

2012 Annual Report

### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND OPERATIONS

March 27, 2013 / This management discussion and analysis (MD&A) for the year ended December 31, 2012 should be read in conjunction with the audited consolidated financial statements and related notes for the year ended December 31, 2012. We have prepared this MD&A with reference to National Instrument 51-102 "Continuous Disclosure Obligations" of the Canadian Securities Administrators. Under the United States/Canada Multijurisdictional Disclosure System, we are permitted to prepare this MD&A in accordance with the disclosure requirements of Canada, which are different from those of the United States. This MD&A and our consolidated financial statements are prepared in accordance with generally accepted accounting principles used in the United States of America (U.S. GAAP). All amounts are expressed in Canadian dollars unless otherwise indicated. Unless the context otherwise requires, all references to "Tekmira," the "Company," "we," "us," and "our" refer to Tekmira Pharmaceuticals Corporation, including all of its subsidiaries. Additional information relating to Tekmira, including the Company's December 31, 2012 Form 20-F is available at the SEDAR website at www.sedar.com or the EDGAR website at www.sec.gov/edgar.

# FORWARD-LOOKING STATEMENTS

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

With respect to the forward-looking statements contained in this MD&A, Tekmira has made numerous assumptions regarding, among other things: LNP's status as a leading RNAi delivery technology; the effectiveness of Tekmira's products as a treatment for cancer, infectious disease, or other diseases; the developmental milestones and approvals required to trigger funding for TKM-Ebola from the TMT program; results in preclinical models are indicative of the potential effect in humans; Tekmira's research and development capabilities and resources; FDA approval with respect to commencing clinical trials; the timing and obtaining of

regulatory approvals for Tekmira's products; the timing and results of clinical data releases and use of LNP technology by Tekmira's development partners and licensees; the time required to complete research and product development activities; the timing and quantum of payments to be received under contracts with Tekmira's partners including Alnylam, Talon, the DoD, and others; Tekmira's financial position and its ability to execute on its business strategy; and Tekmira's ability to protect its intellectual property rights and not to infringe on the intellectual property rights of others. While Tekmira considers these assumptions to be reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Additionally, there are known and unknown risk factors which could cause Tekmira's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, among others: expected payments related to the settlement and licensing agreement between Tekmira and Alnylam may not be received in the quantum and on the timing currently anticipated, or at all; payments received from third parties may not be sufficient to fund Tekmira's continued business plan as currently anticipated; TKM-PLK1 may never enter into Phase 2 clinical trials; Tekmira may never receive milestones or royalty payments from Alnylam; Tekmira may not receive any additional non-exclusive licenses from Alnylam; the possibility that Tekmira does not enter into a separate cross license agreement with AlCana on the terms currently anticipated, or at all; Tekmira's ability to obtain and protect intellectual property rights, and operate without infringing on the intellectual property rights of others; Tekmira's research and development capabilities and resources will not meet current or expected demand; Tekmira's development partners and licensees conducting clinical trial, development programs and joint venture strategic alliances will not result in expected results on a timely basis, or at all; anticipated payments under contracts with Tekmira's collaborative partners may not be received by Tekmira on a timely basis, or at all, or in the quantum expected by Tekmira; Tekmira's products may not prove to be effective in the treatment of cancer and infectious disease or other diseases; the possibility that other organizations have made advancements in RNAi delivery technology that Tekmira is not aware of; the FDA will not approve the commencement of Tekmira's planned clinical trials or approve the use of Tekmira's products and generally, difficulties or delays in the progress, timing and results of clinical trials; the FDA may determine that the design and planned analysis of Tekmira's clinical trials do not adequately address the trial objectives in support of Tekmira's regulatory submissions; future operating results are uncertain and likely to fluctuate; competition from other pharmaceutical or biotechnology companies; Tekmira's ability to raise additional financing required to fund further research and development, clinical studies, and obtain regulatory approvals, on commercially acceptable terms or at all; economic and capital market conditions; a Phase 3 or pivotal trial for ALN-TTR02 may not start as currently anticipated, or at all; clinical trials for ALN-VSP may not commence as anticipated, or at all; anticipated payments under contracts with Tekmira's collaborative partners including the U.S. Government, Alnylam, and Talon will not be received by Tekmira on a timely basis, or at all, or in the quantum expected by Tekmira; the U.S. Government may reduce or cancel certain defense spending, including Tekmira's contract to develop TKM-Ebola; FDA may decide that TKM-Ebola "Animal Rule" data is insufficient for approval and require additional pre-clinical, clinical or other studies, refuse to approve TKM-Ebola, or place restrictions on our ability to commercialize TKM-Ebola; the release of data from the TKM-Ebola and TKM-PLK1 Phase 1 human clinical trials may not occur in the expected timeframe, or at all; the DoD may not accept the modification request to the existing TKM-Ebola to integrate recent advancements in LNP formulation and manufacturing technology; we may not complete the work necessary for the submission of the new LNP formulation to the FDA in the anticipated timeframe, or at all; we may not initiate a new TKM-Ebola Phase 1 clinical trial in the anticipated timeframe, or at all; UNAs may not have the effect of increasing stability or reducing off-target effects when incorporated into RNAi drugs; Tekmira may never develop a commercially viable product that uses UNA technology, or at all; pre-clinical and clinical trials may be more costly or take longer to complete than anticipated; pre-clinical or clinical trials may not generate results that warrant future development of the tested drug candidate; Tekmira's products may not prove to be effective in the treatment of cancer or infectious disease or other diseases; Tekmira may become subject to product liability or other legal claims for which Tekmira has made no accrual in its financial statements; Tekmira's cash runway may not extend as far as anticipated, and may be substantially less than required to continue current operations; and the possibility that Tekmira has not sufficiently budgeted for expenditures necessary to carry out planned activities.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's Annual Report on Form 20-F for the year ended December 31, 2012, which is available at www.sedar.com or at www.sec.gov/edgar. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira

disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

#### **OVERVIEW**

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

# Technology, product development and licensing agreements

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

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

#### **Internal Product Candidates**

# TKM-PLK1

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

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

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

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

# TKM-Ebola

For many years, the Zaire species of Ebola virus (ZEBOV) has been associated with periodic outbreaks of

hemorrhagic fever in human populations with mortality rates reaching 90%. There are no approved treatments for Ebola or other hemorrhagic fever viruses.

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

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

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

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

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

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

#### Other Preclinical Candidates

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

# Alnylam settlement and license agreement

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

agreement with AlCana.

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

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

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

#### **ALN-TTR**

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

# ALN-VSP

In April 2009, Alnylam announced that they had initiated a Phase 1 human clinical trial for ALN-VSP. ALN-VSP is being developed as a treatment for advanced solid tumors with liver involvement. ALN-VSP comprises siRNA molecules delivered systemically using our LNP technology. The initiation of the ALN-VSP Phase 1 clinical trial triggered a milestone payment of \$0.6 million (US\$0.5 million) which we received in May 2009. In June 2011,

Alnylam presented Phase 1 human clinical trial data at American Society of Clinical Oncology (ASCO) meeting and disclosed that ALN-VSP was generally well tolerated, demonstrated evidence for anti-tumor activity, and was found to mediate RNAi activity in both hepatic and extra-hepatic tumors. The most recent ALN-VSP data were presented at the American Society of Clinical Oncology (ASCO) meeting in June 2012. Alnylam disclosed that, overall, the results demonstrated disease control lasting more than six months in the majority of patients treated on the extension study, including a complete response (CR) in an endometrial cancer patient who had multiple liver metastases. In this study, chronic dosing of up to 23 months with ALN-VSP was found to be generally safe and well tolerated. In July 2012, Alnylam disclosed that it has formed a strategic alliance with Ascletis Pharmaceuticals (Hangzhou) Co., Ltd., a privately held US-China joint venture pharmaceutical company, to develop and commercialize ALN-VSP in China, including Hong Kong, Macau, and Taiwan. Tekmira is entitled to receive a US\$5 million milestone payment to enable ALN-VSP to enter clinical trials in China, which is expected to occur in 2013. Tekmira will also receive royalty payments based on commercial sales of ALN-VSP.

#### **ALN-PCS**

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

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

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

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

# License agreement with Marina Biotech, Inc.

On November 29, 2012, we disclosed that we had obtained a worldwide, non-exclusive license to a novel RNAi payload technology called Unlocked Nucleobase Analog (UNA) from Marina for the development of RNAi therapeutics. UNAs can be incorporated into RNAi drugs and have the potential to improve them by increasing their stability and reducing off-target effects. Marina will receive an upfront payment plus milestone and royalty payments on products developed by Tekmira that use UNA technology. Financial terms of the license agreement were not disclosed.

In December 2012, we paid Marina an up-front license fee of \$0.3 million. We expect to pay Marina a further license fee of US\$0.2 million in Q2 2013 and there are milestones of up to US\$3.2 million plus royalties for each product that we develop using UNA technology licensed from Marina.

# Roche product development and research agreements

On May 11, 2009 we announced a product development agreement with Roche (Roche Product Development Agreement) that provided for product development up to the filing of an IND by Roche. Under the Roche Product Development Agreement, Roche was paying 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 IP from Roche.

# Merck & Co., Inc. (Merck) license agreement

As a result of the business combination with Protiva we acquired 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 royalties on product sales. Merck has also granted a license to the Company to certain 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 Company (BMS) research agreement

On May 10, 2010 we announced the expansion of our research collaboration with BMS. Under the new agreement, BMS will use siRNA molecules formulated by us in LNPs to silence target genes of interest. BMS will conduct the preclinical work to validate the function of certain genes and share the data with us. We can use the preclinical data to develop RNAi therapeutic drugs against the therapeutic targets of interest. BMS paid us US\$3.0 million concurrent with the signing of the agreement. We are required to provide a predetermined number of LNP batches over the four-year agreement. BMS will have a first right to negotiate a licensing agreement on certain RNAi products developed by us that evolve from BMS 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. Recognition of revenue from agreements with BMS is covered in the Revenue section of this MD&A.

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

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

# Legacy Agreements

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

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

Marqibo is a proprietary sphingosomal formulation of the widely used, off-patent cancer chemotherapeutic vincristine. The FDA has granted Talon orphan drug and fast track designations for the use of Marqibo in adult acute lymphoblastic leukemia (ALL). In August 2007, Talon initiated a Phase 2 Marqibo registration-enabling

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clinical trial in relapsed ALL. On July 18, 2011, Talon announced that its New Drug Application (NDA) for Marqibo had been submitted to the FDA seeking approval for the treatment of adult Philadelphia chromosomenegative ALL in second or greater relapse or that has progressed following two or more lines of anti-leukemia therapy. On August 9, 2012, Talon announced that Marqibo® (vinCRIStine sulfate LIPOSOME injection) had received accelerated approval from the U.S. Food and Drug Administration (FDA) for the treatment of adult patients with Philadelphia chromosome negative (Ph-) acute lymphoblastic leukemia (ALL) in second or greater relapse or whose disease has progressed following two or more anti-leukemia therapies. Talon is responsible for all future development of Marqibo. In 2012, we received a US\$1.0 million milestone payment based on the FDA approval of Marqibo and will receive royalty payments based on Marqibo's commercial sales.

# **Aradigm Corporation license agreement**

On December 8, 2004, we entered into a licensing agreement with Aradigm Corporation under which Aradigm exclusively licensed certain of our liposomal intellectual property. Under this agreement, we are entitled to milestone payments totaling US\$4.75 million for each disease indication, to a maximum of two, pursued by Aradigm using our technology. In addition, we are entitled to royalties on any product revenue.

# CRITICAL ACCOUNTING POLICIES AND ESTIMATES

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

Revenue Recognition / Our primary sources of revenue have been derived from research and development collaborations and contracts, and licensing fees comprised of initial fees and milestone payments. Payments received under research and development agreements and contracts, which are non-refundable, are recorded as revenue as services are performed and as the related expenditures are incurred pursuant to the agreement, provided collectability is reasonably assured. Revenue earned under research and development manufacturing collaborations where we bear some or all of the risk of a product manufacture failure is recognized when the purchaser accepts the product and there are no remaining rights of return. Revenue earned under research and development collaborations and contracts where we do not bear any risk of product manufacture failure is recognized in the period the work is performed. Initial fees and milestone payments which require our ongoing involvement are deferred and amortized into income over the estimated period of our involvement as we fulfill our obligations under our agreements. Revenue earned under contractual arrangements upon the occurrence of specified milestones is recognized as the milestones are achieved and collection is reasonably assured.

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

Our U.S. Government contract for TKM-Ebola is based on cost reimbursement plus an incentive fee. At the beginning of our fiscal year we estimate our labour and overhead rates for the year ahead. At the end of the year we calculate our actual labour and overhead rates and adjust our revenue accordingly. Our actual labour and overhead rates will differ from our estimate based on actual costs incurred and the proportion of our efforts on contracts and internal products versus indirect activities. Within minimum and maximum collars, the amount of incentive fee we can earn under the U.S. Government contract varies based on our costs incurred versus budgeted

costs. We need to make an estimate of our final contract costs in order to calculate the final incentive fee we will receive. Until we are able to make a reliable estimate of the final contract costs, we recognize only the minimum incentive fee achievable and earned.

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

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

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

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

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

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

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

#### RECENT ACCOUNTING PRONOUNCEMENTS

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

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

In June 2011, the FASB issued ASU No. 2011-05, Comprehensive Income (Topic 220): Presentation of

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

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

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

# SUMMARY OF QUARTERLY RESULTS

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

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

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

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

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

In Q3 2010 we signed a contract with the U.S. Government to develop TKM-Ebola and have since incurred significant program costs related to equipment, materials and preclinical and clinical studies. These costs are included in our research, development, collaborations and contracts expenses. These third-party costs are being reimbursed by the U.S. Government so they are also recorded as revenue. U.S. Government revenue from the TKM-Ebola program also includes labour, overheads and incentive fee charges. Third-party costs were lower in Q3 2011 as we focused on preparing to file the IND for TKM-Ebola. Costs were higher in Q1 2012 as our Phase 1 clinical trial for TKM-Ebola was initiated during the quarter. Also in Q1 2012, we began to acquire materials for continued work on scaling up our TKM-Ebola drug product manufacturing process. Revenues were lower in Q3 2012 due to a temporary stop-work order issued by the U.S. Government in August 2012. The stop-work order was subsequently lifted on October 2, 2012 and the contract has resumed.

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

In Q3 2012 we earned a \$1.0 million milestone from Talon when they received accelerated approval for

Marqibo® from the U.S. Food and Drug Administration (FDA). We are eligible to receive royalty payments based on Marqibo's commercial sales.

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

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

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

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

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

Other income in Q4 2012 is primarily \$65.0 million received under the new Alnylam license agreement net of related contingent legal fees of \$18.7 million paid to our lead litigation counsel (see Overview for further discussion of the lawsuit).

# SELECTED ANNUAL FINANCIAL INFORMATION

The following is selected financial information for our 2012, 2011 and 2010 fiscal years:

(in millions of Cdn\$ except per share data)	2012	2011	2010
m . 1	<b>A. 4.4</b>	<b>A</b> 100	Φ 21.4
Total revenue	<b>\$ 14.1</b>	\$ 16.6	\$ 21.4
Research, development, collaborations and contracts expenses	18.0	19.9	22.1
General and administrative expenses	8.1	6.3	4.8
Depreciation of property and equipment	0.9	1.0	1.0
Loss on purchase and settlement of			
exchangeable and development notes	-	-	6.0
Other income (losses)	42.7	0.6	0.1
Net income (loss)	29.8	(9.9)	(12.4)
Basic income (loss) per share	2.17	(0.88)	(1.20)
Diluted income (loss) per share	2.08	(0.88)	(1.20)
Total assets	52.3	14.0	21.0
Total liabilities	11.6	8.7	10.3
Total non-current liabilities	0.7	1.7	2.2
Deficit	(229.1)	(258.8)	(248.9)
Total stockholders' equity	\$ 40.7	\$ 5.3	\$ 10.7

# RESULTS OF OPERATIONS

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

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

**Revenue** / Revenue is detailed in the following table:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Other income (losses) / Licensing settlement payment / In November 2012 we received \$65.0 million (US\$65.0 million) in cash from Alnylam as a result of signing a new license agreement (see Overview for further discussion of the settlement and license agreement with Alnylam).

Other income (losses) / Licensing settlement legal fees / In connection with the licensing settlement payment of \$65.0 million, in December 2012, we paid our lead legal counsel \$18.7 million in contingent legal fees (see Overview for further discussion of the settlement and license agreement with Alnylam).

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

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

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

# RESULTS OF OPERATIONS

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

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

**Revenue** / Revenue is detailed in the following table:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**General and administrative** / General and administrative expenses were \$6.3 million in 2011 as compared to \$4.8 million in 2010. The increase in 2011 largely relates to legal fees incurred in respect of our lawsuit with Alnylam and AlCana (see Overview for further discussion of the lawsuit).

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

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

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

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

# LIQUIDITY AND CAPITAL RESOURCES

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

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

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

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

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

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

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

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

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

#### **Contractual obligations**

Our laboratory and office premises operating lease expires in July 2014 but we have the option to extend the lease to 2017 and then to 2022 and then to 2027. The lease includes a signing incentive payment. In accordance with our accounting policy the signing incentive payment is being amortized on a straight-line basis over the term of

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the lease.

The following table summarises our contractual obligations:

(in millions Cdn\$)		Payme			
Contractual Obligations	Total	Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Facility lease	2.0	1.3	0.7	-	-
Technology license obligations <sup>1</sup>	2.0	2.0	-	-	-
Total contractual obligations	4.0	3.3	0.7	-	-

<sup>&</sup>lt;sup>1</sup>Relates to our expected fixed payment obligations under in-license agreements.

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

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

# **Off-Balance Sheet arrangements**

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

#### RELATED PARTY TRANSACTIONS

We have not entered into any related party transactions in the periods covered by this discussion.

# **OUTSTANDING SHARE DATA**

As of February 28, 2013, we had 14,362,714 common shares issued and outstanding, options to purchase an additional 1,939,045 common shares, unissued options to purchase an additional 421,438 common shares and warrants to purchase an additional 1,528,411 common shares.

### RISKS AND UNCERTAINTIES

Our risks and uncertainties are discussed in further detail in our Form 20-F dated December 31, 2012 which can be found at www.sedar.com or at www.sec.gov/edgar.

At December 31, 2012 we had cash and cash equivalents of approximately \$46.8 million. We believe our current funds on hand, plus expected income, including payments from our licensees, collaborative partners and the U.S. Government will be sufficient to continue our product development into 2015. Substantial additional funds will be required to continue with the active development of our pipeline products and technologies. In particular, our funding needs may vary depending on a number of factors including:

- revenues earned from our U.S. Government contract to develop TKM-Ebola;
- revenues earned from our collaborative partnerships, including milestone payments from Alnylam and royalties from sales of Marqibo from Talon;
- the extent to which we continue the development of our product candidates, add new product candidates to our pipeline, 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.

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.

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

# DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Our Chief Executive Officer and the Chief Financial Officer have evaluated the effectiveness of our disclosure controls and procedures for the year ending December 31, 2012 and have concluded that our disclosure controls and procedures are effective.

Our Chief Executive Officer and the Chief Financial Officer are also responsible for the design and effectiveness of internal controls over financial reporting within the Company in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. They have evaluated our internal controls and procedures over financial reporting as of the end of the period covered by the annual filings and concluded they are effective. They also concluded that there were no changes in internal controls during 2012 that materially affected the Company's internal control over financial reporting and disclosure controls and procedures.

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Consolidated Financial Statements (expressed in Canadian dollars)

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

December 31, 2012

# MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

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

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

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

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

/s/ Mark J. Murray

/s/ Ian C. Mortimer

Ian C. Mortimer

Dr. Mark J. Murray
President and

Executive Vice President, Finance and

Chief Executive Officer

Chief Financial Officer

March 27, 2013



KPMG LLP Chartered Accountants PO Box 10426 777 Dunsmuir Street Vancouver BC V7Y 1K3 Telephone (604) 691-3000 Fax (604) 691-3031 Internet www.kpmg.ca

# INDEPENDENT AUDITORS' REPORT

To the Shareholders and Board of Directors

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

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with US generally accepted accounting principles, 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 but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

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



# Opinion

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

# **KPMG LLP (signed)**

Chartered Accountants March 27, 2013 Vancouver, Canada

# **Consolidated Balance Sheets**

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

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

Nature of business and future operations (note 1)

Contingencies and commitments (note 9)

Consolidated Statements of Operations and Comprehensive Income (Loss )  $\,$ 

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	Year ended December 31					
	2	2012	2	2011		2010
Revenue (note 3)						
Collaborations and contracts	\$ 12	,097,378	\$ 16	,122,843	\$ 1	4,923,860
Licensing fees and milestone payments	2	,010,100		524,100		514,129
License amendment payment (note 3(f))		-		-		5,916,750
Total revenue	14	,107,478	16	,646,943	2	1,354,739
Expenses						
Research, development, collaborations and contracts	18	,031,718	19	,898,969	2	2,133,983
General and administrative	8	,135,528	6	,312,487		4,780,745
Depreciation of property and equipment		865,041		975,512		1,038,573
Loss on purchase and settlement of						
exchangeable and development notes (note 3(f))		-		-		5,916,750
Total expenses	27	,032,287	27	,186,968	3	3,870,051
Loss from operations	(12	,924,809)	(10	,540,025)	(1	2,515,312)
2005 Hom operations	(12	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(10	,5 10,025)	(1	2,313,312)
Other income (losses)						
Interest income		138,231		124,852		106,957
Licensing settlement payment (note 3(b))	65	,039,000		-		-
Licensing settlement legal fees (note 3(b))	(18	,618,043)		-		_
Foreign exchange gains (losses)		24,839		(14,522)		(7,125)
Warrant issuance costs (note 6(a))		(47,000)		(80,000)		-
(Increase) decrease in fair value of warrant liability	(3	,819,170)		572,769		-
Net income (loss) and comprehensive income (loss)	\$ 29	,793,048	\$ (9	,936,926)	\$(1	2,415,480)
Income (loss) per common share (note 1)						
Basic	\$	2.17	\$	(0.88)	\$	(1.20)
Diluted	\$	2.08	\$	(0.88)	\$	(1.20)
Weighted average number of common shares (note 1)						
Basic	13	,727,925	11	,318,766	1	0,332,941
Diluted	14	,320,814	11	,318,766	1	0,332,941

# Consolidated Statement of Stockholders' Equity

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

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

# **Consolidated Statements of Cash Flow**

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

-	Year ended December 31					
		2012		2011		2010
OPERATING ACTIVITIES						
Income (loss) for the year	\$	29,793,048	\$	(9,936,926)	\$	(12,415,480)
Items not involving cash:						
Depreciation of property and equipment		865,041		975,512		1,038,573
Stock-based compensation expense		981,656		626,119		650,620
Foreign exchange (gains) losses						
arising on foreign currency cash balances		29,273		(20,095)		7,187
Warrant issuance costs		47,000		80,000		-
Change in fair value of warrant liability		3,819,170		(572,769)		-
Fair value of warrants issued in						
conjunction with debt facility		-		35,004		-
Net change in non-cash operating items:						
Accounts receivable		(188,744)		2,438,036		(2,265,834)
Accrued revenue		(2,176,480)		632,108		(817,464)
Deferred expenses		358,890		(230,855)		(557,256)
Investment tax credits receivable		321,207		72,548		(123,448)
Inventory		-		150,731		(150,731)
Prepaid expenses and other assets		96,778		(109,330)		(88,076)
Accounts payable and accrued liabilities		(196,264)		(2,179,372)		498,096
Deferred revenue		(652,019)		360,685		2,975,305
Net cash provided by (used in) operating activities		33,098,556		(7,678,604)		(11,248,508)
INVESTING ACTIVITIES						
Proceeds from sale of property and equipment		2,490		_		_
Acquisition of property and equipment		(14,824)		(59,675)		(830,948)
Net cash provided by (used in) investing activities		(12,334)		(59,675)		(830,948)
FINANCING ACTIVITIES						
Proceeds from issuance of common shares and						
warrants, net of issuance costs		3,841,516		4,545,647		
Issuance of common shares pursuant to		3,041,310		4,545,047		_
exercise of options		71,045		10,661		34,913
Issuance of common shares pursuant to		71,045		10,001		54,715
exercise of warrants		631,874				
Net cash provided by financing activities		4,544,435		4,556,308		34,913
		7,577,755		4,550,500		34,713
Foreign exchange gains (losses)		(20.252)		20.005		(7.197)
arising on foreign currency cash balances		(29,273)		20,095		(7,187)
Increase (decrease) in cash and cash equivalents		37,601,384		(3,161,876)		(12,051,730)
Cash and cash equivalents, beginning of period		9,184,134		12,346,010		24,397,740
Cash and cash equivalents, end of period	\$	46,785,518	\$	9,184,134	\$	12,346,010
Supplemental cash flow information					_	
Investment tax credits received	\$	321,207	\$	102,464	\$	36,613
Fair value of warrants issued in						
conjunction with public offering	\$	850,358	\$	742,809	\$	_
Fair value of warrants issued in						
conjunction with debt facility	\$	-	\$	35,004	\$	-

Notes to Consolidated financial statements (Expressed in Canadian dollars)

# 1. Nature of business and future operations

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

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

# 2. Significant accounting policies

# Basis of presentation

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

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

# Use of estimates

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

# Cash and cash equivalents

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

# Fair value of financial instruments

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

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

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

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

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

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

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

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

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

	Level 1	Level 2	Level 3	December 31, 2012
Assets				
Cash	\$ 44,148,562	-	-	\$ 44,148,562
Guaranteed Investment Certificates	2,636,956	-	-	2,636,956
Total	\$ 46,785,518	-	-	\$ 46,785,518
Liabilities				
Warrants	-	-	\$ 3,994,449	\$ 3,994,449
	Level 1	Level 2	Level 3	December 31, 2011
Assets				
Cash	\$ 1,556,253	-	-	\$ 1,556,253
Guaranteed Investment Certificates	7,627,881	-	-	7,627,881
Total	\$ 9,184,134	-	-	\$ 9,184,134
Liabilities				
Warrants	_	_	\$ 205,044	\$ 205,044

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

	Liability at beginning of the period	Opening liability of warrants issued in the period	Fair value of warrants exercised in the period	Increase (decrease) in value of warrants	Liability at end of the period
Year ended December 31, 2011	\$ -	\$ 777,813	\$ -	\$ (572,769)	\$ 205,044
Year ended December 31, 2012	\$ 205.044	\$ 850,358	\$ (880,123)	\$ 3,819,170	\$ 3,994,449

# Inventory

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

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

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# Property and equipment

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

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

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

# Intangible assets

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

# Impairment of long-lived assets

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

# Revenue recognition

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

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

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

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

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

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#### Leases and lease inducements

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

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

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

# Research and development costs

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

# Income or loss per share

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

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

	Year ended December 31		
	2012	2011	2010
Numerator:			_
Net income (loss)	\$ 29,793,048	\$ (9,936,926)	\$ (12,415,480)
Denominator:			_
Weighted average number of common shares	13,727,925	11,318,766	10,332,941
Effect of dilutive securities:			
Warrants	177,374	-	-
Options	415,515	-	-
Diluted weighted average number of common shares	14,320,814	11,318,766	10,332,941
Basic income (loss) per common share	\$ 2.17	\$ (0.88)	\$ (1.20)
Diluted income (loss) per common share	\$ 2.08	\$ (0.88)	\$ (1.20)

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

# Government grants and refundable investment tax credits

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

# Foreign currency translation

The functional currency of the Company is the Canadian dollar. For the Company and its integrated subsidiaries (Protiva Biotherapeutics Inc. and Protiva Biotherapeutics (USA), Inc.), foreign currency monetary assets and liabilities are translated into Canadian dollars at the rate of exchange prevailing at the balance sheet date. Non-monetary assets and liabilities are translated at historical exchange rates. The previous month's closing rate of

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exchange is used to translate revenue and expense transactions. Exchange gains and losses are included in income or loss for the period.

# Deferred income taxes

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

# Stock-based compensation

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

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

#### Warrants

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

# Segment information

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

# Recent accounting pronouncements

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

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

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

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

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

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

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# 3. Collaborations, contracts and licensing agreements

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

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

The following table sets forth deferred collaborations and contracts revenue:

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

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

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

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

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

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

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

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

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

# License and Collaboration Agreement with Alnylam through Tekmira

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

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

# Cross-License with Alnylam acquired through Protiva

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

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

# Manufacturing agreement with Alnylam

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

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

# Milestone payments

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

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

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

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

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

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

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

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

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

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

## (d) Roche collaboration

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

Under the Roche Product Development Agreement Roche was paying the Company for the provision of staff and for external costs incurred. The Company recognized revenue in proportion to the services provided up to the reporting date by comparing actual hours spent to estimated total hours for each product under the contract. Revenue from external costs incurred on Roche product candidates was recorded in the period that Roche was

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invoiced for those costs. The difference between service revenue recognized and cash received was recorded in the Company's balance sheet as deferred revenue.

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

## (e) Other RNAi collaborators

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

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

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

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

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

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

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

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

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

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## 4. Property and equipment

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

December 31, 2011	Cost	Accumulated depreciation and impairment	Net book value
•	ф. <b>7.</b> соо <b>2</b> 0 с	Φ (6.004.104)	ф <b>704 00</b> 2
Lab equipment	\$ 7,688,286	\$ (6,984,194)	\$ 704,092
Leasehold improvements	7,212,104	(5,976,916)	1,235,188
Computer and office equipment	3,120,072	(2,869,622)	250,450
Furniture and fixtures	664,029	(656,180)	7,849
	<b>0.10.604.401</b>	φ (1 c 40 c 01 <b>0</b> )	<b># 2 105 55</b> 0
	\$ 18,684,491	\$ (16,486,912)	\$ 2,197,579

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

## 5. Borrowing facility

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

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

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

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

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

## 6. Share capital

#### (a) Financing

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

Notes to Consolidated financial statements (Expressed in Canadian dollars)

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

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

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

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

## (b) Authorized share capital

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

## (c) Consolidation of common shares

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

## (d) Warrants to purchase common shares

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

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

	Common shares purchasable upon exercise of warrants	Weighted average exercise price	Range of exercise prices	Weighted average remaining contractual life (years)	Aggregate intrinsic value
Balance, December 31, 2010	040.405	ф 2 25	+ 1 <i>CE</i>	-	
Issued Balance, December 31, 2011	949,495 949,495	\$ 3.25 \$ 3.25	\$ 1.65 - \$ 3.35 \$ 1.65 - \$ 3.35	4.6	
Issued	924,302	\$ 2.60	\$ 2.60	1.0	
Exercised	(285,386)	\$ 2.53	\$ 1.65 - \$ 3.35		
Balance, December 31, 2012	1,588,411	\$ 3.00	\$ 2.60 - \$3.35	3.8	\$ 3,140,893

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

Notes to Consolidated financial statements (Expressed in Canadian dollars)

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

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

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

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

### (e) Stock-based compensation

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

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

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

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

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

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

Notes to Consolidated financial statements (Expressed in Canadian dollars)

## Stock option activity for the Company's 2007 Plan and 2011 Plan

	Number of	Weighted	Aggregate
	optioned	average	intrinsic
,	common shares	exercise price	value
Balance, December 31, 2009	865,628	\$ 10.10	\$ 705,885
Options granted	275,225	\$ 4.40	
Options exercised	(9,548)	\$ 3.63	\$ 29,320
Options forfeited, cancelled or expired	(47,873)	\$ 27.38	
Balance, December 31, 2010	1,083,432	\$ 7.95	\$ 756,628
Options granted	403,100	\$ 2.14	
Options exercised	(1,667)	\$ 1.50	\$ 1,330
Options forfeited, cancelled or expired	(71,547)	\$ 27.42	
Balance, December 31, 2011	1,413,318	\$ 5.32	\$ 1,800
Options granted	326,300	\$ 4.16	
Options exercised	(28,417)	\$ 2.34	\$ 81,545
Options forfeited, cancelled or expired	(62,355)	\$ 21.27	
Balance, December 31, 2012	1,648,846	\$ 4.54	\$ 2,299,512

Options under the 2007 Plan and 2011 Plan expire at various dates from December 5, 2013 to December 9, 2022.

The following table summarizes information pertaining to stock options outstanding at December 31, 2012 under the Company's 2007 Plan and 2011 Plan:

	Options outsta	nding December 3	31, 2012	Options exercisable Decem	ber 31, 2012
		Weighted			
		average	Weighted		Weighted
	Number	remaining	average	Number	average
Range of	of options	contractual	exercise	of options	exercise
Exercise prices	outstanding	life (years)	price	exercisable	price
\$1.50 to \$1.90	296,450	7.6	\$ 1.71	232,950	\$ 1.71
\$2.10 to \$2.60	316,000	8.8	2.30	241,375	2.37
\$3.00 to \$3.10	129,525	3.2	3.03	129,525	3.03
\$3.73 to \$3.85	176,550	7.1	3.85	142,688	3.85
\$4.60 to \$5.15	321,565	8.9	5.00	164,924	4.88
\$5.35 to \$5.60	270,041	4.8	5.56	270,040	5.56
\$5.90 to \$11.60	117,465	4.3	7.08	112,403	7.03
\$49.20 to \$69.00	21,250	0.9	58.00	21,250	58.00
\$1.50 to \$69.00	1,648,846	6.9	\$ 4.54	1,315,155	\$ 4.75

At December 31, 2012, there were 1,315,155 options exercisable (December 31, 2011 – 1,015,224; December 31, 2010 - 861,549) with a weighted average exercise price of \$4.75. The weighted average remaining contractual life of exercisable options as at December 31, 2012 was 6.3 years. The aggregate intrinsic value of options exercisable at December 31, 2012 was \$1,834,841.

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, 2012 is as follows:

	Number of	Weighted
	optioned	average
	common shares	fair value
Non-vested at December 31, 2011	398,094	\$ 2.51
Options granted	326,300	4.16
Options vested	(372,128)	2.88
Non-vested options forfeited	(18,575)	2.72
Non-vested at December 31, 2012	333,691	\$ 3.38

The weighted average remaining contractual life for options expected to vest at December 31, 2012 was 9.2 years and the weighted average exercise price for these options was \$3.69 per share.

The aggregate intrinsic value of options expected to vest as at December 31, 2012 was \$450,330 (December 31, 2011 - \$nil; December 31, 2010 - \$175,905).

The total fair value of options that vested during the year ended December 31, 2012 was \$1,071,548 (2011 - \$351,542; 2010 - \$468,105).

### Valuation assumptions for the Company's 2007 Plan and 2011 Plan

The fair value of stock options at date of grant, based on the following assumptions, was estimated using the Black-Scholes option-pricing model. Assumptions on the dividend yield are based on the fact that the Company has never paid cash dividends and has no present intention to pay cash dividends. Assumptions about the Company's expected stock-price volatility are based on the historical volatility of the Company's publicly traded stock. The risk-free interest rate used for each grant is equal to the zero coupon rate for instruments with a similar expected life. Expected life assumptions are based on the Company's historical data. The Company currently expects, based on an analysis of its historical forfeitures, that no options will be forfeited by senior employees and that approximately 94% of its options issued to non-senior employees will ultimately vest, and based on a three year vesting period has applied an annual forfeiture rate of 2.0% to all unvested options held by non-senior employees as of December 31, 2012. The Company will record additional expense if the actual forfeitures are lower than estimated and will record a recovery of prior expense if the actual forfeitures are higher than estimated. The weighted average option pricing assumptions and the resultant fair values are as follows:

	Year ended December 31			
	2012	2011	2010	
Dividend yield	0.00%	0.00%	0.00%	
Expected volatility	120.40%	116.26%	116.90%	
Risk-free interest rate	1.56%	2.51%	2.60%	
Expected average option term	8.2 years	9.6 years	6.6 years	
Fair value of options granted	\$ 3.83	\$ 2.00	\$ 3.82	

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 statement of operations and comprehensive income (loss) as follows:

	Year ended December 31			
	2012	2011	2010	
Research, development, collaborations				
and contracts expenses	\$ 771,869	\$ 494,634	\$ 533,508	
General and administrative expenses	209,787	131,485	117,112	
Total	\$ 981,656	\$ 626,119	\$ 650,620	

At December 31, 2012, there remains \$952,149 of unearned compensation expense related to unvested employee stock options to be recognized as expense over a weighted-average period of approximately 15 months.

## **Protiva Option Plan**

On May 30, 2008, as a condition of the acquisition of Protiva Biotherapeutics Inc., a total of 350,457 common shares of the Company were reserved for the exercise of 519,073 Protiva share options ("Protiva Options"). The Protiva Options have an exercise price of \$0.30, were fully vested and exercisable as of May 30, 2008, expire at various dates from January 22, 2013 to March 1, 2018 and upon exercise each option will be converted into approximately 0.6752 shares of the Company (the same ratio at which Protiva common shares were exchanged for Company common shares at completion of the acquisition of Protiva). The Protiva Options are not part of the Company's 2007 Plan or 2011 Plan and the Company is not permitted to grant any further Protiva Options.

The following table sets forth outstanding options under the Protiva Option Plan:

		Equivalent number	W. 1. 1
	Number of Protiva	of Company	Weighted average
-	Options	common shares	exercise price
Balance, December 31, 2009	519,073	350,457	\$ 0.30
Options exercised	(850)	(574)	0.30
Options forfeited, cancelled or expired	-	-	-
Balance, December 31, 2010	518,223	349,883	0.30
Options exercised	(27,202)	(18, 366)	0.30
Options forfeited, cancelled or expired	-	-	-
Balance, December 31, 2011	491,020	331,517	0.30
Options exercised	(15,135)	(10,218)	0.30
Options forfeited, cancelled or expired	-	-	-
Balance, December 31, 2012	475,885	321,299	\$ 0.30

The weighted average remaining contractual life of exercisable Protiva Options as at December 31, 2012 was 3.1 years.

The aggregate intrinsic value of Protiva Options outstanding at December 31, 2012 was \$1,457,269. The intrinsic value of Protiva Options exercised in the year ended December 31, 2012 was \$18,929 (2011 - \$42,615; 2010 - \$2,688).

Notes to Consolidated financial statements (Expressed in Canadian dollars)

## Awards outstanding and available for issuance

Combining all of the Company's share-based compensation plans, at December 31, 2012, the Company has 1,970,145 options outstanding and a further 422,688 Awards available for issuance.

## 7. Government grants and refundable investment tax credits

Government grants and refundable investment tax credits have been netted against research and development expenses.

Government grants for the year ended December 31, 2012 include \$nil in funding from the US Army Medical Research Institute for Infectious Diseases (2011 - \$nil; 2010 - \$191,194).

The Company's estimated claim for refundable Scientific Research and Experimental Development investment tax credits for the year ended December 31, 2012 is \$nil (2011 - \$20,905; 2010 - \$196,556).

#### 8. Income taxes

Income tax (recovery) expense varies from the amounts that would be computed by applying the combined Canadian federal and provincial income tax rate of 17.5% (year ended December 31, 2011 - 26.5%; December 31, 2010 - 28.5%) to the loss before income taxes as shown in the following tables:

	Year ended December 31			
		2012	2011	2010
Computed taxes (recoveries) at Canadian				
federal and provincial tax rates	\$	7,448,281 \$	(2,633,285) \$	(3,538,412)
Differences due to change in enacted tax rates		777,000	712,236	
Difference due to change in tax rate on opening deferred taxes		2,623,000	3,427,057	-
Permanent and other differences		2,191,116	143,992	1,409,918
Change in valuation allowance		(2,503,000)	(1,650,000)	2,880,000
Utilization of investment tax credits		(10,536,397)	-	-
Utilization of non-capital loss carryforwards		-	-	(751,506)
Income tax (recovery) expense	\$	- \$	- \$	-

As at December 31, 2012, the Company has investment tax credits available to reduce Canadian federal income taxes of \$5,861,202 (December 31, 2011 - \$11,093,450) and provincial income taxes of \$1,904,908 (December 31, 2011 - \$5,500,315) and expiring between 2013 and 2032.

At December 31, 2012, the Company has scientific research and experimental development expenditures of \$48,111,776 (December 31, 2011 - \$50,575,034) available for indefinite carry-forward and \$21,348,573 (December 31, 2011 - \$19,037,156) of net operating losses due to expire between 2027 and 2032 and which can be used to offset future taxable income in Canada.

On November 23, 2011, the Company was registered as a corporation under the Business Activity Act in the province of British Columbia. Under this program, provincial corporation tax charged on foreign income earned from the Company's patents will be eligible for a 75% tax refund up to a maximum of \$8,000,000.

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			
	-	2012	2011	
Deferred tax assets:				
Non-capital loss carryforwards	\$	4,538,000 \$	4,438,000	
Research and development deductions		8,540,000	9,295,000	
Book amortization in excess of tax		1,925,000	2,779,000	
Share issue costs		(26,000)	45,000	
Warrant liability		724,000	65,000	
Revenue recognized for tax purposes in excess of		,		
revenue recognized for accounting purposes		-	1,125,000	
Tax value in excess of accounting value in lease inducements		8,000	49,000	
Accounting value in excess of tax value in intangible assets		371,000	49,000	
Provincial investment tax credits		303,000	973,000	
Total deferred tax assets		16,383,000	18,818,000	
Valuation allowance		(16,383,000)	(18,818,000)	
Net deferred tax assets	\$	- \$	-	

### 9. Contingencies and commitments

## **Property lease**

Effective July 29, 2009 the Company signed an amendment to the operating lease for its laboratory and office premises. The amended lease expires in July 2014 but the Company has the option to extend the lease to 2017 and then to 2022 and then to 2027. The amended lease included a signing incentive payment. In accordance with the Company's accounting policy the signing incentive payment is being amortized on a straight-line basis over the term of the amended lease.

Following the lease amendment the minimum commitment for rent and estimated operating costs, are as follows:

	Lease
	commitment
Year ended December 31, 2013 Year ended December 31, 2014	\$ 1,285,000 750,000
	\$ 2,035,000

The Company's lease expense, net of sub-lease income, for the year ended December 31, 2012 of \$936,760 has been recorded in the consolidated statements of operations and comprehensive loss in research, development, collaborations and contracts and general and administrative expenses (2011 - \$933,528; 2010 - \$931,606).

The Company has netted \$171,923 of sub-lease income against lease expense in the year ended December 31, 2012 (year ended December 31, 2011 - \$194,281; 2010 - \$194,281).

The Company's sub-lease agreement ended in December 2012.

## Product development partnership with the Canadian Government

The Company entered into a Technology Partnerships Canada ("TPC") agreement with the Canadian Federal Government on November 12, 1999. Under this agreement, TPC agreed to fund 27% of the costs incurred by the Company, prior to March 31, 2004, in the development of certain oligonucleotide product candidates up to a

Notes to Consolidated financial statements (Expressed in Canadian dollars)

maximum contribution from TPC of \$9,329,912. As at December 31, 2012, a cumulative contribution of \$3,701,571 has been received and the Company does not expect any further funding under this agreement. In return for the funding provided by TPC, the Company agreed to pay royalties on the share of future licensing and product revenue, if any, that is received by the Company on certain non-siRNA oligonucleotide product candidates covered by the funding under the agreement. These royalties are payable until a certain cumulative payment amount is achieved or until a pre-specified date. In addition, until a cumulative amount equal to the funding actually received under the agreement has been paid to TPC, the Company agreed to pay low single digit percentage royalties on any royalties the Company receives for Marqibo. To December 31, 2012 the Company had not made any royalty payments to TPC.

## Contingently payable promissory notes

On March 25, 2008, Protiva declared dividends totaling US\$12,000,000. The dividends were paid by Protiva issuing promissory notes on May 23, 2008. Recourse against Protiva for payment of the promissory notes will be limited to Protiva's receipt, if any, of up to US\$12,000,000 in license payments from Merck (see note 3(g)). Protiva will pay these funds if and when it receives them, to the former Protiva shareholders in satisfaction of the promissory notes. As contingent items the US\$12,000,000 receivable and the related promissory notes payable are not recorded in the Company's consolidated balance sheet.

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

On August 24, 2011, the Company entered into a license and collaboration agreement with Halo-Bio. Under the agreement, Halo-Bio granted the Company an exclusive license to its multivalent ribonucleic acid ("MV-RNA") technology. The agreement provides for the companies to work together to design and develop MV-RNA molecules to gene targets of interest to the Company and to combine MV-RNA molecules with the Company's LNP technology to develop therapeutic products.

The Company paid Halo-Bio an initial license fee of \$97,940 (US\$100,000) and recorded this amount as a research, development, collaborations and contracts expense in the year ended December 31, 2011.

The agreement was amended on August 8, 2012 to adjust the future license fees and other contingent payments. The Company recorded a further \$447,780 (US\$450,000) in license fees to research, development, collaborations and contracts expense in the year ended December 31, 2012, in respect of the agreement. Under the amended agreement, as at December 31, 2012, the maximum future license fees are US\$1,300,000. The Company will pay up to US\$12,700,000 in milestones on each product developed plus royalties.

## License agreement with Marina Biotech, Inc. ("Marina")

On November 29, 2012 the Company announced a worldwide, non-exclusive license to a novel RNAi payload technology called Unlocked Nucleobase Analog ("UNA") from Marina for the development of RNAi therapeutics.

UNA technology can be used in the development of RNAi therapeutics, which treat disease by silencing specific disease causing genes. UNAs can be incorporated into RNAi drugs and have the potential to improve them by increasing their stability and reducing off-target effects.

Under the license agreement the Company paid Marina an upfront fee of \$298,098 (US\$300,000). A further license payment of US\$200,000 is due in 2013 and the Company will make milestone payments of up to US\$3,250,000 and royalties on each product developed by the Company that uses Marina's UNA technology. The upfront fee was recorded to research, development, collaborations and contracts expense in the year ended December 31, 2012.

### 10. Concentrations of business risk

#### Credit risk

Credit risk is defined by the Company as an unexpected loss in cash and earnings if a collaborative partner is unable to pay its obligations in due time. The Company's main source of credit risk is related to its accounts receivable balance which principally represents temporary financing provided to collaborative partners in the normal course of operations. Accounts receivable from the U.S. Government as at December 31, 2012 were

Notes to Consolidated financial statements (Expressed in Canadian dollars)

\$947,802 and represent 89% of total accounts receivable as at that date (December 31, 2011 - \$747,720 and 85%).

The Company does not currently maintain a provision for bad debts as the majority of accounts receivable are from collaborative partners or government agencies and are considered low risk.

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at December 31, 2012 was the accounts receivable balance of \$1,069,437 (December 31, 2011 - \$880,693).

All accounts receivable balances were current as at December 31, 2012 and December 31, 2011.

## Significant collaborators and customers risk

We depend on a small number of collaborators and customers for a significant portion of our revenues (see note 3).

## Liquidity Risk

Liquidity risk results from the Company's potential inability to meet its financial liabilities, for example payments to suppliers. The Company ensures sufficient liquidity through the management of net working capital and cash balances.

The Company's liquidity risk is primarily attributable to its cash and cash equivalents. The Company limits exposure to liquidity risk on its liquid assets through maintaining its cash and cash equivalent deposits with high-credit quality financial institutions. Due to the nature of these investments, the funds are available on demand to provide optimal financial flexibility.

The Company believes that its current sources of liquidity are sufficient to cover its likely applicable short term cash obligations. The Company's financial obligations include accounts payable and accrued liabilities which generally fall due within 45 days.

The net liquidity of the Company is considered to be the cash and cash equivalents less accounts payable and accrued liabilities.

<b>December 31, 2012</b> De	cember 31, 2011
\$ 46,785,518	\$ 9,184,134
-	3,051,000
-	(1,135,000)
(3,776,287)	(3,972,551)
\$ 43 000 231	\$ 7,127,583
	\$ 46,785,518 - -

#### Foreign currency risk

The Company's revenues and operating expenses are denominated in both Canadian and US dollars so the results of the Company's operations are subject to currency transaction and translation risk.

The operating results and financial position of the Company are reported in Canadian dollars in the Company's financial statements. The fluctuation of the US dollar in relation to the Canadian dollar will consequently have an impact upon the Company's income or loss and may also affect the value of the Company's assets and the amount of shareholders' equity.

The Company manages its US dollar exchange rate risk by, whenever possible, using cash received from US dollar revenues to pay US dollar expenses and by limiting its holdings of US dollar cash and cash equivalent balances to working capital levels. The Company used a forward exchange contract to convert US\$45,000,000 into Canadian dollars in November 2012. The Company has not entered into any other agreements or purchased any instruments to hedge possible currency risks.

Notes to Consolidated financial statements (Expressed in Canadian dollars)

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

	December 31, 2012	December 31, 2011
Cash and cash equivalents	\$ 149,058	\$ 1,259,029
Accounts receivable	1,025,306	780,176
Accrued revenue	2,361,836	185,356
Accounts payable and accrued liabilities	(2,969,454)	(2,365,191)
	\$ 566,746	\$ (325,986)

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

## 11. Supplementary information

Accounts payable and accrued liabilities is comprised of the following:

	December 31, 2012	December 31, 2011	
Trade accounts payable	\$ 801,701	\$ 1,284,737	
Research and development accruals	308,917	228,942	
License fee accruals	1,641,585	-	
Professional fee accruals	599,058	1,669,838	
Restructuring cost accruals	34,999	36,134	
Deferred lease inducements	47,834	196,966	
Other accrued liabilities	342,193	555,934	
		_	
	\$ 3,776,287	\$ 3,972,551	