (which notice shall be irrevocable) by electronic mail, facsimile, or telephone by 12:00 p.m. Pacific time on the Funding Date of the Term Loan. Together with any such electronic or facsimile notification, Co-Borrowers shall deliver to Bank by electronic mail or facsimile a completed Payment/Advance Form executed by a Responsible Officer or his or her designee. Bank may rely on any telephone notice given by a person whom Bank believes is a Responsible Officer or designee. Bank shall credit Term Loans to the Designated Deposit Account. Bank may make Term Loans under this Agreement based on instructions from a Responsible Officer or his or her designee or without instructions if the Term Loans are necessary to meet Obligations which have become due.

4 CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Repayment and performance of the Obligations of each Co-Borrower to Bank will be secured by the Security.

Each Co-Borrower acknowledges that it previously has entered, or may in the future enter, into Bank Services Agreements with Bank. Regardless of the terms of any Bank Services Agreement, Co-Borrower agrees that any amounts such Co-Borrower owes Bank thereunder shall be deemed to be Obligations hereunder and that it is the intent of Co-Borrower and Bank to have all such Obligations secured by the first priority perfected security interest in the Collateral granted herein (subject only to Permitted Liens that may have superior priority to Bank's Lien in this Agreement).

If this Agreement is terminated, Bank's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are satisfied in full, and at such time, Bank shall, at Co-Borrower's sole cost and expense, terminate its security interest in the Collateral and all rights therein shall revert to Co-Borrower. In the event (x) all Obligations (other than inchoate indemnity obligations), except for Bank Services, are satisfied in full, and (y) this Agreement is terminated, Bank shall terminate the security interest granted herein upon Co-Borrower providing cash collateral acceptable to Bank in its good faith business judgment consistent with Bank's then current practice for Bank Services, if any. In the event such Bank Services consist of outstanding Letters of Credit, Co-Borrower shall provide to Bank cash collateral in an amount equal to one hundred ten percent (110%) of the Dollar Equivalent of the face amount of all such Letters of Credit plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment), to secure all of the Obligations relating to such Letters of Credit.

4.2 Priority of Security Interest. Each Co-Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject only to Permitted Liens that may have superior priority to Bank's Lien under this Agreement). If a Co-Borrower shall acquire a commercial tort claim, such Co-Borrower shall promptly notify Bank in a writing signed by such Co-Borrower of the general details thereof and grant to Bank in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Bank.

4.3 Delivery of Additional Documentation Required. Each Co-Borrower shall from time to time execute and deliver to Bank, at the request of Bank, all financing statements and other documents that Bank may reasonably request, in a form satisfactory to Bank, to perfect and continue the perfection of Bank's security interests in the Collateral and in order to fully consummate all of the transactions contemplated under the Loan Documents.

4.4 Conflict with Security. Notwithstanding that any of the Security is expressed to be payable upon demand, Bank will not make demand under the Security in respect of any Obligations which are not expressed to be payable on demand unless an Event of Default has occurred. Further, if there is any conflict between the provisions of this Agreement and those of any of the Security then the provisions of this Agreement shall prevail.

5 REPRESENTATIONS AND WARRANTIES

Each Co-Borrower represents and warrants as follows:

5.1 Due Organization, Authorization; Power and Authority. Co-Borrower is duly existing and in good standing its jurisdiction of formation or continuation, as the case may be, and is qualified and licensed to do business and is in good standing in any jurisdiction in which the conduct of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a material adverse effect on Co-Borrower's business. In connection with this Agreement, Co-Borrower has delivered to Bank a completed certificate signed by Co-Borrower, entitled "Perfection Certificate". Co-Borrower represents and warrants to Bank that (a) Co-Borrower's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (b) Co-Borrower is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (c) the Perfection Certificate accurately sets forth Co-Borrower's organizational identification number or accurately states that Co-Borrower has none; (d) the Perfection Certificate accurately sets forth Co-Borrower's place of business, or, if more than one, its chief executive office as well as Co-Borrower's mailing address (if different than its chief executive office); (e) Co-Borrower (and each of its predecessors) has not, in the past five (5) years, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction, other than the continuation of Protiva Biotherapeutics Inc. under the *Business Corporations Act* (British Columbia) effective December 17, 2008; and (f) all other information set forth on the Perfection Certificate pertaining to Co-Borrower and each of its Subsidiaries is accurate and complete (it being understood and agreed that Co-Borrower may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement). If Co-Borrower is not now a Registered Organization but later becomes one, Co-Borrower shall promptly notify Bank of such occurrence and provide Bank with Co-Borrower's organizational identification number.

The execution, delivery and performance by Co-Borrower of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Co-Borrower's organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict with or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Co-Borrower or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect, or (v) constitute an event of default under any material agreement by which Co-Borrower is bound. Co-Borrower is not in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a material adverse effect on Co-Borrower's business.

5.2 Collateral. Co-Borrower has good title to, has rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens. Co-Borrower has no Deposit Accounts other than the deposit accounts with Bank, the Deposit Accounts, if any, described in the Perfection Certificates delivered to Bank in connection herewith, or of which Co-Borrower has given Bank notice and taken such actions as are necessary to give Bank a perfected security interest therein.

The Collateral is not in the possession of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate. None of the components of the Collateral shall be maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 7.2.

Co-Borrower is the sole owner or exclusive licensee of the Intellectual Property which it owns or purports to own except for (a) licenses granted to its customers in the ordinary course of business, (b) over-the-counter software that is commercially available to the public, and (c) material Intellectual Property licensed to Co-Borrower

and noted on the Perfection Certificate. Each Patent which it owns or purports to own and which is material to Co-Borrower's business is valid and enforceable, and no part of the Intellectual Property which Co-Borrower owns or purports to own and which is material to Co-Borrower's business has been judged invalid or unenforceable, in whole or in part. To the best of Co-Borrower's knowledge, except for the litigation between the Co-Borrowers and Alnylam Pharmaceuticals, Inc. and AlCana Technologies, and as disclosed in the Perfection Certificate, no claim has been made that any part of the Intellectual Property violates the rights of any third party except to the extent such claim would not reasonably be expected to have a material adverse effect on Co-Borrower's business.

Except as noted on the Perfection Certificate, Co-Borrower is not a party to, nor is it bound by, any Restricted License.

5.3 Intentionally Omitted.

5.4 Litigation. Except as disclosed on the Perfection Certificate, there are no actions or proceedings pending or, to the knowledge of the Responsible Officers, threatened in writing by or against Co-Borrower or any of its Subsidiaries involving more than, individually or in the aggregate, Fifty Thousand Dollars (\$50,000).

5.5 Financial Statements; Financial Condition. All consolidated financial statements for Co-Borrower and any of its Subsidiaries delivered to Bank fairly present in all material respects Co-Borrower's consolidated financial condition and Co-Borrower's consolidated results of operations. There has not been any material deterioration in Co-Borrower's consolidated financial condition since the date of the most recent financial statements submitted to Bank.

5.6 Solvency. The fair salable value of Co-Borrower's assets (including goodwill minus disposition costs) exceeds the fair value of its liabilities; Co-Borrower is not left with unreasonably small capital after the transactions in this Agreement; and Co-Borrower is able to pay its debts (including trade debts) as they mature.

5.7 Regulatory Compliance. Co-Borrower is not registered or required to be registered as an "investment company" under the Investment Company Act of 1940, as amended. Co-Borrower is not engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). To its knowledge, Co-Borrower has not violated any laws, ordinances or rules, the violation of which could reasonably be expected to have a material adverse effect on its business. None of Co-Borrower's or any of its Subsidiaries' properties or assets has been used by Co-Borrower or any Subsidiary or, to the best of Co-Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than legally. Co-Borrower and each of its Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Government Authorities that are necessary to continue their respective businesses as currently conducted, except as would not have a material adverse effect on Co-Borrower and its Subsidiaries taken as a whole.

5.8 Subsidiaries; Investments. Co-Borrower does not own any stock, partnership interest or other equity securities except for Permitted Investments.

5.9 Tax Returns and Payments; Pension Contributions. Co-Borrower has timely filed all required tax returns and reports, and Co-Borrower has timely paid all foreign, federal, provincial, state and local taxes, assessments, deposits and contributions owed by Co-Borrower. Co-Borrower may defer payment of any contested taxes, provided that Co-Borrower (a) in good faith contests its obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted, (b) notifies Bank in writing of the commencement of, and any material development in, the proceedings, (c) posts bonds or takes any other steps required to prevent the governmental authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "Permitted Lien". Co-Borrower is unaware of any claims or adjustments proposed for any of Co-Borrower's prior tax years which could result in additional taxes becoming due and payable by Co-Borrower. Co-Borrower has paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and Co-Borrower has not withdrawn from participation in, and has not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Co-Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

5.10 Use of Proceeds. Co-Borrower shall use the proceeds of the Credit Extensions solely as working capital and to fund its general business requirements and not for personal, family, household or agricultural purposes.

5.11 Full Disclosure. No written representation, warranty or other statement of Co-Borrower in any certificate or written statement given to Bank, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Bank, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized by Bank that the projections and forecasts provided by Co-Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.12 Definition of "Knowledge." For purposes of the Loan Documents, whenever a representation or warranty is made to Co-Borrower's knowledge or awareness, to the "best of" Co-Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of the Responsible Officers.

6 AFFIRMATIVE COVENANTS

Co-Borrowers shall do all of the following:

6.1 Government Compliance.

(a) Maintain their and all their Subsidiaries' organizational existence and good standing in their respective jurisdictions of formation or continuation, as the case may be, and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on a Co-Borrower's business or operations. Each Co-Borrower shall comply, and have each Subsidiary comply, with all laws, ordinances and regulations to which it is subject, noncompliance with which could have a material adverse effect on a Co-Borrower's business.

(b) Obtain all of the Governmental Approvals necessary for the performance by a Co-Borrower of its obligations under the Loan Documents to which it is a party and the grant of a security interest to Bank in all of its property. Co-Borrowers shall promptly provide copies of any such obtained Governmental Approvals to Bank.

6.2 Financial Statements, Reports, Certificates. Deliver to Bank:

(a) Monthly Financial Statements. As soon as available, but no later than thirty (30) days after the last day of each month, a company prepared draft consolidated balance sheet and income statement covering Co-Borrowers' consolidated operations for such month certified by a Responsible Officer and in a form acceptable to Bank (the "**Monthly Financial Statements**"); provided however until the earlier of (i) April 1, 2012 or (ii) the date thirty (30) days prior to the making of the first Term Loan, Co-Borrower will be permitted to provide cash, working capital and major invoice reporting on an intra-quarter basis;

(b) Monthly Compliance Certificate. Within thirty (30) days after the last day of each month and together with the Monthly Financial Statements, a duly completed Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such month, Co-Borrowers were in full compliance with all of the terms and conditions of this Agreement and such other information as Bank shall reasonably request, including material updates on clinical ongoing programs / clinical trials.

(c) Monthly Accounts Statements. Within thirty (30) days after the last day of each month, account statements for any Collateral Account maintained outside Bank.

(d) Annual Audited Financial Statements. As soon as available, but no later than ninety (90) days after the last day of Co-Borrowers' fiscal year, audited consolidated financial statements prepared under GAAP, consistently applied, together with an unqualified opinion on the financial statements from an independent audit firm acceptable to Bank in its reasonable discretion;

(e) Other Statements. Within five (5) days of delivery, copies of all statements, reports and notices made available to each Co-Borrower's security holders or to any holders of Subordinated Debt;

(f) SEC Filings. Within five (5) days of filing, copies of all annual reports and other reports containing financial statements, proxy statements and material change reports filed by such Co-Borrower with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which such Co-Borrower posts such documents, or provides a link thereto, on such Co-Borrower's website on the Internet at such Co-Borrower's website address;

(g) Legal Action Notice. A prompt report of any legal actions pending or threatened in writing against a Co-Borrower or any of its Subsidiaries that could result in damages or costs to a Co-Borrower or any of its Subsidiaries of, individually or in the aggregate, Fifty Thousand Dollars (\$50,000) or more;

(h) Intellectual Property Notice. Written notice via the Compliance Certificate (i) any material change in the composition of the Intellectual Property, (ii) the registration of any copyright, including any subsequent ownership right of a Co-Borrower in or to any copyright, patent or trademark not shown in the IP Security Agreements, and (iii) Co-Borrowers' knowledge of an event that could reasonably be expected to materially and adversely affect the value of the Intellectual Property;

(i) Annual Projections. As soon as available, but no later than forty five (45) days after the last day of Co-Borrowers' fiscal year, annual board approved financial projections; and

(j) Other Financial Information. Such other budgets, sales projections, operating plans and other financial information reasonably requested by Bank.

6.3 Intentionally Omitted.

6.4 Taxes; Pensions; Withholding. Timely file, and require each of their Subsidiaries to timely file, all required tax returns and reports and timely pay, and require each of their Subsidiaries to timely pay, all foreign, federal, provincial, state and local taxes, assessments, deposits and contributions owed by a Co-Borrower and each of its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.9 hereof, and shall deliver to Bank, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms.

In the event any payments are received by Bank from Co-Borrowers pursuant to this Agreement, such payments will be made subject to applicable withholding for any taxes, levies, fees, deductions, withholding, restrictions or conditions of any nature whatsoever. Notwithstanding the foregoing, if at any time any Governmental Authority, applicable law, regulation or international agreement requires a Co-Borrower to make any such deduction or withholding from any such payment or other sum payment hereunder to Bank, the amount due from such Co-Borrower with respect to such payment or other sum payable hereunder will be increased to the extent necessary to ensure that, after the making of such required deduction or withholding, Bank receives a net sum equal to the sum which it would have received had no deductions or withholding been required, and such Co-Borrower shall pay the full amount deducted or withheld to the relevant Governmental Authority. Co-Borrowers will, upon request, furnish

Bank with proof satisfactory to Bank indicating that such Co-Borrower has made such withholding payment; provided, however, that a Co-Borrower need not make any withholding payment if the amount or validity of such withholding payment is contested in good faith by appropriate proceedings and as to which payment in full is bonded or reserved against by such Co-Borrower. The agreements and obligations of Co-Borrowers contained in this provision shall survive the termination of this Agreement.

6.5 Insurance. Keep their businesses and the Collateral insured for risks and in amounts standard for companies in Co-Borrowers' industry and location and as Bank may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are satisfactory to Bank. All property policies shall have a lender's loss payable endorsement, showing Bank as a lender loss payee and waive subrogation against Bank. All liability policies shall show, or have endorsements showing, Bank as an additional insured. All policies (or their respective endorsements) shall provide that the insurer shall give Bank at least twenty (20) days notice before canceling, amending, or declining to renew its policy. At Bank's request, each Co-Borrower shall deliver certified copies of policies and evidence of all premium payments. Proceeds payable under any policy shall, at Bank's option, be payable to Bank on account of the Obligations. If a Co-Borrower fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons and Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Bank deems prudent.

6.6 Operating Accounts.

(a) Intentionally omitted.

(b) Maintain all their U.S. based operating, deposit and securities accounts with Bank and Bank's Affiliates.

(c) Provide Bank five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution other than Bank or Bank's Affiliates. For each Collateral Account that a Co-Borrower at any time maintains, such Co-Borrower shall, at the Bank's request, cause the applicable bank or financial institution (other than Bank) at or with which any Collateral Account is maintained to execute and deliver a Control Agreement, Blocked Account Agreement or other appropriate instrument with respect to such Collateral Account to perfect Bank's Lien in such Collateral Account in accordance with the terms hereunder which Control Agreement may not be terminated without the prior written consent of Bank. The provisions of the previous sentence shall not apply to deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of a Co-Borrower's employees and identified to Bank by such Co-Borrower as such.

6.7 Intentionally Omitted.

6.8 Protection and Registration of Intellectual Property Rights.

(a) (i) Protect, defend and maintain the validity and enforceability of its Intellectual Property; (ii) promptly advise Bank in writing of material infringements of its Intellectual Property; and (iii) not allow any Intellectual Property material to a Co-Borrower's business to be abandoned, forfeited or dedicated to the public without Bank's written consent.

(b) If a Co-Borrower (i) has any Patent issued to it; (ii) obtains any registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, whether as owner, licensee or otherwise, or (iii) applies for the registration of any Trademark, then such Co-Borrower shall provide written notice thereof to Bank via the Compliance Certificate and shall execute such intellectual property security agreements and other documents and take such other actions as Bank shall request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Bank in such property, on the same terms as the security interest created in the Security Agreement. If a Co-Borrower decides to register any Copyrights, mask works or integrated circuit topography in the United States Copyright Office or Canadian

Intellectual Property Office, as the case may be, such Co-Borrower shall: (x) provide Bank with at least fifteen (15) days prior written notice of such Co-Borrower's intent to register such Copyrights, mask works or integrated circuit topography, together with a copy of the application it intends to file with the United States Copyright Office or Canadian Intellectual Property Office, as the case may be, (excluding exhibits thereto); (y) execute an intellectual property security agreement and such other documents and take such other actions as Bank may request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Bank in the Copyrights, mask works or integrated circuit topography intended to be registered with the United States Copyright Office or Canadian Intellectual Property Office, as the case may be; and (z) record such intellectual property security agreement with the United States Copyright Office or Canadian Intellectual Property Office, as the case may be, contemporaneously with filing the Copyright or mask work application(s) with the United States Copyright Office or Canadian Intellectual Property Office, as the case may be. Each Co-Borrower shall promptly provide to Bank copies of all applications that it files for Patents or for the registration of Trademarks, Copyrights, mask works or integrated circuit topography, together with evidence of the recording of the intellectual property security agreement necessary for Bank to perfect and maintain a first priority perfected security interest in such property.

(c) Provide written notice to Bank within thirty (30) days of entering or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public). Co-Borrowers shall take such steps as Bank requests to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (i) any Restricted License to be deemed "Collateral" and for Bank to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, whether now existing or entered into in the future, and (ii) Bank to have the ability in the event of a liquidation of or enforcement against any Collateral to dispose of such Collateral in accordance with Bank's rights and remedies under this Agreement and the other Loan Documents.

6.9 Litigation Cooperation. From the date hereof and continuing through the termination of this Agreement, make available to Bank, without expense to Bank, Co-Borrowers and their officers, employees and agents and Co-Borrowers' books and records, to the extent that Bank may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Bank with respect to any Collateral or relating to a Co-Borrower.

6.10 Access to Collateral; Books and Records. Allow Bank, or its agents, at reasonable times, on one (1) Business Day's notice (provided no notice is required if an Event of Default has occurred and is continuing), to inspect the Collateral and audit and copy any Co-Borrower's Books. Such inspections or audits shall be conducted no more often than once every twelve (12) months unless an Event of Default has occurred and is continuing. The foregoing inspections and audits shall be at Co-Borrowers' expense, and the charge therefor shall be Eight Hundred Fifty Dollars (\$850) per person per day (or such higher amount as shall represent Bank's then-current standard charge for the same), plus reasonable out-of-pocket expenses. In the event a Co-Borrower and Bank schedule an audit more than ten (10) days in advance, and such Co-Borrower cancels or seeks to reschedule the audit with less than ten (10) days written notice to Bank, then (without limiting any of Bank's rights or remedies), such Co-Borrower shall pay Bank a fee of One Thousand Dollars (\$1,000) plus any out-of-pocket expenses incurred by Bank to compensate Bank for the anticipated costs and expenses of the cancellation or rescheduling.

6.11 Formation or Acquisition of Subsidiaries. At the time that a Co-Borrower or any Guarantor forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary after the Effective Date, such Co-Borrower and such Guarantor shall (a) cause such new Subsidiary to provide to Bank a joinder to the Loan Agreement to cause such Subsidiary to become a co-borrower hereunder or a Guaranty, together with such appropriate financing statements, Control Agreements and/or Blocked Account Agreements, all in form and substance satisfactory to Bank (including being sufficient to grant Bank a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Bank appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance satisfactory to Bank, and (c) provide to Bank all other documentation in form and substance satisfactory to Bank, including one or more opinions of counsel satisfactory to Bank, which in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above. Any document, agreement, or instrument executed or issued pursuant to this Section 6.11 shall be a Loan Document.

6.12 Further Assurances. Execute any further instruments and take further action as Bank reasonably requests to perfect or continue Bank's Lien in the Collateral or to effect the purposes of this Agreement. Deliver to Bank, within five (5) days after the same are sent or received, copies of all correspondence, reports, documents and other filings with any Governmental Authority regarding compliance with or maintenance of Governmental Approvals or Requirements of Law or that could reasonably be expected to have a material effect on any of the Governmental Approvals or otherwise on the operations of Co-Borrowers or any of their Subsidiaries.

7 NEGATIVE COVENANTS

No Co-Borrower shall do any of the following without Bank's prior written consent:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, "**Transfer**"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn-out or obsolete Equipment; (c) in connection with Permitted Liens and Permitted Investments; (d) of non-exclusive licenses for the use of the Intellectual Property of Co-Borrower or its Subsidiaries; and (e) exclusive licenses in the ordinary course for the use of the Intellectual Property of Co-Borrower or its Subsidiaries and approved by Co-Borrower's Board of Directors.

7.2 Changes in Business, Management, or Business Locations. (a) Engage in or permit any of its Subsidiaries to engage in any business other than the businesses currently engaged in by Co-Borrower and such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve; or (c) (i) terminate the employment of a majority of its senior management employed as of the date hereof; or (ii) enter into any transaction or series of related transactions in which the stockholders of Co-Borrower who were not stockholders immediately prior to the first such transaction own more than forty percent (40%) of the voting stock of Co-Borrower immediately after giving effect to such transaction or related series of such transactions.

Co-Borrower shall not, without at least thirty (30) days prior written notice to Bank: (1) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Fifty Thousand Dollars (\$50,000) in Co-Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Fifty Thousand Dollars (\$50,000) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate, (2) change its jurisdiction of organization, (3) change its organizational structure or type, (4) change its legal name, or (5) change any organizational number (if any) assigned by its jurisdiction of organization. If Co-Borrower intends to deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Ten Thousand Dollars (\$10,000) to a bailee, and Bank and such bailee are not already parties to a bailee agreement governing both the Collateral and the location to which Co-Borrower intends to deliver the Collateral, then Co-Borrower will first receive the written consent of Bank, and such bailee shall execute and deliver a bailee agreement in form and substance satisfactory to Bank in its sole discretion.

7.3 Mergers, Amalgamations or Acquisitions. Merge, amalgamate or consolidate, or permit any of its Subsidiaries to merge, amalgamate or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person. A Subsidiary may merge, amalgamate or consolidate into another Subsidiary or into Co-Borrower.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of its property or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, permit any Collateral not to be subject to the first priority security interest granted herein, or enter into any agreement, document, instrument or other arrangement (except with or in favor of Bank) with any Person which directly or indirectly prohibits or has the effect of prohibiting Co-Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Co-Borrower's or any Subsidiary's Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and the definition of "Permitted Liens" herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.6(b) hereof.

7.7 Distributions; Investments. (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any capital stock; or (b) directly or indirectly make any Investment other than Permitted Investments, or permit any of its Subsidiaries to do so.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Co-Borrower, except for transactions that are in the ordinary course of Co-Borrower's business, upon fair and reasonable terms that are no less favorable to Co-Borrower than would be obtained in an arm's length transaction with a non-affiliated Person.

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof or adversely affect the subordination thereof to Obligations owed to Bank.

7.10 Compliance. Become registered or required to be registered as an "investment company" under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; or violate any other law or regulation, if the violation could reasonably be expected to have a material adverse effect on Co-Borrower's business, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Co-Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

8 EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "Event of Default") under this Agreement:

8.1 Payment Default. Co-Borrowers fail to (a) make any payment of principal or interest on any Credit Extension on its due date, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day cure period shall not apply to payments due on the Term Loan Maturity Date). During the cure period, the failure to make or pay any payment specified under clause (a) or (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default.

(a) Co-Borrowers fail or neglect to perform any obligation in Sections 6.2, 6.4, 6.5, 6.6, or 6.11 or violate any covenant in Section 7; or

(b) Co-Borrowers fail or neglect to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, have failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Co-Borrowers be cured within such ten (10) day period, and such default is likely to be cured within a reasonable

time, then Co-Borrowers shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Cure periods provided under this section shall not apply, among other things, to financial covenants or any other covenants set forth in clause (a) above;

8.3 Material Adverse Change. A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of a Co-Borrower or of any entity under the control of a Co-Borrower (including a Subsidiary) on deposit or otherwise maintained with Bank or any Bank Affiliate, or (ii) a notice of lien or levy is filed against any of a Co-Borrower's assets by any government agency, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; or

(b) (i) any material portion of a Co-Borrower's assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents a Co-Borrower from conducting any material part of its business;

8.5 Insolvency (a) A Co-Borrower is unable to pay its debts (including trade debts) as they become due or otherwise becomes insolvent; (b) A Co-Borrower begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against a Co-Borrower and not dismissed or stayed within thirty (30) days (but no Credit Extensions shall be made while of any of the conditions described in clause (a) exist and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements. There is, under any agreement to which a Co-Borrower or any Guarantor is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of Fifty Thousand Dollars (\$50,000); or (b) any default by a Co-Borrower or Guarantor, the result of which could have a material adverse effect on a Co-Borrower's or any Guarantor's business;

8.7 Judgments. One or more final judgments, orders, or decrees for the payment of money in an amount, individually or in the aggregate, of at least Fifty Thousand Dollars (\$50,000) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against a Co-Borrower and the same are not, within ten (10) days after the entry thereof, discharged or execution thereof stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the discharge, stay, or bonding of such judgment, order, or decree), and for greater clarity, a judgment against a Co-Borrower in the litigation between the Co-Borrowers and Alnylam Pharmaceuticals, Inc. and AICana Technologies in and of itself will not constitute an Event of Default unless such judgment, in the opinion of the Bank, represents a material impairment on the prospect of repayment of any portion of the Obligations;

8.8 Misrepresentations. A Co-Borrower or any Person acting for a Co-Borrower makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Bank or to induce Bank to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.9 Subordinated Debt. Any document, instrument, or agreement evidencing any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, any Person shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder, or the Obligations shall for any reason be subordinated or shall not have the priority contemplated by this Agreement;

8.10 Guaranty. (a) Any guaranty of any Obligations terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any guaranty of the Obligations; or (c) any circumstance described in Sections 8.3, 8.4, 8.5, 8.7, or 8.8 occurs with respect to any Guarantor.

8.11 Governmental Approvals. Any Governmental Approval shall have been (a) revoked, rescinded, suspended, modified in an adverse manner or not renewed in the ordinary course for a full term or (b) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Governmental Approval or that could result in the Governmental Authority taking any of the actions described in clause (a) above, and such decision or such revocation, rescission, suspension, modification or non-renewal (i) has, or could reasonably be expected to have, a Material Adverse Change, or (ii) adversely affects the legal qualifications of a Co-Borrower or any of its Subsidiaries to hold such Governmental Approval in any applicable jurisdiction and such revocation, rescission, suspension, modification or non-renewal could reasonably be expected to affect the status of or legal qualifications of a Co-Borrower or any of its Subsidiaries to hold any Governmental Approval in any other jurisdiction.

9 BANK'S RIGHTS AND REMEDIES

9.1 Rights and Remedies. While an Event of Default occurs and continues Bank may, without notice or demand, do any or all of the following:

(a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Bank);

(b) stop advancing money or extending credit for Co-Borrowers' benefit under this Agreement or under any other agreement between Co-Borrowers and Bank;

(c) for any Letters of Credit, demand that Co-Borrower (i) deposit cash with Bank in an amount equal to one hundred ten percent (110%) of the Dollar Equivalent of the aggregate face amount of all Letters of Credit remaining undrawn (plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment)), to secure all of the Obligations relating to such Letters of Credit, as collateral security for the repayment of any future drawings under such Letters of Credit, and Co-Borrower shall forthwith deposit and pay such amounts, and (ii) pay in advance all letter of credit fees scheduled to be paid or payable over the remaining term of any Letters of Credit;

(d) terminate any FX Contracts;

(e) settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Bank considers advisable, notify any Account Debtor of Bank's security interest in such funds, and verify the amount of such account;

(f) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Co-Borrowers shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Each Co-Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;

(g) apply to the Obligations any (i) balances and deposits of a Co-Borrower it holds, or (ii) any amount held by Bank owing to or for the credit or the account of a Co-Borrower;

(h) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Bank is hereby granted a non-exclusive, royalty-free license or other right to use, without

charge, a Co-Borrower's labels, Patents, Copyrights, mask works or integrated circuit topography, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section, Co-Borrowers' rights under all licenses and all franchise agreements inure to Bank's benefit;

(i) place a "hold" on any account maintained with Bank and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement, Blocked Account Agreement or similar agreements providing control of any Collateral;

(j) apply for the appointment of a receiver, trustee, liquidator or conservator of the Collateral, without notice and without regard to the adequacy of the security for the Obligations and without regard to the solvency of any Co-Borrower, any guarantor or any other Person liable for any of the Obligations.

(k) demand and receive possession of a Co-Borrower's Books; and

(l) exercise all rights and remedies available to Bank under the Loan Documents or at law or equity, including all remedies provided under the PPSA (including disposal of the Collateral pursuant to the terms thereof).

9.2 Power of Attorney. Each Co-Borrower hereby irrevocably appoints Bank as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Co-Borrower's name on any checks or other forms of payment or security; (b) sign Co-Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Bank determines reasonable; (d) make, settle, and adjust all claims under Co-Borrower's insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Bank or a third party as the PPSA permits. Each Co-Borrower hereby appoints Bank as its lawful attorney-in-fact to sign Co-Borrower's name on any documents necessary to perfect or continue the perfection of Bank's security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations have been satisfied in full and Bank is under no further obligation to make Credit Extensions hereunder. Bank's foregoing appointment as each Co-Borrower's attorney in fact, and all of Bank's rights and powers, coupled with an interest, are irrevocable until all Obligations have been fully repaid and performed and Bank's obligation to provide Credit Extensions terminates.

9.3 Protective Payments. If a Co-Borrower fails to obtain the insurance called for by Section 6.5 or fails to pay any premium thereon or fails to pay any other amount which such Co-Borrower is obligated to pay under this Agreement or any other Loan Document, Bank may obtain such insurance or make such payment, and all amounts so paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Bank will make reasonable efforts to provide Co-Borrowers with notice of Bank obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Bank are deemed an agreement to make similar payments in the future or Bank's waiver of any Event of Default.

9.4 Application of Payments and Proceeds Upon Default. If an Event of Default has occurred and is continuing, Bank may apply any funds in its possession, whether from Co-Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations in such order as Bank shall determine in its sole discretion. Any surplus shall be paid to Co-Borrowers or other Persons legally entitled thereto; Co-Borrowers shall remain liable to Bank for any deficiency. If Bank, in its good faith business judgment, directly or indirectly enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Bank shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Bank of cash therefor.

9.5 Bank's Liability for Collateral. So long as Bank complies with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Bank, Bank shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Co-Borrowers bear all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Bank's failure, at any time or times, to require strict performance by Co-Borrowers of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Bank thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Bank's rights and remedies under this Agreement and the other Loan Documents are cumulative. Bank has all rights and remedies provided under the PPSA, by law, or in equity. Bank's exercise of one right or remedy is not an election and shall not preclude Bank from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Each Co-Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which such Co-Borrower is liable.

9.8 Co-Borrower Liability. Either Co-Borrower may, acting singly, request Advances hereunder. Each Co-Borrower hereby appoints the other as agent for the other for all purposes hereunder, including with respect to requesting Advances hereunder. Each Co-Borrower hereunder shall be jointly and severally obligated to repay all Advances made hereunder, regardless of which Co-Borrower actually receives said Advance, as if each Co-Borrower hereunder directly received all Advances. Each Co-Borrower waives (a) any suretyship defenses available to it under the PPSA or any other applicable law, and (b) any right to require Bank to: (i) proceed against any Co-Borrower or any other person; (ii) proceed against or exhaust any security; or (iii) pursue any other remedy. Bank may exercise or not exercise any right or remedy it has against any Co-Borrower or any security it holds (including the right to foreclose by judicial or non-judicial sale) without affecting any Co-Borrower's liability. Notwithstanding any other provision of this Agreement or other related document, each Co-Borrower irrevocably waives all rights that it may have at law or in equity (including, without limitation, any law subrogating Co-Borrower to the rights of Bank under this Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Co-Borrower, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by Co-Borrower with respect to the Obligations in connection with this Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by Co-Borrower with respect to the Obligations in connection with this Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Co-Borrower in contravention of this Section, such Co-Borrower shall hold such payment in trust for Bank and such payment shall be promptly delivered to Bank for application to the Obligations, whether matured or unmatured.

10 NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Bank or Co-Borrowers may change their mailing or electronic mail address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Co-Borrowers: TEKMIRA PHARMACEUTICALS CORPORATION
100-8900 Glenlyon Parkway
Burnaby, British Columbia
Canada V5J 5J8
Attn: Ian Mortimer – Executive VP of Finance and CFO
Fax: 604-419-3201

If to Bank: Silicon Valley Bank
901 5th Avenue, Suite 3900
Seattle, WA 98164
Attn: Minh Le – Deal Team Leader
Fax: 206.624.0374

11 CHOICE OF LAW, VENUE, JURY TRIAL WAIVER, AND JUDICIAL REFERENCE

This Agreement shall be governed by, and construed in accordance with, the internal laws of the Province of British Columbia and the federal laws of Canada applicable therein, without regard to principles of conflicts of law. Each of Co-Borrower and Bank hereby submits to the non-exclusive jurisdiction of the courts of British Columbia. BANK AND CO-BORROWERS EACH ACKNOWLEDGE THAT THE RIGHT TO TRIAL BY JURY IS A CONSTITUTIONAL ONE, BUT THAT IT MAY BE WAIVED. EACH OF THEM, AFTER CONSULTING OR HAVING HAD THE OPPORTUNITY TO CONSULT, WITH COUNSEL OF THEIR CHOICE, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ANY RIGHT ANY OF THEM MAY HAVE TO A TRIAL BY JURY IN ANY LITIGATION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY RELATED INSTRUMENT OR LOAN DOCUMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT OR ANY COURSE OF CONDUCT, DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN), OR ACTION OF ANY OF THEM. THESE PROVISIONS SHALL NOT BE DEEMED TO HAVE BEEN MODIFIED IN ANY RESPECT OR RELINQUISHED BY BANK OR CO-BORROWERS, EXCEPT BY A WRITTEN INSTRUMENT EXECUTED BY EACH OF THEM.

12 GENERAL PROVISIONS

12.1 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. No Co-Borrower may assign this Agreement or any rights or obligations under it without Bank's prior written consent (which may be granted or withheld in Bank's discretion). Bank has the right, without the consent of or notice to Co-Borrowers, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents. Notwithstanding the foregoing, so long as no Event of Default has occurred and is continuing, Bank shall not sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents to any operating company which is a direct competitor or a related party of a direct competitor of a Co-Borrower.

12.2 Indemnification. Co-Borrowers agree to indemnify, defend and hold Bank and its directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Bank (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (b) all losses or expenses (including Bank Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions between Bank and Co-Borrowers (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct.

12.3 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

12.4 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.5 Correction of Loan Documents. Bank may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties so long as Bank provides Co-Borrowers with written notice of such correction and allows Co-Borrowers at least ten (10) days to object to such correction. In the event of such objection, such correction shall not be made except by an amendment signed by both Bank and Co-Borrowers.

12.6 Amendments in Writing; Waiver; Integration. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.8 Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been paid in full and satisfied. Without limiting the foregoing, except as otherwise provided in Section 4.1, the grant of security interest by Co-Borrower in Section 4.1 shall survive until the termination of all Bank Services Agreements. The obligation of Co-Borrower in Section 12.2 to indemnify Bank shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

12.9 Confidentiality. In handling any confidential information, Bank shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to Bank's Subsidiaries or Affiliates (such Subsidiaries and Affiliates, together with Bank, collectively, "Bank Entities"); (b) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Bank shall use its best efforts to obtain any prospective transferee's or purchaser's agreement to the terms of this provision); (c) as required by law, regulation, subpoena, or other order; (d) to Bank's regulators or as otherwise required in connection with Bank's examination or audit; (e) as Bank considers appropriate in exercising remedies under the Loan Documents; and (f) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Bank's possession when disclosed to Bank, or becomes part of the public domain after disclosure to Bank; or (ii) disclosed to Bank by a third party if Bank does not know that the third party is prohibited from disclosing the information.

Bank Entities may use the confidential information for reporting purposes and the development and distribution of databases and market analysis so long as such confidential information is aggregated and anonymized prior to distribution unless otherwise expressly permitted by Co-Borrowers. The provisions of the immediately preceding sentence shall survive the termination of this Agreement.

12.10 Attorneys' Fees, Costs and Expenses. In any action or proceeding between Co-Borrowers and Bank arising out of or relating to the Loan Documents, the prevailing party shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled.

12.11 Electronic Execution of Documents. The words “execution,” “signed,” “signature” and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

12.12 Captions. The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.13 Construction of Agreement. The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.14 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm’s-length contract.

12.15 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

13 DEFINITIONS

13.1 Definitions. As used in the Loan Documents, the word “shall” is mandatory, the word “may” is permissive, the word “or” is not exclusive, the words “includes” and “including” are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. As used in this Agreement, the following capitalized terms have the following meanings:

“**Account**” has the meaning given in the Security Agreement.

“**Account Debtor**” means any Person who owes funds to a Co-Borrower.

“**Additional Warrant**” has the meaning set out in the Warrant.

“**Affiliate**” is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person’s senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person’s managers and members.

“**Agreement**” is defined in the preamble hereof.

“**Bank**” is defined in the preamble hereof.

“**Bank Expenses**” are all audit fees and expenses, costs, and expenses (including reasonable attorneys’ fees and expenses) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Co-Borrowers or any Guarantor.

“**Bank Services**” are any products, credit services, and/or financial accommodations previously, now, or hereafter provided to Co-Borrower or any of its Subsidiaries by Bank or any Bank Affiliate, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services as any such products or services may be identified in Bank’s various agreements related thereto (each, a “**Bank Services Agreement**”).

“Blocked Account Agreement” is any blocked account agreement entered into among the depository institution at which a Co-Borrower maintains a Deposit Account, such Co-Borrower, and Bank pursuant to which Bank may exercise control over such Deposit Account upon the occurrence of an Event of Default.

“Borrowing Resolutions” are, with respect to any Person, those resolutions substantially in the form attached hereto as Exhibit C.

“Business Day” is any day that is not a Saturday, Sunday or a day on which Bank is closed.

“Cash Equivalents” means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor’s Ratings Group or Moody’s Investors Service, Inc.; (c) Bank’s certificates of deposit issued maturing no more than one (1) year after issue; (d) guaranteed investment certificates; and (e) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (d) of this definition.

“Co-Borrower(s)” is defined in the preamble hereof.

“Co-Borrower’s Books” are all of a Co-Borrower’s books and records including ledgers, federal, provincial and state tax returns, records regarding such Co-Borrower’s assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

“Code” is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of California; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Bank’s Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of California, the term **“Code”** shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

“Collateral” has the meaning given in the Security Agreement.

“Collateral Account” is any Deposit Account, Securities Account or Commodity Account.

“Commodity Account” is any “commodity account” as defined in the Code with such additions to such term as may hereafter be made.

“Compliance Certificate” is that certain certificate in the form attached hereto as Exhibit D.

“Contingent Obligation” is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case, directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but “Contingent Obligation” does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

“**Control Agreement**” is any control agreement entered into among the depository institution at which a Co-Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which a Co-Borrower maintains a Securities Account or a Commodity Account, such Co-Borrower, and Bank pursuant to which Bank obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

“**Copyrights**” has the meaning set out in the Security Agreement.

“**Credit Extension**” is any Term Loan, or any other extension of credit by Bank for Co-Borrower’s benefit under this Agreement.

“**Default Rate**” is defined in Section 2.3(b).

“**Deposit Account**” is any “deposit account” as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation any operating account, current account or other deposit account of a Co-Borrower maintained with a Canadian bank.

“**Designated Deposit Account**” is a Co-Borrower’s deposit account, account number _____, maintained with _____.

“**Dollars**,” “**dollars**” or use of the sign “\$” means only lawful money of the United States and not any other currency, regardless of whether that currency uses the “\$” sign to denote its currency or may be readily converted into lawful money of the United States.

“**Dollar Equivalent**” is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by Bank at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

“**Draw Period**” is the period of time from the Effective Date through the earlier to occur of (a) September 30, 2012 or (b) an Event of Default.

“**Effective Date**” is defined in the preamble hereof.

“**Equipment**” has the meaning set out in the Security Agreement.

“**ERISA**” is the Employee Retirement Income Security Act of 1974, and its regulations.

“**Event of Default**” is defined in Section 8.

“**Exchange Act**” is the Securities Exchange Act of 1934, as amended.

“**Foreign Currency**” means lawful money of a country other than the United States.

“**Funding Date**” is any date on which a Credit Extension is made to or for the account of Co-Borrowers which shall be a Business Day.

“**FX Contract**” is any foreign exchange contract by and between Co-Borrower and Bank under which Co-Borrower commits to purchase from or sell to Bank a specific amount of Foreign Currency on a specified date.

“**GAAP**” means generally accepted accounting principles, consistently applied, as in effect from time to time in the United States.

“**Governmental Approval**” is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

“**Governmental Authority**” is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

“**Guarantor**” is any present or future guarantor of the Obligations, including Protiva Biotherapeutics (USA), Inc., a Delaware corporation.

“**Indebtedness**” is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

“**Indemnified Person**” is defined in Section 12.2.

“**Insolvency Proceeding**” is any proceeding by or against any Person under the United States Bankruptcy Code, the *Bankruptcy and Insolvency Act* (Canada) or the *Companies’ Creditors Arrangement Act* (Canada), each as amended, or any other bankruptcy or insolvency law of any jurisdiction, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“**Intellectual Property**” has the meaning set out in the Security Agreement.

“**Inventory**” has the meaning set out in the Security Agreement.

“**Investment**” is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

“**IP Agreements**” are those certain Intellectual Property Security Agreements executed and delivered by Co-Borrowers and Guarantor to Bank dated as of the Effective Date.

“**Letter of Credit**” is a standby or commercial letter of credit issued by Bank upon request of a Co-Borrower based upon an application, guarantee, indemnity, or similar agreement.

“**Lien**” is a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

“**Loan Documents**” are, collectively, this Agreement, the Security Agreement, the Perfection Certificates, the IP Agreements, the Secured Guaranty Documents, any Bank Services Agreement, any subordination agreement, any note, or notes or guaranties executed by a Co-Borrower or any Guarantor, and any other present or future agreement between a Co-Borrower and any Guarantor and/or for the benefit of Bank, all as amended, restated, or otherwise modified or replaced.

“**Material Adverse Change**” is (a) a material impairment in the perfection or priority of Bank’s Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations, or condition (financial or otherwise) of a Co-Borrower; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

“**Monthly Financial Statements**” is defined in Section 6.2(a)

“**Obligations**” are Co-Borrower’s obligation to pay when due any debts, principal, interest, Bank Expenses, and other amounts Co-Borrower owes Bank now or later, whether under this Agreement, the other Loan Documents,

or otherwise, including, without limitation, any interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Co-Borrower assigned to Bank, and the performance of Co-Borrower's duties under the Loan Documents.

"Operating Documents" are, for any Person, such Person's formation documents, as certified with the Secretary of State of such Person's state of formation on a date that is no earlier than 30 days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"Patents" means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

"Payment/Advance Form" is that certain form attached hereto as Exhibit B.

"Perfection Certificate" is defined in Section 5.1.

"Permitted Indebtedness" is:

- (a) Co-Borrowers' Indebtedness to Bank under this Agreement and the other Loan Documents;
- (b) Indebtedness existing on the Effective Date and shown on the Perfection Certificate;
- (c) Subordinated Debt;
- (d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;
- (e) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;
- (f) Indebtedness secured by Liens permitted under clauses (a) and (c) of the definition of "Permitted Liens" hereunder; and

(g) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (f) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon a Co-Borrower or its Subsidiary, as the case may be.

"Permitted Investments" are:

- (a) Investments (including, without limitation, Subsidiaries) existing on the Effective Date and shown on the Perfection Certificate and;
- (b) (i) Investments consisting of Cash Equivalents, and (ii) any Investments permitted by a Co-Borrower's investment policy, as amended from time to time, provided that any amendments made to such investment policy has been approved in writing by Bank;
- (c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of a Co-Borrower;

(d) Investments consisting of Deposit Accounts in which Bank has a perfected security interest;

(e) Investments accepted in connection with Transfers permitted by Section 7.1;

(f) Investments by a Co-Borrower or another Co-Borrower or in Guarantor and Investments by Guarantor in a Co-Borrower;

(g) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of a Co-Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by such Co-Borrower's Board of Directors;

(h) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;

(i) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (i) shall not apply to Investments of a Co-Borrower in any Subsidiary;

(j) Investments in joint ventures or strategic alliances (in the ordinary course of Co-Borrowers' business) consisting of the licensing of technology, the development of technology or the providing of technical support, provided that any cash investments by a Co-Borrower do not exceed Fifty Thousand Dollars (\$50,000) in the aggregate in any fiscal year, and provided that no such cash investment may be made if an Event of Default is then occurring or would otherwise occur upon the making thereof; and

(k) to the extent it is deemed to be an Investment, up-front fees, license fees, milestone payments, royalty payments and other cash payments arising in connection with the acquisition of rights to intellectual property of a third party, including without limitation rights to a pharmaceutical product or technology.

"Permitted Liens" are:

(a) Liens existing on the Effective Date and shown on the Perfection Certificate or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which a Co-Borrower maintains adequate reserves on its Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) purchase money Liens (i) on Equipment acquired or held by a Co-Borrower incurred for financing the acquisition of the Equipment securing no more than Fifty Thousand Dollars (\$50,000) in the aggregate amount outstanding, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Fifty Thousand Dollars (\$50,000) and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (c), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase;

(g) leases or subleases of real property granted in the ordinary course of a Co-Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of a Co-Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest therein;

(h) non-exclusive license of Intellectual Property granted to third parties in the ordinary course of business, and licenses of Intellectual Property that could not result in a legal transfer of title of the licensed property that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discreet geographical areas outside of the United States;

(i) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 8.4 and 8.7;

(j) Liens in favor of other financial institutions arising in connection with a Co-Borrower's deposit and/or securities accounts held at such institutions, provided that Bank has a perfected security interest in the amounts held in such deposit and/or securities accounts;

(k) leases or subleases and licenses or sublicenses granted in the ordinary course of a Co-Borrower's business, if the leases, subleases, licenses and sublicenses do not prohibit granting lenders a security interest; and

(l) transfers, licenses or sublicenses permitted hereunder.

"Person" is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"PPSA" means the *Personal Property Security Act*, British Columbia in force from time to time, including and all amendments thereto or replacements thereof, and regulations thereunder as may from time to time be amended or replaced.

"Prepayment Fee" means with respect to any Term Loan prepaid prior to the Term Loan Maturity Date, whether by mandatory or voluntary prepayment, acceleration or otherwise, an additional fee payable to Bank in amount equal to (i) Ninety Thousand Dollars (\$90,000) if the prepayment occurs on or before the first anniversary of the Effective Date, (ii) 2.00% of the amount of the prepayment if prepayment occurs after the first anniversary of the Effective Date but on or before the second anniversary of the Effective Date, with no other interest payable except for interest accrued to the date of prepayment and (iii) 1.00% of the amount of the prepayment if prepayment occurs after the second anniversary of the Effective Date but before the Term Loan Maturity Date, with no other interest payable except for interest accrued to the date of prepayment.

"Registered Organization" is any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

"Requirement of Law" is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

“Responsible Officer” is any of the Chief Executive Officer, President, Chief Financial Officer and Controller of each Co-Borrower.

“Restricted License” is any material license or other agreement with respect to which a Co-Borrower is the licensee (a) that prohibits or otherwise restricts a Co-Borrower from granting a security interest in such Co-Borrower’s interest in such license or agreement or any other property, or (b) for which a default under or termination of could interfere with the Bank’s right to sell any Collateral.

“SEC” shall mean the Securities and Exchange Commission, any successor thereto, and any analogous Governmental Authority.

“Secured Guaranty Documents” means those certain Unconditional Guaranty, Security Agreement and IP Agreement executed by Guarantor in favor of Bank dated as of the Effective Date.

“Securities Account” is any “securities account” as defined in the Code or in the PPSA, with such additions to such term as may hereafter be made.

“Security” means the Security Agreement and all other present and future security from time to time held by or on behalf of Bank from Co-Borrower or any other Person as security for the Obligations.

“Security Agreement” means the security agreement given by Co-Borrowers in favour of Bank on or about the date hereof as the same may be renewed, amended, extended or restated from time to time.

“Subordinated Debt” is indebtedness incurred by a Co-Borrower subordinated to all of such Co-Borrower’s now or hereafter indebtedness to Bank (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Bank entered into between Bank and the other creditor), on terms acceptable to Bank.

“Subsidiary” is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of a Co-Borrower or Guarantor.

“Term Loan” is a loan made by Bank pursuant to the terms of Section 2.1.1 hereof.

“Term Loan Amount” is an amount equal to Three Million Dollars (\$3,000,000).

“Term Loan Maturity Date” is June 30, 2015.

“Term Loan Payment” is defined in Section 2.1.1(b).

“Trademarks” means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of a Co-Borrower connected with and symbolized by such trademarks.

“Transfer” is defined in Section 7.1.

“Warrant” is that certain Warrant to Purchase Stock dated as of the Effective Date executed by Parent in favor of Bank.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

BORROWERS:

TEKMIRA PHARMACEUTICALS CORPORATION

By /s/ Mark J. Murray
Name: Mark J. Murray
Title: President & CEO

PROTIVA BIOTHERAPEUTICS INC.

By /s/ Mark J. Murray
Name: Mark J. Murray
Title: President & CEO

BANK:

SILICON VALLEY BANK

By /s/ Minh Le
Name: Minh Le
Title: Deal Team Leader

EXHIBIT A

Intentionally left blank.

EXHIBIT B – LOAN PAYMENT/ADVANCE REQUEST FORM

DEADLINE FOR SAME DAY PROCESSING IS NOON PACIFIC TIME*

Fax To: _____ Date: _____

LOAN PAYMENT:

TEKMIRA PHARMACEUTICALS CORPORATION

From Account # _____ To Account # _____
(Deposit Account #) (Loan Account #)
Principal \$ _____ and/or Interest \$ _____
Authorize Signature: _____ Phone Number: _____
Print Name/Title: _____

LOAN ADVANCE:

Complete *Outgoing Wire Request* section below if all or a portion of the funds from this loan advance are for an outgoing wire.

From Account # _____ To Account # _____
(Loan Account #) (Deposit Account #)
Amount of Advance \$ _____

All Co-Borrowers' representations and warranties in the Loan Agreement are true, correct and complete in all material respects on the date of the request for an advance; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date:

Authorized Signature: _____ Phone Number: _____
Print Name/Title: _____

OUTGOING WIRE REQUEST:

Complete only if all or a portion of funds from the loan advance above is to be wired.

Deadline for same day processing is noon, Pacific Time

Beneficiary Name: _____ Amount of Wire: \$ _____
Beneficiary Bank: _____ Account Number: _____
City and State: _____

Beneficiary Bank Transit (ABA) #: _____ Beneficiary Bank Code (Swift, Sort, Chip, etc.): _____
(For International Wire Only)

Intermediary Bank: _____ Transit (ABA) #: _____
For Further Credit to: _____

Special Instruction: _____

By signing below, I (we) acknowledge and agree that my (our) funds transfer request shall be processed in accordance with and subject to the terms and conditions set forth in the agreements(s) covering funds transfer service(s), which agreements(s) were previously received and executed by me (us).

Authorized Signature: _____ 2nd Signature (if required): _____
Print Name/Title: _____ Print Name/Title: _____
Telephone #: _____ Telephone #: _____

* Unless otherwise provided for an Advance bearing interest at LIBOR.

EXHIBIT C

BORROWING RESOLUTIONS



CORPORATE BORROWING CERTIFICATE

CO-BORROWER: TEKIRA PHARMACEUTICALS CORPORATION

DATE: December , 2011

BANK: Silicon Valley Bank

I hereby certify as follows, as of the date set forth above:

1. I am the Secretary, Assistant Secretary or other officer of the Co-Borrower. My title is as set forth below.
2. Co-Borrower's exact legal name is set forth above. Co-Borrower is a corporation existing under the laws of British Columbia.
3. Attached hereto are true, correct and complete copies of Co-Borrower's current Notice of Articles, as filed with the Registrar of Companies for British Columbia, and Articles (including amendments). Co-Borrower is incorporated in British Columbia as set forth in paragraph 2 above. Such Notice of Articles and Articles have not been amended, annulled, rescinded, revoked or supplemented, and remain in full force and effect as of the date hereof.
4. The following resolutions were duly and validly adopted by Co-Borrower's Board of Directors at a duly held meeting of such directors (or pursuant to a unanimous written consent or other authorized corporate action). Such resolutions are in full force and effect as of the date hereof and have not been in any way modified, repealed, rescinded, amended or revoked, and Bank may rely on them until Bank receives written notice of revocation from Co-Borrower.

RESOLVED, that **any one** of the following officers or employees of Co-Borrower, whose names, titles and signatures are below, may act on behalf of Co-Borrower:

<u>Name</u>	<u>Title</u>	<u>Signature</u>	<u>Authorized to Add or Remove Signatories</u>
<u>Mark J. Murray</u>	<u>Director / CEO / President</u>	_____	<input type="checkbox"/>
<u>Ian Mortimer</u>	<u>CFO</u>	_____	<input type="checkbox"/>

Resolved Further, that any one of the persons designated above with a checked box beside his or her name may, from time to time, add or remove any individuals to and from the above list of persons authorized to act on behalf of Co-Borrower.

RESOLVED FURTHER, that such individuals may, on behalf of Co-Borrower:

- Borrow Money.** Borrow money from Silicon Valley Bank ("Bank").
- Execute Loan Documents.** Execute any loan documents Bank requires.
- Grant Security.** Grant Bank a security interest in any of Co-Borrower's assets.
- Negotiate Items.** Negotiate or discount all drafts, trade acceptances, promissory notes, or other indebtedness in which Co-Borrower has an interest and receive cash or otherwise use the proceeds.
- Issue Warrants.** Issue warrants for Co-Borrower's capital stock.
- Further Acts.** Designate other individuals to request advances, pay fees and costs and execute other documents or agreements (including documents or agreement that waive Co-Borrowers right to a jury trial) they believe to be necessary to effectuate such resolutions.

RESOLVED FURTHER, that all acts authorized by the above resolutions and any prior acts relating thereto are ratified.

5. The persons listed above are Co-Borrower's officers or employees with their titles and signatures shown next to their names.

TEKMIRA PHARMACEUTICALS CORPORATION

By: _____
Name: _____
Title: _____

**** If the Secretary, Assistant Secretary or other certifying officer executing above is designated by the resolutions set forth in paragraph 4 as one of the authorized signing officers, this Certificate must also be signed by a second authorized officer or director of Co-Borrower.*

I, the _____ of Co-Borrower, hereby certify as to paragraphs 1 through 5 above, as
[print title]
of the date set forth above.

By: _____
Name: _____
Title: _____

BORROWING RESOLUTIONS



CORPORATE BORROWING CERTIFICATE

CO-BORROWER: PROTIVA BIOTHERAPEUTICS INC.
BANK: Silicon Valley Bank

DATE: December , 2011.

I hereby certify as follows, as of the date set forth above:

1. I am the Secretary, Assistant Secretary or other officer of the Co-Borrower. My title is as set forth below.
2. Co-Borrower’s exact legal name is set forth above. Co-Borrower is a corporation existing under the laws of British Columbia.
3. Attached hereto are true, correct and complete copies of Co-Borrower’s current Notice of Articles, as filed with the Registrar of Companies for British Columbia, and Articles (including amendments). Co-Borrower is continued in British Columbia as set forth in paragraph 2 above. Such Notice of Articles and Articles have not been amended, annulled, rescinded, revoked or supplemented, and remain in full force and effect as of the date hereof.
4. The following resolutions were duly and validly adopted by Co-Borrower’s Board of Directors at a duly held meeting of such directors (or pursuant to a unanimous written consent or other authorized corporate action). Such resolutions are in full force and effect as of the date hereof and have not been in any way modified, repealed, rescinded, amended or revoked, and Bank may rely on them until Bank receives written notice of revocation from Co-Borrower.

RESOLVED, that **any one** of the following officers or employees of Co-Borrower, whose names, titles and signatures are below, may act on behalf of Co-Borrower:

<u>Name</u>	<u>Title</u>	<u>Signature</u>	<u>Authorized to Add or Remove Signatories</u>
<u>Mark J. Murray</u>	<u>Director / CEO, President</u>	_____	<input type="checkbox"/>
<u>Ian Mortimer</u>	<u>CFO</u>	_____	<input type="checkbox"/>

RESOLVED FURTHER, that **any one** of the persons designated above with a checked box beside his or her name may, from time to time, add or remove any individuals to and from the above list of persons authorized to act on behalf of Co-Borrower.

RESOLVED FURTHER, that such individuals may, on behalf of Co-Borrower:

Borrow Money. Borrow money from Silicon Valley Bank (“Bank”).

Execute Loan Documents. Execute any loan documents Bank requires.

Grant Security. Grant Bank a security interest in any of Co-Borrower’s assets.

Negotiate Items. Negotiate or discount all drafts, trade acceptances, promissory notes, or other indebtedness in which Co-Borrower has an interest and receive cash or otherwise use the proceeds.

Further Acts. Designate other individuals to request advances, pay fees and costs and execute other documents or agreements (including documents or agreement that waive Co-Borrowers right to a jury trial) they believe to be necessary to effectuate such resolutions.

RESOLVED FURTHER, that all acts authorized by the above resolutions and any prior acts relating thereto are ratified.

5. The persons listed above are Co-Borrower's officers or employees with their titles and signatures shown next to their names.

PROTIVA BIOTHERAPEUTICS INC.

By: _____
Name: _____
Title: _____

**** If the Secretary, Assistant Secretary or other certifying officer executing above is designated by the resolutions set forth in paragraph 4 as one of the authorized signing officers, this Certificate must also be signed by a second authorized officer or director of Co-Borrower.*

I, the _____ of Co-Borrower, hereby certify as to paragraphs 1 through 5 above, as
[print title]
of the date set forth above.

By: _____
Name: _____
Title: _____

EXHIBIT D

COMPLIANCE CERTIFICATE

TO: SILICON VALLEY BANK
FROM: TEKIRA PHARMACEUTICALS CORPORATION

Date: _____

The undersigned authorized officer of TEKIRA PHARMACEUTICALS CORPORATION (a “**Co-Borrower**”) certifies that under the terms and conditions of the Loan Agreement between Co-Borrowers and Bank (the “**Agreement**”):

(1) Co-Borrowers are in complete compliance for the period ending _____ with all required covenants except as noted below; (2) there are no Events of Default; (3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; (4) each Co-Borrower, and each of their Subsidiaries, has timely filed all required tax returns and reports, and each Co-Borrower has timely paid all applicable foreign, federal, provincial, state and local taxes, assessments, deposits and contributions owed by such Co-Borrower except as otherwise permitted pursuant to the terms of Section 5.9 of the Agreement; (5) no Liens have been levied or claims made against a Co-Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which such Co-Borrower has not previously provided written notification to Bank; and (6) any intellectual property notices required pursuant to Sections 6.2(h) and 6.8(b) of the Agreement are included with this certificate.

Attached are the required documents supporting the certification. The undersigned certifies that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges that no borrowings may be requested at any time or date of determination that Co-Borrowers are not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under “Complies” column.

<u>Reporting Covenant</u>	<u>Required</u>	<u>Complies</u>	
Monthly financial statements with Compliance Certificate	Monthly within 30 days	Yes	No
Annual financial statement (CPA Audited) + CC	FYE within 90 days	Yes	No
Quarterly (unaudited) financial statements and Material Change reports filed on 6-K	Within 5 days after filing with SEC	Yes	No
Annual Projections	FYE within 45 days	Yes	No

The following Intellectual Property was registered (or a registration application submitted) after the Effective Date (if no registrations, state “None”)

The following material updates to ongoing clinical programs/clinical trials occurred during the current reporting period

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

TEKMIRA PHARMACEUTICALS CORPORATION
on behalf of itself and the other Co-Borrowers

By: _____
Name: _____
Title: _____

BANK USE ONLY

Received by: _____
AUTHORIZED SIGNER

Date: _____

Verified: _____
AUTHORIZED SIGNER

Date: _____

Compliance Status: Yes No

EMPLOYMENT AGREEMENT

THIS AGREEMENT MADE THE 24th day of August, 2010

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:

PAUL BRENNAN (the "Executive"),

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;

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:

The following numbering is done with the Alt NW numbering macro. The numbered paragraphs use List styles. The shortcut keys are Alt G1, Alt G2 etc. (This numbering scheme can't be used in the same document as the Alt NG or Alt NO scheme.)

1. EMPLOYMENT

- (a) The Executive will be employed by and will serve the Company as its Senior Vice President, Business Development. The Executive will report directly to the Chief Executive Officer of the Company and will perform the duties and responsibilities assigned to him 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 September 7, 2010 and the Executive's employment as Senior Vice President, Business Development 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, his 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 himself of the details of such policies and any amendments thereto.
- (d) The Executive agrees that as a high technology professional, as defined in the *Employment Standards Act* of British Columbia Regulations, and as an executive, his hours of work will vary and may be irregular and will be those hours required to meet the objectives of his employment. The Executive agrees that the compensation described in Paragraph 2 of this Agreement compensates him for all hours worked.
- (e) The Executive will devote himself 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 his 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 \$230,000.00 (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 35 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(s). 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. If as a result of such a change the Company is unable to maintain similar coverage, then the Company will provide the Executive with compensation to assist in securing his 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 his duties. The Executive will provide the Company with receipts supporting his claims for reimbursement;

3. VACATION

- (a) The Executive will be entitled to an annual paid vacation of four weeks, to be scheduled at times that are mutually acceptable to the Executive and the Company.

4. NON-COMPETITION AND NON-SOLICITATION

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 company immediately upon leaving the Company.

- (a) Definitions:

“Business” or “Business of the Company” means:

(i) researching, developing, production and marketing of RNA interference drugs and delivery technology, as such business grows and evolves during the term of this Agreement;

“Competing Business” means any endeavour, activity or business which is competitive in any material way with the Business of the Company worldwide during the term of this Agreement.

“Customer” means any person or entity that is a customer of the Company that the Executive has been, directly or indirectly, involved in servicing on behalf of the Company.

“Prospective Customer” means any person or entity during the course of his employment that was solicited by the Executive on behalf of the Company for the purposes of becoming a customer of the Company or whom he knows was solicited by the Company for the purpose of becoming a customer of the Company.

- (b) The Executive shall not, during the term of this Agreement and for the Restricted Period following the termination of his employment for whatever reason, on his own behalf or on behalf of any person or entity, whether directly or indirectly, in any capacity whatsoever, alone, through or in connection with any person or 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 the event that the Executive terminates his employment pursuant to Section 6(a) or is terminated pursuant to Section 6(b) of the Employment Agreement, the “Restricted Period” shall be equivalent to the amount of notice that the Executive is entitled pursuant to Section 6(b)(ii). In the event that the Executive’s employment is terminated pursuant to a Change of Control, the “Restricted Period” shall be twelve (12) months.
- (c) The Executive shall, however, not be in default of Section 4(b) 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.
- (d) If the Executive holds issued and outstanding shares or any other interest in a corporation or other entity pursuant to Section 5(c) above, 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 his shares or other interest in such corporation or other entity.
- (e) The Executive shall not, during this Agreement and for the Restricted Period following the termination of his employment, for whatever reason, on his own behalf or on behalf of or in connection with any other person or 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 person or 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 his 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, solely in a personal capacity, shall be permitted to provide letters of reference for individuals who are employed by the Company.
- (f) The Executive expressly recognizes and acknowledges that it is the intent of the parties that his activities following termination of 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. **EQUITABLE REMEDIES**

- (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 Paragraph 4 above 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 Paragraph 4 above or Appendix "A" to this Agreement, that breach will 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, without having to prove damages to the court.

6. TERMINATION

- (a) The Executive may terminate his employment by giving at least three 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 his 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 his 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 completed 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 of the following events:
 - (i) the acquisition by a person of beneficial ownership of 50% or more of the voting securities of the Company then outstanding; provided, however, that any acquisition by any person whose ordinary business includes the management of investment funds for others and such voting securities are beneficially owned by such person in the ordinary course of such business shall not constitute a Change of Control; and

- (ii) consummation of a merger, amalgamation, arrangement, business combination, reorganization or consolidation or sale or other disposition of all or substantially all of the assets of the Company (a "Business Combination"), in each case, unless, following such Business Combination: persons who were the beneficial owners, respectively, of all outstanding voting securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 5-% of the then outstanding voting securities of the successor entity resulting from such Business Combination (including, without limitation, a company which as a result of such transaction owns all or substantially all of the Company's assets either directly or through one or more subsidiaries).
- (d) If a Change of Control occurs and within twelve (12) months after the occurrence of a Change of Control, the Executive resigns his employment for Good Reason upon giving the Company not less than three months' prior written notice of resignation; or at the Company's sole discretion, the Executive is terminated without cause within 12 months of a Change of Control, the Executive will be entitled to receive the "Change of Control Severance Amount". "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, benefits, bonus or other compensation provided to the Executive and in effect immediately prior to the Change of Control;
 - (iii) relocation of the Executive's principal place of employment to a place outside of Metro Vancouver; or
 - (iv) any request by the Company that the Executive participates in an unlawful act pursuant to the laws of British Columbia or Canada.
- (e) The Change of Control Severance Amount will be calculated as follows:
- (i) an amount equal to twelve (12) months' 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 his 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 including Appendix A 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 Paragraph 4 above and Sub-paragraph (f) below 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 Paragraph 4 above, 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 him 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 **PAUL BRENNAN** in the presence of:)
)
)
)
_____)
Witness Signature)
_____)
Witness Name)
_____)
Witness Address)
_____)
_____)
_____)
_____)
Witness Occupation)

PAUL BRENNAN

TEKMIRA PHARMACEUTICALS CORPORATION

Per: _____
Mark J. Murray

APPENDIX A
CONFIDENTIALITY AGREEMENT AND ASSIGNMENT OF INVENTIONS

The Confidentiality Agreement and Assignment of Inventions is attached hereto.

**CONFIDENTIALITY AGREEMENT
AND ASSIGNMENT OF INVENTIONS**

THIS AGREEMENT (this “**Agreement**”) dated for reference the day of August, 2010

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:

PAUL BRENNAN (the “**Executive**”), of
14509 30th Avenue, Surrey, British Columbia V4P 1P9

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 his work during his 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:

The following numbering is done with the Alt NB numbering macro. There are 6 levels (Heading 1 to Heading 6 styles); shortcut keys Ctrl Alt 1 to Ctrl Alt 6.

1. INTERPRETATION

1.1 Definitions. In this Agreement:

- (a) “**Business of the Company**” means:
 - (i) the research, development, production and marketing of RNA interference drugs and delivery technology, as such business grows and evolves during the term of this Agreement; and

- (ii) any other material business carried on from time to time by the Company, its subsidiaries and/or affiliates, directly or indirectly, whether under an agreement with or in collaboration with, any other person during the term of this Agreement.
- (b) **“Confidential Information”** shall mean any information relating to the Business of the Company (as hereinafter defined), 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 his 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 his 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 September 7, 2010, which is the date that the Executive starts or started working at the Company, as indicated in his employment agreement with the Company dated the even date hereof.
- (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 his involvement in any capacity with the Company, whether during or outside his regular working hours, except those Inventions made or conceived by the Executive entirely on his 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 his 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 his 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 his 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 his 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 his 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 his 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 his 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 his 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 authorised 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 his involvement, in any capacity, with the Company, whether or not developed before or after execution of this Agreement. On his 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 his 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 his 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 his agent and attorney-in-fact, to act for and in his 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 his obligations under this Agreement, that breach will 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, without having to prove damages to the court.

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 **PAUL BRENNAN** in the presence of:)
)
)
)
_____)
Witness Signature)
_____)
Witness Name)
_____)
Witness Address)
_____)
_____)
_____)
_____)
Witness Occupation)

PAUL BRENNAN

TEKMIRA PHARMACEUTICALS CORPORATION

Per: _____
Mark J. Murray

EXHIBIT I
to Confidentiality Agreement and Assignment of Inventions
EXCLUSIONS FROM WORK PRODUCT



**TEKMIRA 2011 OMNIBUS SHARE
COMPENSATION PLAN**
**(as approved by the board of directors on May 10, 2011 and
approved by the shareholders at the June 22, 2011 Annual and Special General Meeting)**

TEKMIRA PHARMACEUTICALS CORPORATION

TEKMIRA PHARMACEUTICALS CORPORATION 2011 OMNIBUS SHARE
COMPENSATION PLAN

(as approved by the board of directors on May 10, 2011 and
approved by the shareholders at the June 22, 2011 Annual and Special General Meeting)

1. PURPOSE OF THE PLAN

1.1 Purpose of this Plan. The purpose of this Plan is to promote the interests of the Corporation by:

- (a) furnishing certain directors, officers, employees or consultants of the Corporation or an Affiliate or other persons as the Compensation Committee may approve with greater incentive to further develop and promote the business and financial success of the Corporation;
- (b) furthering the identity of interests of persons to whom equity-based incentive awards may be granted with those of the shareholders of the Corporation generally through share ownership in the Corporation; and
- (c) assisting the Corporation in attracting, retaining and motivating its directors, officers, employees and consultants.

The Corporation believes that these purposes may best be effected by granting equity-based incentive awards to Eligible Participants.

2. DEFINITIONS

2.1 Definitions. In this Plan, unless there is something in the subject matter or context inconsistent therewith, capitalized words and terms will have the following meanings:

- (a) **“Affiliate”** means an affiliate company as defined in the Securities Act;
- (b) **“Associate”** means an associate as defined in the Securities Act;
- (c) **“Award”** means an award of Deferred Stock Units, Options, Restricted Stock Units, or Tandem SARs;
- (d) **“Award Agreement”** means an agreement evidencing a Deferred Stock Unit, Option, Restricted Stock Unit or Tandem SAR, entered into by and between the Corporation and an Eligible Person;
- (e) **“Blackout Period”** means an interval of time during which trading in securities of the Corporation by officers, directors and employees of the Corporation is prohibited pursuant to the Corporation’s Insider Trading Policy;

- (f) **“Board of Directors”** means the board of directors of the Corporation as constituted from time to time;
- (g) **“Change in Control”** means:
- (i) any merger or consolidation in which voting securities of the Corporation possessing more than fifty percent (50%) of the total combined voting power of the Corporation’s outstanding securities are transferred to a person or persons different from the persons holding those securities immediately prior to such transaction and the composition of the Board of Directors following such transaction is such that the directors of the Corporation prior to the transaction constitute less than fifty percent (50%) of the Board of Directors membership following the transaction;
 - (ii) any acquisition, directly or indirectly, by a person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership of voting securities of the Corporation possessing more than fifty percent (50%) of the total combined voting power of the Corporation’s outstanding securities;
 - (iii) any acquisition, directly or indirectly, by a person or related group of persons of the right to appoint a majority of the directors of the Corporation or otherwise directly or indirectly control the management, affairs and business of the Corporation;
 - (iv) any sale, transfer or other disposition of all or substantially all of the assets of the Corporation; and
 - (v) a complete liquidation or dissolution of the Corporation;
- provided however, that a Change in Control shall not be deemed to have occurred if such Change in Control results solely from the issuance, in connection with a *bona fide* financing or series of financings by the Corporation or any of its Affiliates, of voting securities of the Corporation or any of its Affiliates or any rights to acquire voting securities of the Corporation or any of its Affiliates which are convertible into voting securities;
- (h) **“Common Shares”** means the common shares in the capital of the Corporation as constituted on the Effective Date, provided that if the rights of any Participant are subsequently adjusted pursuant to Article 20 hereof, “Common Shares” thereafter means the shares or other securities or property which such Participant is entitled to purchase after giving effect to such adjustment;
- (i) **“Compensation Committee”** has the meaning ascribed thereto in Section 5.1 of this Plan;

- (j) **“Consultant”** means any individual, corporation or other person engaged to provide ongoing valuable services to the Corporation or an Affiliate;
- (k) **“Corporation”** means Tekmira Pharmaceuticals Corporation and includes any successor corporation thereto;
- (l) **“Deferred Stock Unit”** means a right granted to an Eligible Person in accordance with Section 11 to receive, on a deferred payment basis, a cash payment or Common Shares, or any combination thereof, as determined by the Compensation Committee and on the terms contained in this Plan;
- (m) **“Effective Date”** has the meaning ascribed thereto by Section 3.1 of this Plan;
- (n) **“Eligible Person”** means a director, officer, employee or Consultant of the Corporation or an Affiliate or a person otherwise approved by the Compensation Committee;
- (o) **“Exercise Price”** means the price per Common Share at which a Participant may purchase Common Shares pursuant to an Option, provided that if such price is adjusted pursuant to Section 20.1 hereof, “Exercise Price” thereafter means the price per Common Share at which such Participant may purchase Common Shares pursuant to such Option after giving effect to such adjustment;
- (p) **“Fair Market Value”** as it relates to Common Shares means:
 - (i) where the Common Shares are listed for trading on a Stock Exchange, the closing price of the Common Shares on such Stock Exchange as determined by the Compensation Committee, for the Trading Session on the day prior to the relevant time as it relates to an Award; 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 relevant time as it relates to an Award, 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;
- (q) **“Insider”** means:
 - (i) an insider as defined in the Securities Act; and
 - (ii) an Associate or Affiliate of any person who is an insider;
- (r) **“Key Employee”** means an employee of the Corporation who at any time during the calendar year is an officer of the Corporation whose annual compensation is equal to or greater than US\$130,000, an employee whose share ownership in the Corporation is 5% or more, or an employee whose share ownership in the Corporation is 1% or more and whose annual compensation exceeds US\$150,000, or as U.S. federal tax law is amended in this regard from time to time;

- (s) **“Legal Representative”** has the meaning ascribed thereto by Section 14.1 of this Plan;
- (t) **“Merger and Acquisition Transaction”** means:
- (i) any merger;
 - (ii) any acquisition;
 - (iii) any amalgamation;
 - (iv) any offer for shares of the Corporation which if successful would entitle the offeror to acquire all of the voting securities of the Corporation; or
 - (v) any arrangement or other scheme of reorganization; that results in a Change in Control;
- (u) **“Non Blackout Trading Day”** means a day on which (i) a Trading Session occurs, and (ii) no Blackout Period is in place;
- (v) **“Notice of Settlement”** means a notice delivered to the Corporation in the form prescribed by the Corporation from time to time, or in absence of such form, a written notice indicating the Participant’s desire to receive his or her Settlement Amount and delivered to the Corporation;
- (w) **“Options”** means stock options granted hereunder to purchase Common Shares from treasury pursuant to the terms and conditions hereof and as evidenced by an Option Agreement and **“Option”** means any one of them;
- (x) **“Option Agreement”** means an agreement evidencing an Option, entered into by and between the Corporation and an Eligible Person;
- (y) **“Outstanding Common Shares”** at the time of any share issuance or grant of Options means the number of Common Shares that are outstanding immediately prior to the share issuance or grant of Options in question, on a non-diluted basis, or such other number as may be determined under the applicable rules and regulations of all regulatory authorities to which the Corporation is subject, including the Stock Exchange;
- (z) **“Participant”** means a person to whom an Award has been granted under this Plan;
- (aa) **“Plan”** means the Tekmira 2011 Omnibus Share Compensation Plan, as the same may from time to time be supplemented or amended and in effect;

- (bb) **“Restricted Stock Unit”** means a right granted to an Eligible Person in accordance with Section 10 to receive a cash payment or Common Shares, or a combination thereof, as determined by the Compensation Committee, equal in value to the Fair Market Value of the Common Shares on an applicable future settlement date as specified by the Compensation Committee, on the terms and conditions and calculated in accordance with Section 10 hereof;
- (cc) **“Settlement Amount”** means an amount paid to the holder of Deferred Stock Units as determined pursuant to Section 11;
- (dd) **“Securities Act”** means the *Securities Act*, R.S.B.C. 1996, c.418, as amended from time to time;
- (ee) **“Stock Exchange”** means such stock exchange or other organized market on which the Common Shares are listed or posted for trading;
- (ff) **“Tandem SAR”** means a right, granted in accordance with Section 9 in tandem with an Option, to receive upon the exercise thereof payment in cash, Common Shares or any combination thereof, as determined by the Compensation Committee, an amount equal to the excess of the Fair Market Value of the Common Shares on the date of exercise of such Tandem SAR over the Option Exercise Price, on the terms and conditions and calculated in accordance with Section 9 hereof;
- (gg) **“Terminated Service”** means that a Participant has, except as a result of death or disability, ceased to be a director, officer, employee or Consultant of the Corporation, as the case may be;
- (hh) **“Trading Session”** means a trading session on a day which the applicable Stock Exchange is open for trading;
- (ii) **“U.S. Exchange Act”** means the U.S. Securities Exchange Act of 1934, as amended from time to time;
- (jj) **“U.S. Internal Revenue Code”** means the Internal Revenue Code of 1986 of the United States, as amended from time to time;
- (kk) **“U.S. Nonqualified Stock Option”** means an Option to purchase Common Shares other than a U.S. Qualified Incentive Stock Option;
- (ll) **“U.S. Optionee”** or **“U.S. Person”** means a Participant who is a citizen or a resident of the United States (including its territories, possessions and all areas subject to the jurisdiction); and
- (mm) **“U.S. Qualified Incentive Stock Option”** means an Option to purchase Common Shares with the intention that it qualify as an “incentive stock option” as that term is defined in Section 422 of the U.S. Internal Revenue Code, such intention being evidenced by the resolutions of the Compensation Committee at the time of grant.

3. EFFECTIVE DATE OF PLAN

3.1 Effective Date of this Plan. The effective date (the “Effective Date”) of this Plan is June 22, 2011, the date on which this Plan was adopted by the shareholders of the Corporation.

4. COMMON SHARES SUBJECT TO PLAN

4.1 Common Shares Subject to this Plan. The aggregate number of Common Shares in respect of which Awards may be granted pursuant to this Plan shall not exceed 1,643,144. The number of Common Shares in respect of which Awards may be granted pursuant to this Plan may be increased, decreased or fixed by the Board of Directors, as permitted under the applicable rules and regulations of all regulatory authorities to which the Corporation is subject, including the Stock Exchange.

4.2 Computation of Available Shares. For the purposes of computing the number of Common Shares available for grant under this Plan, Common Shares subject to any Award (or any portion thereof) that have expired or are forfeited, surrendered, cancelled or otherwise terminated prior to the issuance or transfer of such Common Shares and Common Shares subject to an Award (or any portion thereof) that is settled in cash in lieu of settlement in Common Shares shall again be available for grant under this Plan. Notwithstanding the foregoing, any Common Shares subject to an Award that are withheld or otherwise not issued (upon either an exercise of any Option or Tandem SAR or any settlement of any Award) 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 under the limitations set forth in this Article 4.

4.3 Reservation of Shares. The Board of Directors will reserve for allotment from time to time out of the authorized but unissued Common Shares sufficient Common Shares to provide for issuance of all Common Shares which are issuable under all outstanding Awards.

4.4 No Fractional Shares. No fractional Common Shares may be purchased or issued under this Plan.

4.5 Settlement of Awards. Subject to the terms and limitations of the Plan, payments or transfers to be made upon the exercise settlement of an Award, other than an Option, may be made in such form or forms as the Compensation Committee shall 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.

5. ADMINISTRATION OF PLAN

5.1 Administration of Plan. The Board of Directors may at any time appoint a committee (the “Compensation Committee”) to, among other things, interpret, administer and implement this Plan on behalf of the Board of Directors in accordance with such terms and conditions as the Board of Directors may prescribe, consistent with this Plan (provided that if at

any such time such a committee has not been appointed by the Board of Directors, this Plan will be administered by the Board of Directors, and in such event references herein to the Compensation Committee shall be construed to be a reference to the Board of Directors). The Board of Directors will take such steps which in its opinion are required to ensure that the Compensation Committee has the necessary authority to fulfil its functions under this Plan.

5.2 Award Agreements. Each Award will be evidenced by an Award Agreement which incorporates such terms and conditions as the Compensation Committee in its discretion deems appropriate and consistent with the provisions of this Plan (and the execution and delivery by the Corporation of an Award Agreement with a Participant shall be conclusive evidence that such Award Agreement incorporates terms and conditions approved by the Compensation Committee and is consistent with the provisions of this Plan). Each Award Agreement will be executed by the Participant to whom the Award is granted and on behalf of the Corporation by any member of the Compensation Committee or any officer of the Corporation or such other person as the Compensation Committee may designate for such purpose.

5.3 Powers of Compensation Committee. The Compensation Committee is authorized, subject to the provisions of this Plan, to establish from time to time such rules and regulations, make such determinations and to take such steps in connection with this Plan as in the opinion of the Compensation Committee are necessary or desirable for the proper administration of this Plan. For greater certainty, without limiting the generality of the foregoing, the Compensation Committee will have the power, where consistent with the general purpose and intent of this Plan and subject to the specific provisions of this Plan and any approval of the Stock Exchange, if applicable:

- (a) to interpret and construe this Plan and any Award Agreement and to determine all questions arising out of this Plan and any Award Agreement, and any such interpretation, construction or determination made by the Compensation Committee will be final, binding and conclusive for all purposes;
- (b) to determine to which Eligible Persons Awards are granted, and to grant, Awards;
- (c) to determine the number of Common Shares issuable pursuant to each Award;
- (d) to determine the Exercise Price for each Option;
- (e) to determine the time or times when Awards will be granted, vest and be exercisable, as applicable;
- (f) to determine the vesting terms of Awards, which may be based upon the passage of time, continued employment or service, on the basis of corporate or personal performance objectives, or any combination of the foregoing as determined by the Compensation Committee;
- (g) to determine any acceleration of vesting;
- (h) to determine if the Common Shares that are subject to an Award will be subject to any restrictions or repurchase rights upon the exercise or settlement of such

Award including, where applicable, the endorsement of a legend on any certificate representing Common Shares acquired on the exercise or settlement of any Award to the effect that such Common Shares may not be offered, sold or delivered except in compliance with the applicable securities laws and regulations of Canada, the United States or any other country and if any rights or restrictions exist they will be described in the applicable Award Agreement;

- (i) to determine the expiration date for each Award and to extend the period of time for which any Award is to remain exercisable or may be settled in appropriate circumstances, including, without limitation, in the event of the Participant's cessation of employment or service, provided that such date may not be later than the earlier of (A) the latest date permitted under the applicable rules and regulations of all regulatory authorities to which the Corporation is subject, including the Stock Exchange, and (B) in the case of an Option and, if applicable, Tandem SAR, the date which is the tenth anniversary of the date on which such Option and, if applicable, Tandem SAR is granted;
- (j) to prescribe the form of the instruments relating to the grant, exercise, or settlement, as applicable, and other terms of Awards;
- (k) to enter into an Award Agreement evidencing each Award which will incorporate such terms as the Compensation Committee in its discretion deems consistent with this Plan;
- (l) to take such steps and require such documentation from Eligible Persons which in its opinion are necessary or desirable to ensure compliance with the rules and regulations of the Stock Exchange and all applicable laws;
- (m) to adopt such modifications, procedures and subplans as may be necessary or desirable to comply with the provisions of the laws of Canada, the United States and other countries in which the Corporation or its Affiliates may operate to ensure the viability and maximization of the benefits from the Awards granted to Participants residing in such countries and to meet the objectives of this Plan; and
- (n) to determine such other matters as provided for herein.

6. GRANT OF OPTIONS

Subject to the rules set out below, the Compensation Committee or the Board of Directors (or in the case of any proposed Participant who is a member of the Compensation Committee, the Board of Directors) may from time to time grant to any Eligible Person one or more Options as the Compensation Committee or the Board of Directors deems appropriate.

6.1 Date Option Granted. The date on which an Option will be deemed to have been granted under this Plan will be the date on which the Compensation Committee or the Board of Directors, as applicable, authorizes the grant of such Option or such other date as may be specified by the Compensation Committee or the Board of Directors, as applicable, at the time of such authorization.

6.2 Number of Common Shares/Maximum Grant. The number of Common Shares that may be purchased under any Option will be determined by the Compensation Committee, provided that:

- (a) the number of Common Shares reserved for issuance to any one Participant pursuant to this Plan within any one year period shall not, in aggregate, exceed 5% of the total number of Outstanding Common Shares on a non-diluted basis; and
- (b) the number of Common Shares:
 - (i) issuable, at any time, to Participants that are Insiders; and
 - (ii) issued to Participants that are Insiders within any one year period;pursuant to this Plan, or when combined with all of the Corporation's other security based share compensation arrangements shall not, in aggregate, exceed 10% of the total number of Outstanding Common Shares on a non-diluted basis;

For the purposes of this Section 6.2, Common Shares issued pursuant to an entitlement granted prior to the grantee becoming an Insider may be excluded in determining the number of Common Shares issuable to Insiders. A Participant who holds Options at the time of granting an Option, may hold more than one Option.

6.3 Exercise Price. The Exercise Price per Common Share under each Option will be determined by the Compensation Committee, in its sole discretion, but will in no event be less than the Fair Market Value of the date of the grant.

7. U.S. QUALIFIED INCENTIVE STOCK OPTION PROVISIONS

To the extent required by Section 422 of the U.S. Internal Revenue Code, U.S. Qualified Incentive Stock Options shall be subject to the following additional terms and conditions and if there is any conflict between the terms of this Article and other provisions under this Plan, the provisions under this Article shall prevail:

7.1 Eligible Employees. All classes of employees of the Corporation or one of its parent corporations or subsidiary corporations may be granted U.S. Qualified Incentive Stock Options. U.S. Qualified Incentive Stock Options shall only be granted to U.S. Optionees who are, at the time of grant, officers, key employees or directors of the Corporation or one of its parent corporations or subsidiary corporations (provided, for purposes of this Article 7 only, such directors are then also officers or key employees of the Corporation or one of its parent corporations or subsidiary corporations). For purposes of this Article 7, "parent corporation" and "subsidiary corporation" shall have the meanings attributed to those terms for the purposes of Section 422 of the U.S. Internal Revenue Code. Any director of the Corporation who is a U.S. Optionee shall be ineligible to vote upon the granting of such Option; and for greater certainty, contractors of the Corporation or subsidiary corporations may not be granted U.S. Qualified Incentive Stock Options.

7.2 Dollar Limitation. To the extent the aggregate fair market value (determined as of the grant date) of Common Shares with respect to which U.S. Qualified Incentive Stock Options are exercisable for the first time by a U.S. Optionee during any calendar year (under this Plan and all other stock option plans of the Corporation) exceeds U.S. \$100,000, such portion in excess of U.S. \$100,000 shall be treated as a U.S. Nonqualified Stock Option. In the event the U.S. Optionee holds two or more such Options that become exercisable for the first time in the same calendar year, such limitation shall be applied on the basis of the order in which such Options are granted.

7.3 10% Shareholders. If any U.S. Optionee to whom an U.S. Qualified Incentive Stock Option is to be granted under this Plan at the time of the grant of such U.S. Qualified Incentive Stock Option is the owner of shares possessing more than ten percent (10%) of the total combined voting power of all classes of shares of the Corporation, then the following special provisions shall be applicable to the U.S. Qualified Incentive Stock Option granted to such individual:

- (i) the Exercise Price (per Common Share) subject to such U.S. Qualified Incentive Stock Option shall not be less than one hundred ten percent (110%) of the fair market value of one Common Share at the time of grant; and
- (ii) for the purposes of this Article 7 only, the option exercise period shall not exceed five (5) years from the date of grant.

The determination of 10% ownership shall be made in accordance with Section 422 of the U.S. Internal Revenue Code.

7.4 Exercisability. To qualify for U.S. Qualified Incentive Stock Option tax treatment, an Option designated as a U.S. Qualified Incentive Stock Option must be exercised within three months after termination of employment for reasons other than death, except that, in the case of termination of employment due to total disability, such Option must be exercised within one year after such termination. Employment shall not be deemed to continue beyond the first 90 days of a leave of absence unless the U.S. Optionee's reemployment rights are guaranteed by statute or contract. For purposes of this Section 7.4, "total disability" shall mean a mental or physical impairment of the U.S. Optionee which is expected to result in death or which has lasted or is expected to last for a continuous period of 12 months or more and which causes the U.S. Optionee to be unable, in the opinion of the Corporation and two independent physicians, to perform his or her duties for the Corporation and to be engaged in any substantial gainful activity. Total disability shall be deemed to have occurred on the first day after the Corporation and the two independent physicians have furnished their opinion of total disability to the Compensation Committee.

7.5 Taxation of U.S. Qualified Incentive Stock Options. In order to obtain certain tax benefits afforded to U.S. Qualified Incentive Stock Options under Section 422 of the U.S. Internal Revenue Code, the U.S. Optionee must hold the Common Shares issued upon the exercise of a U.S. Qualified Incentive Stock Option for two years after the date of grant of the U.S. Qualified Incentive Stock Option and one year from the date of exercise. A U.S. Optionee

may be subject to U.S. alternative minimum tax at the time of exercise of a U.S. Qualified Incentive Stock Option. The Compensation Committee may require a U.S. Optionee to give the Corporation prompt notice of any disposition of shares acquired by the exercise of a U.S. Qualified Incentive Stock Option prior to the expiration of such holding periods.

7.6 Transferability. No U.S. Qualified Incentive Stock Option granted under this Plan may be assigned or transferred by the U.S. Optionee other than by will or by the laws of descent and distribution, and during the U.S. Optionee's lifetime, such U.S. Qualified Incentive Stock Option may be exercised only by the U.S. Optionee.

7.7 Compensation Committee Governance if U.S. Registrant. If and so long as the Common Shares are registered under Section 12(b) or 12(g) of the U.S. Securities Exchange Act, the Board of Directors will consider in selecting the members of the Compensation Committee, with respect to any persons subject or likely to become subject to Section 16 of the U.S. Securities Exchange Act, the provisions regarding "nonemployee directors" as contemplated by Rule 16b-3 under the U.S. Securities Exchange Act.

7.8 Exercise Price. Notwithstanding Section 6.3, no U.S. Qualified Incentive Stock Option granted under the Plan shall have an Exercise Price less than the fair market value of the underlying Common Shares at the date of grant of such Option, as determined at such time in good faith by the Board or Directors or the Compensation Committee, as the case may be.

7.9 Approval by Shareholders. No U.S. Qualified Incentive Stock Option granted to a U.S. Optionee under this Plan shall become exercisable unless and until this Plan shall have been approved by the shareholders of the Corporation within 12 months of approval by the Board of Directors of the Corporation.

7.10 Option Agreements. Each Option will be evidenced by an Option Agreement which incorporates such terms and conditions as the Compensation Committee in its discretion deems appropriate and consistent with the provisions of this Plan (and the execution and delivery by the Corporation of an Option Agreement with a Participant shall be conclusive evidence that such Option Agreement incorporates terms and conditions approved by the Compensation Committee and is consistent with the provisions of this Plan). Each Option Agreement will be executed by the Participant to whom the Option is granted and on behalf of the Corporation by any member of the Compensation Committee or any officer of the Corporation or such other person as the Compensation Committee may designate for such purpose. Each Option Agreement will specify the reasons for the Corporation granting Options to such Participant.

8. EXERCISE OF OPTIONS

8.1 Exercise of Options. Subject to the terms and conditions of this Plan, the Compensation Committee may impose such limitations or conditions on the exercise or vesting of any Option as the Compensation Committee in its discretion deems appropriate, including limiting the number of Common Shares for which any Option may be exercised during any period as may be specified by the Compensation Committee and which number of Common Shares for which such Option may be exercised in any period will be specified in the Option Agreement with respect to such Option. Each Option Agreement will provide that the Option

granted thereunder may be exercised only by notice signed by the Participant or the Legal Representative of the Participant and accompanied by full payment for the Common Shares being purchased. Such consideration may be paid in any combination of the following:

- (a) cash, bank draft or certified cheque; or
- (b) such other consideration as the Compensation Committee may permit consistent with applicable laws.

As soon as practicable after any exercise of an Option, a certificate or certificates representing the Common Shares in respect of which such Option is exercised will be delivered by the Corporation to the Participant.

8.2 Conditions. Notwithstanding any of the provisions contained in this Plan or in any Option Agreement, the Corporation's obligation to issue Common Shares to a Participant pursuant to the exercise of an Option will be subject to, if applicable:

- (a) completion of such registration or other qualification of such Common Shares or obtaining approval of such governmental authority as the Corporation will determine to be necessary or advisable in connection with the authorization, issuance or sale thereof;
- (b) the admission of such Common Shares to listing or quotation on the Stock Exchange; and
- (c) the receipt from the Participant of such representations, agreements and undertakings, including as to future dealings in such Common Shares, as the Corporation or its counsel determines to be necessary or advisable in order to safeguard against the violation of the securities laws of any jurisdiction.

9. GRANT OF TANDEM SARs

9.1 Grant of Tandem SARs. The Compensation Committee or the Board of Directors, as applicable, may from time to time grant an Award of Tandem SARs to a Participant for each Option granted to such Participant on such terms and conditions, consistent with the Plan, as the Compensation Committee or the Board of Directors, as applicable, shall determine.

9.2 Terms of Tandem SARs. Tandem SARs may be granted at or after the grant date of the related grant of Options, and each Tandem SAR shall be subject to the same terms and conditions and denominated in the same currency as the Option to which it relates and the additional terms and conditions set forth in this Article 9.

9.3 Exercise of Tandem SARs. The Participant shall have the right to elect to exercise either an Option or the related Tandem SAR, if so granted. If the Participant elects to exercise a Tandem SAR, the related Option shall be cancelled. Tandem SARs may be exercised only if and to the extent the Options related thereto are then vested. Tandem SARs shall be exercisable at the election of the Participant by delivering to the Corporation a notice specifying the number of Options in respect of which the Tandem SARs are exercised. The Participant shall

not pay the Option Exercise Price attributable to the Option to which the Tandem SAR is related, but must pay or satisfy, in accordance with the terms of Article 17, any withholding amounts or administrative costs with respect to such exercise.

9.4 Settlement of Tandem SARs. Upon exercise of a Tandem SAR, and subject to payment or other satisfaction of all related withholding obligations in accordance with Article 17, such Tandem SAR shall be settled and the Participant shall be entitled to a cash payment, Common Shares or a combination thereof, at the discretion of the Compensation Committee, and settlement:

- (a) made in Common Shares shall be equal to such number of Common Shares having an aggregate value equal to the excess of the Fair Market Value of a Common Share on the date of exercise of the Tandem SAR over the Option Exercise Price for the corresponding Option, multiplied by the number of Tandem SARs exercised;
- (b) made by a cash payment shall be an aggregate amount equivalent to the value derived by 9.4(a); and
- (c) made by a combination of a cash payment and Common Shares shall be equivalent to the value derived by 9.4(a).

10. GRANT OF RESTRICTED STOCK UNITS

10.1 Grant of Restricted Stock Units. Restricted Stock Units may be granted pursuant to the terms of the Plan from time to time by the Compensation Committee or the Board of Directors, as applicable. The date on which any Restricted Stock Unit will be deemed to have been granted will be the date on which the Compensation Committee or the Board of Directors, as applicable, authorizes the grant of such Award.

10.2 Vesting Terms. Restricted Stock Units shall become vested at such times, in such instalments, and subject to such terms and conditions as may be determined by the Compensation Committee and set forth in the applicable Award Agreement.

10.3 Settlement of Restricted Stock Units. Restricted Stock Units shall be settled upon, or as soon as reasonably practicable following, the vesting thereof, subject to payment or other satisfaction of all related withholding obligations in accordance with Article 17 hereof and administrative costs. Settlement shall be made by a cash payment, Common Shares, or a combination thereof, as determined by the Compensation Committee in its sole discretion, and settlement:

- (a) made in Common Shares shall be made by delivery of one Common Share for each such Restricted Stock Unit then being settled;
- (b) made by a cash payment shall be an aggregate amount equal to the product of the Fair Market Value of the Common Shares on the applicable settlement date as specified by the Compensation Committee, multiplied by the number of Restricted Stock Units then being settled; and

- (c) made by a combination of a cash payment and Common Shares shall be equivalent to the value derived by 10.3(b).

11. GRANT OF DEFERRED STOCK UNITS

11.1 Grant of Deferred Stock Units. Deferred Stock Units may be granted pursuant to the terms of the Plan from time to time by the Compensation Committee or the Board of Directors, as applicable. The date on which any Deferred Stock Unit will be deemed to have been granted will be the date on which the Compensation Committee or the Board of Directors, as applicable, authorizes the grant of such Award.

11.2 Vesting Terms. Deferred Stock Units shall become vested at such times and subject to such terms and conditions as may be determined by the Compensation Committee and set forth in the applicable Award Agreement.

11.3 Determination of Deferred Stock Units. Deferred Stock Units awarded pursuant to this Plan will be credited to an account maintained for each Participant by the Corporation as and when awards are made. The number of Deferred Share Units to be credited to a Participant will be determined on the date on which the Compensation Committee or the Board of Directors, as applicable, authorizes the grant of DSU award, on a one Deferred Share Unit per Share basis.

11.4 Settlement of Deferred Stock Units. Deferred Stock Units shall be settled upon the Terminated Service of a Participant, pursuant to the terms and conditions of this Section 11.4, and subject to payment or other satisfaction of all related withholding obligations in accordance with Article 17 hereof and administrative costs. Settlement Amounts in respect of Deferred Stock Units shall be settled by a cash payment, Common Shares or any combination thereof, as determined by the Compensation Committee in its sole discretion, and settlement:

- (a) made in Common Shares shall be made by delivery of one Common Share for each such Deferred Stock Unit then being settled on the Filing Date;
- (b) made by a cash payment shall be an aggregate amount equivalent to the value derived by 11.4(a); and
- (c) made by a combination of a cash payment and Common Shares will be equivalent to the value derived by 11.4(a).

11.5 Payment of Settlement Amount.

- (a) Non-U.S. Persons
 - (i) a Participant who is not a U.S. Person and who has Terminated Service may receive their Settlement Amount by filing a Notice of Settlement on or before December 15 of the first calendar year commencing after the date of the Participant's Terminated Service. If the Participant fails to file such notice on or before that December 15, the Participant will be deemed to have filed the Notice of Settlement on that December 15.

- (ii) subject to Article 18 herein, the Corporation shall make payment of the Settlement Amount as soon as reasonably possible following the Filing Date.
 - (iii) in the event of the death of a Participant who is not a U.S. Person, the Corporation will, subject to Article 18 herein, make payment of the Settlement Amount within two months of the Participant's death to or for the benefit of the legal representative of the deceased Participant. For the purposes of this subsection, the Filing Date shall be the date of the Participant's death.
 - (iv) if a Participant who is not a U.S. Person dies after the Participant has Terminated Service but before filing a Notice of Settlement, Section 11.5(a)(iii) will apply.
- (b) U.S. Persons
- (i) in the event that a Participant who is a U.S. Person and not a Key Employee has Terminated Service, the Corporation will, subject to Article 18 herein, make payment of the Settlement Amount as soon as reasonably possible following such Participant's Terminated Service. For the purposes of this subsection, the Filing Date shall be the date that such Participant Terminated Service.
 - (ii) in the event that a Participant who is a U.S. Person and a Key Employee has Terminated Service, the Corporation will, subject to Article 18 herein, make payment of the Settlement Amount as soon as is reasonably possible following the date that is 6 months after the date that such Participant Terminated Service. For the purposes of this subsection, the Filing Date shall be the date which is 6 months after the date that such Participant Terminated Service. In the event of death of such a Participant during the 6 month period following the date the Participant Terminated Service, the rules under Section 11.5(b)(ii) shall then apply.
 - (iii) in the event of the death of a Participant who is a U.S. Person, the Corporation will, subject to Article 18 herein, make payment of the Settlement Amount within two months of the Participant's death to or for the benefit of the legal representative of the deceased Participant. For the purposes of this subsection, the Filing Date shall be the date of the Participant's death.

12. TERM OF AWARDS

12.1 Term of Options and Tandem SARs. Unless otherwise determined by the Compensation Committee, each Option and Tandem SAR granted pursuant to this Plan will, subject to the provisions of this Plan, expire automatically on the earlier of:

- (a) the date determined by the Compensation Committee and specified in the Award Agreement pursuant to which such Option and, if applicable, Tandem SAR is granted, provided that such date may not be, subject to Article 18 later than the earlier of (A) the date which is the tenth anniversary of the date on which such Option and, if applicable, Tandem SAR is granted, and (B) the latest date permitted under the applicable rules and regulations of all regulatory authorities to which the Corporation is subject, including the Stock Exchange;

- (b) in the event the Participant ceases to be an Eligible Person for any reason, other than the death of the Participant or the termination of the Participant for cause, such period of time after the date on which the Participant ceases to be an Eligible Person as may be specified by the Compensation Committee or as specified in an agreement among the Participant and the Corporation, and in the absence of such specification or agreement, will be deemed to be the date that is three months following the Participant ceasing to be an Eligible Person
- (c) in the event of the termination of the Participant as a director, officer, employee or Consultant of the Corporation or an Affiliate for cause, the date of such termination;
- (d) in the event of the death of a Participant prior to: (A) the Participant ceasing to be an Eligible Person; or (B) the date which is the number of days specified by the Compensation Committee pursuant to subparagraph (b) above from the date on which the Participant ceased to be an Eligible Person; the date which is one year after the date of death of such Participant or such other date as may be specified by the Compensation Committee and which period will be specified in the Award Agreement with the Participant with respect to such Option ; and
- (e) notwithstanding the foregoing provisions of subparagraphs (b), (c) and (d) of this Section 12.1, the Compensation Committee may, subject Article 19 and to regulatory approval, at any time prior to expiry of an Option extend the period of time within which an Option may be exercised by a Participant who has ceased to be an Eligible Person, but such an extension shall not be granted beyond the original expiry date of the Option as provided for in subparagraph (a) above.

12.2 Options and Tandem SARs Cease to Vest. Notwithstanding the foregoing, except as expressly permitted by the Compensation Committee, all Options will cease to vest as at the date upon which the Participant ceases to be an Eligible Person.

12.3 Accelerated Vesting of Options and Tandem SARs on Death. In the event of the death of the Participant prior to the Participant ceasing to be an Eligible Person, all Options and Tandem SARs of such Participant shall become immediately vested.

12.4 Term of Restricted Stock Units. Unless otherwise determined by the Compensation Committee:

- (a) in the event a Participant ceases to be an Eligible Person due to death or retirement, any then outstanding Restricted Stock Units that have not become

vested and settled prior to the Participant ceasing to be an Eligible Person shall immediately vest and be settled as soon as reasonably practicable after the date that such Participant ceases to be an Eligible Person;

- (b) in the event a Participant ceases to be an Eligible Person due to resignation, any then outstanding Restricted Stock Units that have not become vested and settled prior to the Participant ceasing to be an Eligible Person shall immediately be forfeited and cancelled; and
- (c) in the event a Participant ceases to be an Eligible Person due to disability or termination without cause, any then outstanding Restricted Stock Units that have not become vested and settled prior to the Participant ceasing to be an Eligible Person shall vest and be settled at the discretion of the Compensation Committee.

12.5 Termination of a Participant for Cause. Notwithstanding any other provision hereof or in any Award Agreement, in the case of a Participant's termination for cause, any and all then outstanding Awards granted to the Participant, whether or not vested, shall be immediately forfeited and cancelled, without any consideration therefore, and any and all rights of such Participant with respect to and arising from this Plan shall terminate, as of the commencement of the date that notice of such termination is given, without regard to any period of reasonable notice or any salary continuance, unless otherwise determined by the Compensation Committee.

13. CHANGE IN STATUS

13.1 A change in the status, office, position or duties of a Participant from the status, office, position or duties held by such Participant on the date on which the Award was granted to such Participant will not result in the termination of the Award granted to such Participant provided that such Participant remains a director, officer, employee or Consultant of the Corporation or an Affiliate.

14. NON-TRANSFERABILITY OF AWARDS

14.1 Each Award Agreement will provide that the Award granted thereunder is not transferable or assignable and may be exercised or settled, as the case may be, only by the Participant or, in the event of the death of the Participant or the appointment of a committee or duly appointed attorney of the Participant or of the estate of the Participant on the grounds that the Participant is incapable, by reason of physical or mental infirmity, of managing their affairs, the Participant's legal representative or such committee or attorney, as the case may be (the "Legal Representative").

15. REPRESENTATIONS AND COVENANTS OF PARTICIPANTS

15.1 Each Award Agreement will contain representations and covenants of the Participant that:

- (a) the Participant is a director, officer, employee, or Consultant of the Corporation or an Affiliate or a person otherwise approved as an "Eligible Person" under this Plan by the Compensation Committee;

- (b) the Participant has not been induced to enter into such Award Agreement by the expectation of employment or continued employment with the Corporation or an Affiliate;
- (c) the Participant is aware that the grant of the Award and the issuance by the Corporation of Common Shares thereunder are exempt from the obligation under applicable securities laws to file a prospectus or other registration document qualifying the distribution of the Awards or the Common Shares to be distributed thereunder under any applicable securities laws;
- (d) upon each exercise or settlement of an Award, the Participant, or the Legal Representative of the Participant, as the case may be, will, if requested by the Corporation, represent and agree in writing that the person is, or the Participant was, a director, officer, employee or Consultant of the Corporation or an Affiliate or a person otherwise approved as an "Eligible Person" under this Plan by the Compensation Committee and has not been induced to purchase the Common Shares by expectation of employment or continued employment with the Corporation or an Affiliate, and that such person is not aware of any commission or other remuneration having been paid or given to others in respect of the trade in the Common Shares; and
- (e) if the Participant or the Legal Representative of the Participant exercises or settles the Award, the Participant or the Legal Representative, as the case may be, will prior to and upon any sale or disposition of any Common Shares received pursuant to the exercise or settlement of the Award, comply with all applicable securities laws and all applicable rules and regulations of all regulatory authorities to which the Corporation is subject, including the Stock Exchange, and will not offer, sell or deliver any of such Common Shares, directly or indirectly, in the United States or to any citizen or resident of, or any Corporation, partnership or other entity created or organized in or under the laws of, the United States, or any estate or trust the income of which is subject to United States federal income taxation regardless of its source, except in compliance with the securities laws of the United States.

16. PROVISIONS RELATED TO SHARE ISSUANCES

16.1 Each Award Agreement will contain such provisions as in the opinion of the Compensation Committee are required to ensure that no Common Shares are issued on the exercise or settlement of an Award unless the Compensation Committee is satisfied that the issuance of such Common Shares will be exempt from all registration or qualification requirements of applicable securities laws and will be permitted under the applicable rules and regulations of all regulatory authorities to which the Corporation is subject, including the Stock Exchange. In particular, if required by any regulatory authority to which the Corporation is

subject, including the Stock Exchange, an Award Agreement may provide that shareholder approval to the grant of an Award must be obtained prior to the exercise or settlement of the Award or to the amendment of the Award Agreement.

17. WITHHOLDING TAX

17.1 The Participant will be solely responsible for paying any applicable withholding taxes arising from the grant, vesting, exercise or settlement of any Award and payment is to be made in a manner satisfactory to the Corporation. Notwithstanding the foregoing, the Corporation will have the right to withhold from any Award or any Common Shares issuable pursuant to an Award or from any cash amounts otherwise due or to become due from the Corporation to the Participant, an amount equal to any such taxes.

18. EXERCISE AND SETTLEMENT OF AWARDS DURING BLACKOUT PERIODS

18.1 Adjustment for Exercise of Awards during Blackout Periods. Where the expiry date of an Option or Tandem SAR occurs during a Blackout Period 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.

18.2 Extension for Settlement during Blackout Periods. Where the date for the settlement of Restricted Stock Units or the payment of a Settlement Amount occurs during a Blackout Period, the Corporation 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.

19. SUSPENSION, AMENDMENT OR TERMINATION OF PLAN

19.1 Suspension, Amendment or Termination of Plan. This Plan will terminate on the tenth anniversary of the Effective Date. The Compensation Committee will have the right at any time to suspend, amend or terminate this Plan and, subject to Section 19.2, may:

- (a) with approval of shareholders of the Corporation by ordinary resolution make any amendment to any Award Agreement or the Plan; and
- (b) without approval of shareholders of the Corporation make the following amendments to any Award Agreement or the Plan:
 - (i) amendments of a clerical nature, including but not limited to the correction of grammatical or typographical errors or clarification of terms;
 - (ii) amendments to reflect any requirements of any regulatory authorities to which the Corporation is subject, including the Stock Exchange;
 - (iii) subject to the terms and conditions of the Plan, amendments to vesting provisions of Award Agreements;

- (iv) extend the term of Options and Tandem SARs held by non-Insiders of the Corporation;
- (v) reduce the Exercise Price per Common Share under any Option held by non-Insiders of the Corporation or replace such Option with a lower Exercise Price per Common Share under such replacement Option; and
- (vi) amendments which provide cashless exercise features to an Option that require the full deduction of the number of underlying Common Shares from the total number of Common Shares subject to the Plan.

Notwithstanding the foregoing, all procedures and necessary approvals required under the applicable rules and regulations of all regulatory authorities to which the Corporation is subject shall be complied with and obtained in connection with any such suspension, termination or amendment to the Plan or amendments to any Award Agreement.

19.2 Limitations. In exercising its rights pursuant to Section 19.1, the Compensation Committee will not have the right to:

- (a) without the prior approval of shareholders and except as permitted pursuant to Article 20, (i) extend the term of an Option or Tandem SAR held by an Insider of the Corporation; or (ii) reduce the Exercise Price per Common Share under any Option held by an Insider of the Corporation; or (iii) cancel any Option held by an Insider and replace such Option within three months;
- (b) affect in a manner that is adverse or prejudicial to, or that impairs, the benefits and rights of any Participant under any Award previously granted under this Plan (except as permitted pursuant to Article 20 and except for the purpose of complying with applicable securities laws or the bylaws, rules and regulations of any regulatory authority to which the Corporation is subject, including the Stock Exchange);
- (c) decrease the number of Common Shares which may be purchased pursuant to any Option (except as permitted pursuant to Article 20) without the consent of such Participant;
- (d) set the Exercise Price of any Option below the Fair Market Value of such Option on the date of grant;
- (e) increase the Exercise Price at which Common Shares may be purchased pursuant to any Option (except as permitted pursuant to Article 20) without the consent of such Participant;
- (f) extend the term of any Option beyond a period of ten years or the latest date permitted under the applicable rules and regulations of all regulatory authorities to which the Corporation is subject, including the Stock Exchange;
- (g) grant any Award if this Plan is suspended or has been terminated; or

- (h) change or adjust any outstanding U.S. Qualified Incentive Stock Option without the consent of the Participant if such change or adjustment would constitute a “modification” that would cause such U.S. Qualified Incentive Stock Option to fail to continue to qualify as a U.S. Qualified Incentive Stock Option.

19.3 Powers of Compensation Committee Survive Termination. The full powers of the Compensation Committee as provided for in this Plan will survive the termination of this Plan until all Awards have been exercised or settled in full or have otherwise expired.

20. ADJUSTMENTS

20.1 Adjustments. Appropriate adjustments in the number of Common Shares subject to this Plan, as regards Awards granted or to be granted, in the Option Exercise Price of an Option, in the number of Common Shares to be issued or cash payments to be made in respect of the settlement of any Award, or any other matter of will be conclusively determined by the Compensation Committee to give effect to adjustments in the number of Common Shares resulting from subdivisions, consolidations, substitutions, or reclassifications of the Common Shares, the payment of stock dividends by the Corporation (other than dividends in the ordinary course) or other relevant changes in the capital of the Corporation or from a proposed merger, amalgamation or other corporate arrangement or reorganization involving the exchange or replacement of Common Shares of the Corporation for those in another corporation. Any dispute that arises at any time with respect to any such adjustment will be conclusively determined by the Compensation Committee, and any such determination will be binding on the Corporation, the Participant and all other affected parties.

20.2 Merger and Acquisition Transaction. In the event of a Merger and Acquisition Transaction or proposed Merger and Acquisition Transaction, the Compensation Committee, at its option, may do any of the following:

- (a) the Compensation Committee may, in a fair and equitable manner, determine the manner in which all unexercised Options or unsettled Awards granted under this Plan will be treated including, without limitation, requiring the acceleration of the time for the exercise or settlement of Awards by the Participants, the time for the fulfilment of any conditions or restrictions on such exercise or settlement, and the time for the expiry of such rights; or
- (b) the Compensation Committee or any corporation which is or would be the successor to the Corporation or which may issue securities in exchange for Common Shares upon the Merger and Acquisition Transaction becoming effective may offer any Participant the opportunity to obtain a new or replacement awards over any securities into which the Common Shares are changed or are convertible or exchangeable, on a basis proportionate to the number of Common Shares under Award, including Exercise Price, as applicable (and otherwise substantially upon the terms of the Award being replaced, or upon terms no less favourable to the Participant) including, without limitation, the periods during which the Award may be exercised or settled and expiry dates of such Awards; and in such event, the Participant shall, if he accepts such offer, be deemed to have released his Award over the Common Shares and such Award shall be deemed to have lapsed and be cancelled; or

- (c) the Compensation Committee may commute for or into any other security or any other property or cash, any Award that is still capable of being exercised or settled, upon giving to the Participant to whom such Award has been granted at least 30 days written notice of its intention to commute such Award, and during such period of notice, the Award, to the extent it has not been exercised or settled, may be exercised or settled by the Participant without regard to any vesting conditions attached thereto; and on the expiry of such period of notice, the unexercised or unsettled portion of the Award shall lapse and be cancelled.

Section 20.1 and subsections (a), (b) and (c) of this Section 20.2 are intended to be permissive and may be utilized independently or successively in combination or otherwise, and nothing therein contained shall be construed as limiting or affecting the ability of the Compensation Committee to deal with Awards in any other manner. All determinations by the Compensation Committee under this Section will be final, binding and conclusive for all purposes.

20.3 Limitations. The grant of Awards under this Plan will in no way affect the Corporation's right to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, amalgamate, reorganize, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets or engage in any like transaction.

20.4 No Fractional Shares. No adjustment or substitution provided for in this Article 20 will require the Corporation to issue a fractional share in respect of any Award and the total substitution or adjustment with respect to each Award will be limited accordingly.

21. GENERAL

21.1 No Rights as Shareholder. Nothing herein or otherwise shall be construed so as to confer on any Participant any rights as a shareholder of the Corporation with respect to any Common Shares reserved for the purpose of any Award.

21.2 No Effect on Employment. Nothing in this Plan or any Award Agreement will confer upon any Participant any right to continue in the employ of or under contract with the Corporation or an Affiliate or affect in any way the right of the Corporation or any such Affiliate to terminate his or her employment at any time or terminate his or her consulting contract; nor will anything in this Plan or any Award Agreement be deemed or construed to constitute an agreement, or an expression of intent, on the part of the Corporation or any such Affiliate to extend the employment of any Participant beyond the time that he or she would normally be retired pursuant to the provisions of any present or future retirement plan of the Corporation or an Affiliate or any present or future retirement policy of the Corporation or an Affiliate, or beyond the time at which he or she would otherwise be retired pursuant to the provisions of any contract of employment with the Corporation or an Affiliate. Neither any period of notice nor any payment in lieu thereof upon termination of employment shall be considered as extending the period of employment for the purposes of the Plan.

21.3 No Fettering of Directors' Discretion. Nothing contained in this Plan will restrict or limit or be deemed to restrict or limit the right or power of the Board of Directors in connection with any allotment and issuance of Common Shares which are not allotted and issued under this Plan including, without limitation, with respect to other compensation arrangements.

21.4 Applicable Law. The Plan and any Award Agreement granted hereunder will be governed, construed and administered in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein.

21.5 Interpretation. References herein to any gender include all genders and to the plural includes the singular and vice versa. The division of this Plan into Sections and Articles and the insertion of headings are for convenience of reference only and will not affect the construction or interpretation of this Plan.

21.6 Reference. This Plan may be referred to as the "Tekmira 2011 Share Compensation Plan".

**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, 2012

/s/ Mark J. Murray

Name: Mark J. Murray

Title: President and Chief Executive Officer

**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, 2012

/s/ Ian C. Mortimer

Name: Ian C. Mortimer

Title: Executive Vice President, Finance and
Chief Financial Officer

**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, 2011, 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, 2012

/s/ Mark J. Murray

Name: Mark J. Murray

Title: President and Chief Executive Officer

**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, 2011, 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, 2012

/s/ Ian C. Mortimer

Name: Ian C. Mortimer

Title: Executive Vice President, Finance and
Chief Financial Officer



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. 333-169311) on Form F-10 of Tekmira Pharmaceuticals Corporation of our report dated March 27, 2012, with respect to the consolidated balance sheets of Tekmira Pharmaceuticals Corporation as at December 31, 2011 and December 31, 2010, and the related consolidated statements of operations and comprehensive loss, stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2011, which report appears in the December 31, 2011 annual report on Form 20-F of Tekmira Pharmaceuticals Corporation.

/s/ KPMG LLP

Chartered Accountants

March 27, 2012

Vancouver, Canada

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. KPMG Canada provides services to KPMG LLP.