



**TEKMIRA PHARMACEUTICALS  
CORPORATION**

Q3 2013 Quarterly Report

# **TEKMIRA PHARMACEUTICALS CORPORATION**

Unaudited Interim Condensed 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))

**2013 – Q3**

Three and nine months ended September 30, 2013 and September 30, 2012

# TEKMIRA PHARMACEUTICALS CORPORATION

## Interim Condensed Consolidated Balance Sheets

(Unaudited)

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	September 30 2013	December 31 2012
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 36,919,072	\$ 46,785,518
Accounts receivable	4,106,997	1,069,437
Accrued revenue	1,164,840	2,361,836
Deferred expenses	254,569	429,221
Investment tax credits receivable	-	9,825
Prepaid expenses and other assets	892,522	327,609
<b>Total current assets</b>	<b>43,338,000</b>	<b>50,983,446</b>
Property and equipment	13,668,214	13,121,268
Less accumulated depreciation	(12,256,797)	(11,776,396)
Property and equipment, net of accumulated depreciation	1,411,417	1,344,872
<b>Total assets</b>	<b>\$ 44,749,417</b>	<b>\$ 52,328,318</b>
<b>Liabilities and stockholders' equity</b>		
Current liabilities:		
Accounts payable and accrued liabilities (note 4)	\$ 4,412,527	\$ 3,776,287
Deferred revenue (note 3)	4,453,488	3,127,629
Warrants (note 2)	5,105,173	3,994,449
<b>Total current liabilities</b>	<b>13,971,188</b>	<b>10,898,365</b>
Deferred revenue, net of current portion (note 3)	-	718,779
<b>Total liabilities</b>	<b>13,971,188</b>	<b>11,617,144</b>
<b>Stockholders' equity:</b>		
Common shares		
Authorized - unlimited number with no par value		
Issued and outstanding:		
14,554,211 (December 31, 2012 - 14,305,356)	239,749,898	238,245,333
Additional paid-in capital	31,893,102	31,520,480
Deficit	(240,864,771)	(229,054,639)
<b>Total stockholders' equity</b>	<b>30,778,229</b>	<b>40,711,174</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 44,749,417</b>	<b>\$ 52,328,318</b>

Nature of business and future operations (note 1)

Contingencies and commitments (note 6)

Subsequent events (note 7)

See accompanying notes to the interim condensed consolidated financial statements.

# TEKMIRA PHARMACEUTICALS CORPORATION

## Interim Condensed Consolidated Statements of Operations and Comprehensive Loss

(Unaudited)

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2013	2012	2013	2012
<b>Revenue (note 3)</b>				
Collaborations and contracts	\$ 3,049,341	\$ 2,055,934	\$ 8,173,502	\$ 8,221,763
Licensing fees, milestone and royalty payments	2,100	992,000	2,100	2,010,100
<b>Total revenue</b>	<b>3,051,441</b>	<b>3,047,934</b>	<b>8,175,602</b>	<b>10,231,863</b>
<b>Expenses</b>				
Research, development, collaborations and contracts	5,670,974	3,101,825	14,920,628	10,810,861
General and administrative	989,061	1,504,637	2,782,226	5,730,051
Depreciation of property and equipment	152,852	214,701	480,401	681,487
<b>Total expenses</b>	<b>6,812,887</b>	<b>4,821,163</b>	<b>18,183,255</b>	<b>17,222,399</b>
<b>Loss from operations</b>	<b>(3,761,446)</b>	<b>(1,773,229)</b>	<b>(10,007,653)</b>	<b>(6,990,536)</b>
<b>Other income (losses)</b>				
Interest income	132,891	25,631	431,694	79,170
Foreign exchange gains (losses)	54,016	56,891	(14,425)	61,770
Warrant issuance costs	-	-	-	(47,000)
Increase in fair value of warrant liability	(2,508,059)	(1,744,734)	(2,219,748)	(1,622,078)
<b>Net loss and comprehensive loss</b>	<b>\$(6,082,598)</b>	<b>\$ (3,435,441)</b>	<b>\$(11,810,132)</b>	<b>\$ (8,518,674)</b>
Loss per common share				
Basic and diluted	\$ (0.42)	\$ (0.25)	\$ (0.82)	\$ (0.63)
Weighted average number of common shares				
Basic and diluted	14,511,760	14,006,774	14,421,444	13,596,800

See accompanying notes to the interim condensed consolidated financial statements.

# TEKMIRA PHARMACEUTICALS CORPORATION

## Interim Condensed Consolidated Statement of Stockholders' Equity

For the nine months ended September 30, 2013

(Unaudited)

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	Number of shares	Share capital	Additional paid-in capital	Deficit	Total stockholders' equity
Balance, December 31, 2012	14,305,356	\$ 238,245,333	\$ 31,520,480	\$ (229,054,639)	\$ 40,711,174
Stock-based compensation	-	-	477,008	-	477,008
Issuance of common shares pursuant to exercise of options	44,475	219,197	(104,386)	-	114,811
Issuance of common shares pursuant to exercise of warrants	204,380	1,285,368	-	-	1,285,368
Net loss	-	-	-	(11,810,132)	(11,810,132)
Balance, September 30, 2013	14,554,211	\$ 239,749,898	\$ 31,893,102	\$ (240,864,771)	\$ 30,778,229

See accompanying notes to the interim condensed consolidated financial statements.

# TEKMIRA PHARMACEUTICALS CORPORATION

## Interim Condensed Consolidated Statements of Cash Flow

(Unaudited)

(Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2013	2012	2013	2012
<b>OPERATING ACTIVITIES</b>				
Loss for the period	\$ (6,082,598)	\$ (3,435,441)	\$ (11,810,132)	\$ (8,518,674)
Items not involving cash:				
Depreciation of property and equipment	152,852	214,701	480,401	681,487
Stock-based compensation expense	226,473	140,656	477,008	469,230
Foreign exchange losses				
arising on foreign currency cash balances	16,516	16,362	25,630	55,646
Warrant issuance costs	-	-	-	47,000
Change in fair value of warrant liability	2,508,059	1,744,734	2,219,748	1,622,078
Net change in non-cash operating items:				
Accounts receivable	(2,374,841)	(99,998)	(3,037,560)	(1,068,971)
Accrued revenue	2,057,996	10,811	1,196,996	87,580
Deferred expenses	52,017	141,346	174,652	300,000
Investment tax credits receivable	9,825	207,635	9,825	321,207
Prepaid expenses and other assets	(37,694)	(80,958)	(564,913)	(1,120)
Accounts payable and accrued liabilities	(775,571)	76,515	636,240	(939,189)
Deferred revenue	491,352	(230,965)	607,080	(388,246)
<b>Net cash (used in) operating activities</b>	<b>(3,755,614)</b>	<b>(1,294,602)</b>	<b>(9,585,025)</b>	<b>(7,331,972)</b>
<b>INVESTING ACTIVITIES</b>				
Proceeds from sale of property and equipment	-	2,488	-	2,488
Acquisition of property and equipment	(123,165)	-	(546,946)	(12,767)
<b>Net cash provided by (used in) investing activities</b>	<b>(123,165)</b>	<b>2,488</b>	<b>(546,946)</b>	<b>(10,279)</b>
<b>FINANCING ACTIVITIES</b>				
Proceeds from issuance of common shares and warrants, net of issuance costs	-	-	-	3,841,515
Issuance of common shares pursuant to exercise of options	22,794	3,640	114,811	5,140
Issuance of common shares pursuant to exercise of warrants	55,569	-	176,344	-
<b>Net cash provided by financing activities</b>	<b>78,363</b>	<b>3,640</b>	<b>291,155</b>	<b>3,846,655</b>
Foreign exchange losses				
arising on foreign currency cash balances	(16,516)	(16,362)	(25,630)	(55,646)
<b>Decrease in cash and cash equivalents</b>	<b>(3,816,932)</b>	<b>(1,304,836)</b>	<b>(9,866,446)</b>	<b>(3,551,242)</b>
Cash and cash equivalents, beginning of period	40,736,004	6,937,728	46,785,518	9,184,134
<b>Cash and cash equivalents, end of period</b>	<b>\$36,919,072</b>	<b>\$ 5,632,892</b>	<b>\$ 36,919,072</b>	<b>\$ 5,632,892</b>

### Supplemental cash flow information

Fair value of warrants exercised on a cashless basis	\$ 698,120	\$ -	\$ 920,345	\$ -
Investment tax credits received	\$ 9,825	\$ 207,635	\$ 9,825	\$ 321,207
Fair value of warrants issued in conjunction with public offering	\$ -	\$ -	\$ -	\$ 850,358

See accompanying notes to the interim condensed consolidated financial statements.

# TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Interim Condensed Consolidated financial statements (unaudited)

(Expressed in Canadian dollars)

Three and nine months ended September 30, 2013 and September 30, 2012

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## 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*

These unaudited interim condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles of the United States of America (“U.S. GAAP”) for interim financial statements and accordingly, do not include all disclosures required for annual financial statements.

These statements should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto for the year ended December 31, 2012 and included in the Company’s 2012 annual report on Form 20-F.

The unaudited interim condensed consolidated financial statements reflect, in the opinion of management, all adjustments and reclassifications necessary to present fairly the financial position, results of operations and cash flows at September 30, 2013 and for all periods presented.

The results of operations for the three and nine months ended September 30, 2013 and September 30, 2012 are not necessarily indicative of the results for the full year.

These interim condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended December 31, 2012.

These interim condensed consolidated financial statements include the accounts of the Company and its two wholly-owned subsidiaries, Protiva Biotherapeutics Inc. (“Protiva”) and Protiva Biotherapeutics (USA), Inc. All intercompany transactions and balances have been eliminated on consolidation.

### *Income or loss per share*

Income or loss per share is calculated based on the weighted average number of common shares outstanding. Diluted loss per share does not differ from basic loss per share since the effect of the Company’s stock options and warrants are anti-dilutive. Diluted income per share is calculated using the treasury stock method which uses the weighted average number of common shares outstanding during the period and also includes the dilutive effect of potentially issuable common shares from outstanding stock options and warrants. At September 30, 2013, potential common shares of 3,163,771 (September 30, 2012 – 3,675,159) were excluded from the calculation of net loss per common share because their inclusion would be anti-dilutive.

### *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:

# TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Interim Condensed Consolidated financial statements (unaudited)

(Expressed in Canadian dollars)

Three and nine months ended September 30, 2013 and September 30, 2012

- 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.
- 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.

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	September 30, 2013
<b>Assets</b>				
Cash and cash equivalents	\$ 36,919,072	-	-	\$ 36,919,072

<b>Liabilities</b>				
Warrants	-	-	\$ 5,105,173	\$ 5,105,173

	Level 1	Level 2	Level 3	December 31, 2012
<b>Assets</b>				
Cash and cash equivalents	\$ 46,785,518	-	-	\$ 46,785,518

<b>Liabilities</b>				
Warrants	-	-	\$ 3,994,449	\$ 3,994,449

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

Liability at January 1, 2013	\$ 3,994,449
Fair value of warrants exercised in the period	(1,109,024)
Increase in fair value of warrant liability	2,219,748
<b>Liability at September 30, 2013</b>	<b>\$ 5,105,173</b>

The change in fair value of warrant liability for the nine months ended September 30, 2013 is recorded in the statement of operations and comprehensive loss.

The weighted average Black-Scholes warrant-pricing assumptions and the resultant fair values for warrants outstanding at September 30, 2013 and at December 31, 2012 are as follows:

	September 30, 2013	December 31, 2012
Dividend yield	0.00%	0.00%
Expected volatility	52.39%	40.00%
Risk-free interest rate	1.21%	1.28%
Expected average term	1.8 years	3.8 years
Fair value of warrants outstanding	\$ 4.45	\$ 2.51
Aggregate fair value of warrants outstanding	\$ 5,105,173	\$ 3,994,449

## Recent accounting pronouncements

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



# TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Interim Condensed Consolidated financial statements (unaudited)

(Expressed in Canadian dollars)

Three and nine months ended September 30, 2013 and September 30, 2012

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

### 3. Collaborations, contracts and licensing agreements

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

	Three months ended		Nine months ended	
	September 30		September 30	
	2013	2012	2013	2012
<b>Collaborations and contracts</b>				
DoD (a)	\$ 2,917,593	\$ 1,879,314	\$ 7,400,462	\$ 7,808,645
Alnylam (b)	-	-	-	9,713
BMS (c)	105,423	129,353	676,758	314,243
Other RNAi collaborators (d)	26,325	47,267	96,283	89,162
Total research and development collaborations and contracts	3,049,341	2,055,934	8,173,502	8,221,763
<b>Licensing fees, milestone and royalty payments</b>				
Alnylam milestone payments (b)	-	-	-	1,018,100
Spectrum and Talon payments (e)	2,100	992,000	2,100	992,000
Total licensing fees and milestone payments	2,100	992,000	2,100	2,010,100
<b>Total revenue</b>	<b>\$ 3,051,441</b>	<b>\$ 3,047,934</b>	<b>\$ 8,175,602</b>	<b>\$ 10,231,863</b>

The following table sets forth deferred collaborations and contracts revenue:

	September 30, 2013	December 31, 2012
DoD (a)	\$ 2,665,761	\$ 1,381,922
BMS current portion (c)	1,787,727	1,745,707
Deferred revenue, current portion	4,453,488	3,127,629
BMS long-term portion (c)	-	718,779
<b>Total deferred revenue</b>	<b>\$ 4,453,488</b>	<b>\$ 3,846,408</b>

# TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Interim Condensed Consolidated financial statements (unaudited)

(Expressed in Canadian dollars)

Three and nine months ended September 30, 2013 and September 30, 2012

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## **(a) Contract with United States Government's Department of Defense ("DoD") to develop TKM-Ebola**

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

In stage one of the contract, funded as part of the Transformational Medical Technologies program, the Company was initially eligible to receive targeted funding of US\$34.8 million. This stage one 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. On May 8, 2013, the Company announced that the contract had been modified to support development plans that integrate recent advancements in lipid nanoparticle ("LNP") formulation and manufacturing technologies. The contract modification increased the stage one targeted funding to US\$41.7 million.

The DoD has the option of extending the contract beyond stage one 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 approximately 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. During the fiscal year, at the end of each quarter, the Company estimates its labour and overhead rates for the current year and uses these estimates to estimate and record revenue earned to date. At the end of the year the actual labour and overhead rates are calculated and revenue is adjusted accordingly. The Company's actual labour and overhead rates will differ from its estimated rates based on actual costs incurred and the proportion of the Company's efforts on contracts and internal products versus indirect activities.

Within minimum and maximum collars, the amount of incentive fee the Company can earn under the contract varies based on actual costs incurred versus targeted costs. During the contractual period, incentive fee revenue and total costs are impacted by management's estimate and judgments which are continuously reviewed and adjusted as necessary using the cumulative catch-up method. At this time, the Company is not able to make a reliable estimate of the final contract costs, so, only the minimum incentive fee achievable and earned has been recognized.

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

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

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 AICana (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 AICana which will include milestone and royalty payments and AICana has agreed not to compete in the ribonucleic acid interference ("RNAi") field for five years. In conjunction with the Settlement, in November 2012, the Company paid AICana \$298,080 (US\$300,000). A further \$1,545,450 (US\$1,500,000), which the Company expects to pay upon the execution of a cross license agreement with AICana, was included in research, development, collaborations and contracts expenses in the year ended December 31, 2012.

As a result of the new Alnylam license agreement, on November 26, 2012, the Company received \$65,039,000 (US\$65,000,000) in cash from Alnylam. This includes US\$30,000,000 associated with the termination of the manufacturing agreement and US\$35,000,000 associated with the termination of the previous license agreements, as well as a modification of the milestone and royalty schedules associated with Alnylam's ALN-VSP, ALN-PCS, and ALN-TTR programs. In addition, Alnylam has transferred all agreed upon patents and patent applications related to 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

# TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Interim Condensed Consolidated financial statements (unaudited)

(Expressed in Canadian dollars)

Three and nine months ended September 30, 2013 and September 30, 2012

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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.

On June 21, 2013, the Company transferred manufacturing process technology to Ascleptis Pharmaceuticals (Hangzhou) Co., Ltd. (“Ascleptis”) to enable them to produce ALN-VSP, a product candidate licensed to them by Alnylam. The Company believes that under the new licensing agreement with Alnylam, the technology transfer to Ascleptis triggers a US\$5,000,000 milestone obligation from Alnylam to the Company. However, Alnylam has demanded a declaration that the Company has not yet met its milestone obligations. The Company disputes Alnylam's position. To remedy this dispute, the Company and Alnylam have commenced arbitration proceedings as provided for under the agreement. The Company has not recorded any revenue in respect of this milestone.

## **(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) Other RNAi collaborators**

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

## **(e) License agreement with Talon Therapeutics, Inc. (“Talon”, formerly Hana Biosciences, Inc.)**

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

On 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 three months ended September 30, 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.

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Notes to Interim Condensed Consolidated financial statements (unaudited)

(Expressed in Canadian dollars)

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Talon was acquired by Spectrum Pharmaceuticals, Inc. ("Spectrum") in July, 2013. The acquisition does not affect the terms of the license between Talon and the Company.

On September 3, 2013, Spectrum announced that they had shipped the first commercial orders of Marqibo. On October 30, 2013, the Company received its first Marqibo royalty payment from Spectrum of \$2,100 (US\$2,038) in respect of sales in the three months ended September 30, 2013. In the three months ended September 30, 2013, the Company accrued \$53 in royalties due to TPC in respect of the Marqibo royalty due to the Company (see note 6).

#### 4. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities are comprised of the following:

	September 30, 2013	December 31, 2012
Trade accounts payable	\$ 801,315	\$ 801,701
Research and development accruals	524,570	308,917
License fee accruals	1,545,450	1,641,585
Professional fee accruals	606,674	599,058
Deferred lease inducements	25,000	47,834
Other accrued liabilities	909,518	377,192
	<b>\$ 4,412,527</b>	<b>\$ 3,776,287</b>

#### 5. Concentration of 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 DoD as at September 30, 2013 were \$4,009,735 and represent 98% of total accounts receivable as at that date (December 31, 2012 - \$947,802 and 89%).

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 September 30, 2013 was the accounts receivable balance of \$4,106,997 (December 31, 2012 - \$1,069,437).

All accounts receivable balances were current as at September 30, 2013 and December 31, 2012.

#### 6. Contingencies and commitments

##### Product development partnership with the Canadian Government

The Company entered into a Technology Partnerships Canada ("TPC") agreement with the Canadian Federal Government on November 12, 1999. Under this agreement, TPC agreed to fund 27% of the costs incurred by the Company, prior to March 31, 2004, in the development of certain oligonucleotide product candidates up to a maximum contribution from TPC of \$9,329,912. As at September 30, 2013, a cumulative contribution of \$3,701,571 had 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

# TEKMIRA PHARMACEUTICALS CORPORATION

Notes to Interim Condensed Consolidated financial statements (unaudited)

(Expressed in Canadian dollars)

Three and nine months ended September 30, 2013 and September 30, 2012

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funding actually received under the agreement has been paid to TPC, the Company agreed to pay a 2.5% royalty on any royalties the Company receives for Marqibo.

In the three months ended September 30, 2013, the Company began to earn royalties on Marqibo (see note 3(e)) and has accrued \$53 in royalties payable to TPC. The remaining contingently payable balance with TPC as of September 30, 2013 was \$3,701,518.

## **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. 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.

The Company terminated the agreement with Halo-Bio on July 31, 2013. There are no further payments due or contingently payable to Halo-Bio.

## **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, in the year ended December 31, 2012, the Company paid Marina an upfront fee of \$298,098 (US\$300,000). A further license payment of \$203,200 (US\$200,000) was expensed in March 2013 and the Company will make milestone payments of up to US\$3,250,000 plus royalties on each product developed by the Company that uses Marina's UNA technology. The upfront fee and license payment were expensed to research, development, collaborations and contracts expense.

Effective August 9, 2013, Marina's UNA technology was acquired by Arcturus Therapeutics, Inc. ("Arcturus") and the UNA license agreement between the Company and Marina was assigned to Arcturus. The terms of the license are otherwise unchanged.

## **7. Subsequent events**

### **Public Offering Financing**

On October 22, 2013, the Company announced that it had completed an underwritten public offering of 3,750,000 common shares, at a price of \$8.23 (US\$8.00) per share, representing gross proceeds of \$30,867,000 (US\$30,000,000). On November 1, 2013, the offering's underwriter completed the exercise of its over-

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allotment option to purchase a further 562,500 shares at \$8.34 (US\$8.00) bringing the aggregate financing gross proceeds to \$35,559,150 (US\$34,500,000). The estimated cost of the financing, including commissions and professional fees, is \$2,442,219, resulting in net estimated proceeds of \$33,116,931 (US\$32,130,000).

## **US\$5,000,000 milestone from Alnylam**

On November 10, 2013, Alnylam disclosed that it had initiated a Phase III trial with ALN-TTR02, also known as patisiran, and the associated US\$5,000,000 development milestone payable to the Company has now been triggered.

## **TEKMIRA PHARMACEUTICALS CORPORATION**

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

**November 13, 2013** / *This management discussion and analysis (MD&A) for the three and nine months ended September 30, 2013 should be read in conjunction with the MD&A and the unaudited interim condensed consolidated financial statements and related notes for the same periods and 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 condensed 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 annual report on Form 20-F for the year ended December 31, 2012 is available at the SEDAR website at [www.sedar.com](http://www.sedar.com) or the EDGAR website at [www.sec.gov/edgar](http://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 in this MD&A include statements about Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi (ribonucleic acid interference) product development programs; the effects of Tekmira's products on the treatment of cancer, infectious disease, alcohol use disorder, and other diseases; expectations of a LNP-based product entering into Phase III clinical development by 2013; ongoing advances in next-generation LNP technologies; an expanded Phase I/II clinical trial with TKM-PLK1 (and expected enrollment of patients with GI-NET or ACC), and results of such clinical trial by mid-2014, and commencement of a pivotal trial before the end of 2014; the initiation in the first half of 2014 of another Phase I/II clinical trial with TKM-PLK1; the potency of the new TKM-Ebola LNP formulation; the completion of studies for TKM-Ebola and submission to the FDA in the second half of 2013 in order to support the use of the enhanced product in a Phase 1 trial, and the initiation of a Phase I trial in the first quarter of 2014 with data available in the second half of 2014; the development of TKM-Ebola under the "Animal Rule"; continued development and the pursuit of funding opportunities for TKM-Marburg; addressing the unmet need of eliminating HBV surface antigen expression in chronically infected patients; completion of TKM-HBV preclinical work and the filing of an IND application in the second half of 2014, with Phase I data available in 2015; the development and target population for TKM-ALDH2; the completion of preclinical work and the filing of an IND application in the second half of 2014 to advance TKM-ALDH2 into a Phase I clinical trial, with data available in 2015; the generation of data and the expectation of identifying another development candidate in 2014; Tekmira's expectations of entering into a separate cross license agreement with AlCana and expected payments in connection therewith; the use of LNP technology by Tekmira's licensees and expected milestone and royalty payments from commercial sales of Tekmira's product development partners; the expected US\$5 million milestone payment to Tekmira triggered by Alnylam's initiation of a Phase III trial with ALN-TTR02; arbitration proceedings with Alnylam in connection with ALN-VSP; anticipated royalty payments based on sales of Marqibo; statements with respect to revenue and expense fluctuation and guidance; the quantum and timing of potential funding; and statements about Tekmira's cash runway and estimated cash and cash equivalents at the end of 2013.

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; Tekmira's research and development capabilities and resources; the effectiveness of Tekmira's products as a treatment for cancer, infectious disease, alcohol use disorder, or other diseases; the timing and obtaining of regulatory approvals for the clinical development of Tekmira's products; the use of LNP technology by Tekmira's development partners and licensees and subsequent timing and results of clinical data releases; 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, Spectrum, and the DoD; Tekmira's financial position and its ability to execute 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: Tekmira's products may not prove to be effective or as potent as currently believed; there may be no further advancements in next-generation LNP technologies; anticipated studies and submissions to the FDA may not occur as currently anticipated, or at all; the 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 its ability to commercialize TKM-Ebola; completion of preclinical work and IND applications may not occur as currently anticipated, or at all; Tekmira may never identify another product development candidate; Tekmira may not obtain and protect intellectual property rights, and operate without infringing on the intellectual property rights of others; Tekmira may face competition from other pharmaceutical or biotechnology companies and the possibility that other organizations have made advancements in RNAi delivery technology that Tekmira is not aware of; anticipated pre-clinical and clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of the tested drug candidate; Tekmira may not receive the necessary regulatory approvals for the clinical development of Tekmira's products; expected milestone or royalty 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; Tekmira may lose the arbitration proceedings with Alnylam in connection with ALN-VSP; the possibility that Tekmira may not enter into a separate cross license agreement with AlCana on the terms currently anticipated, or at all; Tekmira's development partners and licensees conducting clinical trial, development programs and joint venture strategic alliances may 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; payments received from third parties may not be sufficient to fund Tekmira's continued business plan as currently anticipated; future operating results are uncertain and likely to fluctuate; Tekmira may not be able 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; Tekmira may become subject to product liability or other legal claims for which Tekmira has made no accrual in its financial statements; and, Tekmira's cash runway and cash position may be substantially less than projected and may be less than required to continue current operations.

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](http://www.sedar.com) or at [www.sec.gov/edgar.shtml](http://www.sec.gov/edgar.shtml). All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

## **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 RNAi product pipeline consists of products being developed internally with our research and development resources, as well as TKM-Ebola, an anti-Ebola viral therapeutic, being developed under a contract with the U.S. Department of Defense's (DoD) Joint Project Manager Medical Countermeasure Systems (JPM-MCS). Our focus is on advancing products that utilize our proprietary LNP technology for the delivery of RNAi trigger molecules. 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 a broad non-exclusive license to use Unlocked Nucleobase Analogs (UNAs) from Arcturus Therapeutics, Inc. for the development of RNAi therapeutic products directed to any target in any therapeutic indication.

In the field of RNAi therapeutics, we have licensed our LNP delivery technology to Alnylam and Merck & Co., Inc., and Alnylam has provided royalty bearing 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 DoD's JPM-MCS program, and other undisclosed pharmaceutical and biotechnology companies. Outside the field of RNAi, we have a legacy licensing agreement with Talon Therapeutics, Inc., which was acquired by Spectrum Pharmaceuticals Inc. in July 2013.

We continue to develop our proprietary "gold standard" LNP delivery technology, and a LNP-based product is expected to enter Phase III clinical development by the end of 2013. Ongoing advances in next-generation LNP technologies include increasing potency as well as expanding the therapeutic index. Our LNP technology remains an important cornerstone of our business development activities moving forward.

### **Internal Product Candidates**

#### **TKM-PLK1**

Our oncology product candidate, TKM-PLK1, targets polo-like kinase 1 (PLK1), 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. Evidence that patients with elevated levels of PLK1 in their tumors exhibit poorer prognosis and survival rates has been documented in the medical literature.

We presented updated TKM-PLK1 data at the 6th Annual NET Conference hosted by the North American Neuroendocrine Tumor Society (NA-NETS) held in Charleston, South Carolina on October 4, 2013. Tekmira has treated a total of 36 patients in a population of advanced cancer patients with solid tumors. Doses ranged from 0.15 mg/kg to 0.90 mg/kg during the dose escalation portion of the trial, with the maximum tolerated dose (MTD) of 0.75 mg/kg administered to the expansion cohort. Serious adverse events (SAEs) were experienced by four subjects in this heavily pre-treated, advanced cancer patient population, with three of these four subjects continuing on study. Forty percent (6 out of 15) of patients evaluable for response, treated at a dose equal to or greater than 0.6 mg/kg, showed clinical benefit. Three out of the four Adrenocortical Carcinoma (ACC) patients (75%) treated with TKM-PLK1 achieved stable disease, including one patient who saw a 19.3% reduction in target tumor size after two cycles of treatment and is still on study receiving TKM-PLK1. Of the two Gastrointestinal Neuroendocrine Tumors (GI-NET) patients enrolled, both experienced clinical benefit: one patient had a partial response based on RECIST response criteria, and the other GI-NET patient achieved stable disease and showed a greater than 50% reduction in Chromogranin-A (CgA) levels, a key biomarker used to predict clinical outcome and tumor response.

Based on the encouraging results from the dose escalation portion and expansion cohort from our Phase I TKM-PLK1 clinical trial, we have expanded into a Phase I/II clinical trial with TKM-PLK1, which is enrolling patients with advanced GI-NET or ACC. This multi-center, single arm, open label study is designed to measure efficacy using RECIST and tumor biomarkers for GI-NET patients, as well as to evaluate the safety, tolerability and pharmacokinetics of TKM-PLK1. TKM-PLK1 will be administered weekly with each four-week cycle consisting of three once-weekly doses followed by a rest week. It is expected that approximately 20 patients with advanced GI-NET or ACC tumors will be enrolled in this trial, with a minimum of 10 GI-NET patients to be enrolled. We expect initial results from this trial by mid-2014, and if supported by the data, to commence a pivotal trial in GI-NET before the end of 2014.

In the first half of 2014, we also expect to initiate another Phase I/II clinical trial with TKM-PLK1, enrolling patients with Hepatocellular Carcinoma (HCC). This clinical trial will be a multi-center, single arm, open label dose escalation study designed to evaluate the safety, tolerability and pharmacokinetics of TKM-PLK1 as well as determine the maximum tolerated dose in HCC patients and measure the anti-tumor activity of TKM-PLK1 in HCC patients.

#### **TKM-Ebola and TKM-Marburg**

TKM-Ebola, an anti-Ebola viral therapeutic, is being developed under a contract with the U.S. Department of Defense's (DoD) Joint Project Manager Medical Countermeasure Systems (JPM-MCS). Earlier preclinical studies were published in the medical journal *The Lancet* demonstrating 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).

In July 2010, we signed a contract with the DoD under their JPM-MCS program to advance TKM-Ebola. Based

on the budget for the extended contract, this would provide us with a total of approximately US\$140.0 million in funding for the entire program. In May 2013 we announced that our collaboration with the JPM-MCS was modified and expanded to include advances in LNP formulation technology since the initiation of the program in 2010. The recent contract modification increases the stage one targeted funding from US\$34.8 million to US\$41.7 million. Some highlights from the TKM-Ebola program include:

- The incorporation of a new formulation, more potent than any LNP currently in clinical trials. This new TKM-Ebola LNP formulation has demonstrated significant increases in potency in non-human primates infected with the Zaire Ebola virus. At 0.5mg/kg, 100% of the infected animals survived after receiving TKM-Ebola daily for seven days. The previous LNP formulation provided the same level of protection and 100% survival at 2 mg/kg.
- The development of a lyophilized (freeze-dried) LNP to eliminate cold-chain requirements and facilitate use in tropical climates. Importantly, the lyophilized LNP formulation also provided 100% survival in non-human primates infected with the Zaire Ebola virus with no loss in potency at 0.5 mg/kg dosed daily for seven days.

We have initiated pre-clinical and chemistry, manufacturing and control studies that support the use of these improvements in the TKM-Ebola program. We anticipate the completion of these studies and a submission to the FDA in the second half of 2013 in order to support the use of the enhanced product in a Phase I clinical trial. The Phase I clinical trial is expected to be initiated in the first quarter of 2014 with data available in the second half of 2014.

New preclinical data from the TKM-Ebola program has been generated showing survival in non-human primates despite infection with the most lethal Zaire variant of Ebola virus and delayed treatment. Such “delay to treat” studies in animals infected with lethal quantities of rapidly replicating viruses such as Ebola and Marburg are rigorous tests of anti-viral efficacy in well-established infections.

- TKM-Ebola has demonstrated up to 100% survival in non-human primate studies when treatment was initiated at various time points post-infection.
- In a new study each cohort received seven daily treatments of 0.5 mg/kg TKM-Ebola beginning 24-, 48-, 72-, or 96-hours after infection.
- The study demonstrated 83% survival when treated 24- or 48-hours post infection and 67% survival when treatment was initiated at 72-hours, as compared to 0% survival rates in the placebo and 96-hour cohorts.

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.

Like Ebola, Marburg is a member of the filovirus family of hemorrhagic fever viruses. Regularly occurring natural outbreaks with the Marburg Angola strain have resulted in mortality in approximately 90% of infected individuals, matching that of the most lethal Ebola strains, while in laboratory settings experimental infection with either virus is uniformly lethal. There are currently no approved therapeutics available for the treatment of Marburg infection.

Data from a collaboration between Tekmira and the University of Texas Medical Branch (UTMB) showed 100% survival in non-human primates infected with the Angola strain of the Marburg virus in three separate studies. 100% survival was achieved when TKM-Marburg treatment at 0.5 mg/kg began either one hour, 24 hours or 48 hours after infection with lethal quantities of the virus. Dosing was administered once daily for seven days. These studies represent the first known demonstration of protection of non-human primates from Marburg-Angola, the most lethal strain of Marburg virus.

### **TKM-HBV**

Our extensive experience in the anti-viral arena has been applied to our TKM-HBV program, and the development of an RNAi therapeutic for the treatment of chronic Hepatitis B infection. There are over 350 million people infected globally with Hepatitis B virus (HBV). In the United States there are approximately 1.4 million

HBV chronically infected individuals. We are focused on addressing the unmet need of eliminating HBV surface antigen expression in chronically infected patients. Small molecule nucleotide therapy is rapidly becoming the standard of care for chronically HBV infected patients. However, many of these patients continue to express a viral protein called surface antigen. This protein causes inflammation in the liver leading to cirrhosis and in some cases to hepatocellular cancer and death. TKM-HBV is designed to eliminate surface antigen expression in these chronically infected patients. The rationale is that by blocking surface antigen – and reducing much of the pathology associated with surface antigen expression – this therapy will also allow these patients a potential to 'sero-convert', or raise their own antibodies against the virus, and effect a functional cure of the infection.

TKM-HBV is being developed as a multi-component RNAi therapeutic that targets multiple sites on the HBV genome. Because HBV is a viral infection of the liver, the TKM-HBV therapeutic will employ a liver-centric-LNP formulation that is more potent and has a broader therapeutic index than any LNP currently in clinical development. We anticipate completing the necessary preclinical work to be in a position to file an Investigational New Drug (IND) application in the second half of 2014 in order to advance TKM-HBV into chronically infected HBV patients with Phase I data available in 2015.

### **TKM-ALDH2**

TKM-ALDH2 is a unique application of RNAi. In the United States, approximately 18 million people have an alcohol use disorder. Two million of these seek treatment each year, and approximately 350,000 of these patients receive pharmacotherapy for alcohol use disorder. TKM-ALDH2 will be developed for a clearly defined high value segment of the alcohol use disorder market, with a target patient population of educated professionals who have moderate to severe alcohol use disorder.

TKM-ALDH2 has been designed to knock down or silence the ALDH2 enzyme to induce long term acute sensitivity to ethanol. Aldehyde dehydrogenase 2 (ALDH2) is a key enzyme in ethanol metabolism. Inhibition of aldehyde dehydrogenase 2 activity, through the silencing of ALDH2, results in the build-up of acetaldehyde. Elevated levels of acetaldehyde are responsible for the adverse physiological effects that cause individuals to avoid alcohol consumption. We have developed extremely potent RNAi trigger and combined it with a third generation LNP. Human proof of concept for ALDH2 inhibition already exists in the form of the approved drug Disulfiram. However, Disulfiram's efficacy suffers from poor compliance because it has to be taken daily. We believe TKM-ALDH2 will induce prolonged ethanol sensitivity that will enable it to overcome the compliance limitations associated with daily dosing.

We anticipate completing the necessary preclinical work to be in a position to file an IND in the second half of 2014 in order to advance TKM-ALDH2 into a Phase I clinical trial in healthy volunteers. It is expected that proof-of-concept with alcohol challenge including ALDH2 knockdown, acetaldehyde build up and ethanol toxicity can be obtained in the Phase I clinical trial with data available in 2015. Alcohol use disorder represents a significant public health problem, and there are a variety of government funding sources seeking to support new therapeutic strategies and Tekmira will be exploring and leveraging these partnering opportunities.

### **Research Programs**

We are currently evaluating several preclinical candidates with potential in diverse therapeutic areas using key criteria to prioritize efforts. Given the extremely high efficiency of delivery for third generation liver-centric LNP formulations, we are focused on rare diseases where the molecular target is found in the liver, where early clinical proof-of-concept can be achieved and where there may be accelerated development opportunities. Two areas of interest are glycogen storage diseases and rare forms of hypertriglyceridemia. Our research team intends to continue to generate data to support the advancement of the most promising of these targets, and we expect to be in a position to identify another development candidate in 2014.

### **Advancements in LNP Technology**

Our LNP technology represents the most widely adopted delivery technology in RNAi, enabling eight clinical trials and administered to over 200 patients to date. Because LNP can enable a wide variety of nucleic acid payloads, including messenger RNA, we continue to see new product development and partnering opportunities based on our industry-leading delivery expertise. In October, we presented new preclinical data at a scientific symposium demonstrating that mRNA when encapsulated and delivered using Tekmira's LNP technology can be effectively delivered and expressed in liver, tumors and other specific tissues of therapeutic interest.

### **Strategic Alliances**

**Alnylam settlement and license agreement**

In November 2012, we entered into an agreement to settle all litigation between Tekmira and Alnylam and AICana Technologies, Inc. At the same time, we also entered into a new licensing agreement with Alnylam that replaced all earlier licensing, cross-licensing, collaboration, and manufacturing agreements. We expect to enter into a separate cross license agreement with AICana, which will include milestone and royalty payment obligations to Tekmira. AICana is excluded from working in the RNAi field for five years. In conjunction with the settlement, we paid AICana 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 AICana.

As a result of the new Alnylam license agreement, Tekmira received a total of US\$65 million in cash payments in November 2012. We are also eligible to receive an additional US\$10 million in near-term milestones related to Alnylam's ALN-TTR02 and ALN-VSP products:

- In November 2013, Alnylam disclosed that it had initiated a Phase III trial with ALN-TTR02, also known as patisiran, and the associated US\$5 million milestone payment to Tekmira has now been triggered.
- In June 2013, Tekmira transferred manufacturing process technology to Ascleto Pharmaceuticals (Hangzhou) Co., Ltd. ("Ascleto") to enable them to produce ALN-VSP, a product candidate licensed to them by Alnylam. We believe that the technology transferred to Ascleto triggers a US\$5 million milestone payment from Alnylam. However, Alnylam has disputed the milestone claim submitted the matter to an arbitration proceeding as provided for under the agreement. The Company has not recorded any revenue in respect of this milestone.

Alnylam has a license to use our intellectual property to develop and commercialize products and may only grant access to our LNP technology to its partners if it is part of a product sublicense. Alnylam will pay us low single-digit royalties as Alnylam's LNP-enabled products are developed and commercialized. Alnylam currently has three LNP-based products in human clinical trials: ALN-TTR02, ALN-VSP, and ALN-PCS02.

The new licensing agreement with Alnylam also grants us intellectual property rights for the development and commercialization of RNAi therapeutics for specified targets. In consideration for these three exclusive and ten non-exclusive licenses, we have agreed to pay single-digit royalties to Alnylam on product sales, with milestone obligations of up to US\$8.5 million on the non-exclusive licenses and no milestone obligations on the three exclusive licenses.

**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.

The agreement was amended on August 8, 2012 to adjust the future license fees and other contingent payments. To date we have recorded \$0.5 million in fees under our license from Halo-Bio.

We terminated the agreement with Halo-Bio on July 31, 2013. There are no further payments due or contingently payable to Halo-Bio.

**License agreement with Marina Biotech, Inc. / Arcturus Therapeutics, Inc.**

On November 29, 2012, we disclosed that we had obtained a worldwide, non-exclusive license to a novel RNAi trigger 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.

To date we have paid Marina \$0.5 million in license fees 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.

In August 2013, Marina assigned its UNA technology to Arcturus Therapeutics, Inc., and the UNA license agreement between Tekmira and Marina was assigned to Arcturus. The terms of the license are otherwise unchanged.

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

As a result of the business combination with Protiva in 2008, we acquired a non-exclusive royalty-bearing worldwide 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.

**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 at UTMB. At September 30, 2013 the remaining balance on Tekmira's portion of the grant was \$0.1 million.

**Spectrum Pharmaceuticals, Inc. license agreement**

On September 3, 2013, we announced that our licensee, Spectrum Pharmaceuticals, Inc. had launched Marqibo® through its existing hematology sales force in the United States and has shipped the first commercial orders. We are entitled to mid-single digit royalty payments based on Marqibo's commercial sales. Marqibo, which is a novel, sphingomyelin/cholesterol liposome-encapsulated formulation of the FDA-approved anticancer drug vincristine originally developed by Tekmira, was licensed from Tekmira to Talon Therapeutics in 2006. In July 2013, Talon was acquired by Spectrum Pharmaceuticals, Inc. Marqibo's approved indication is for the treatment of adult patients with Philadelphia chromosome-negative acute lymphoblastic leukemia (Ph- ALL) in second or greater relapse or whose disease has progressed following two or more lines of anti-leukemia therapy. Spectrum has two ongoing Phase III trials evaluating Marqibo in additional indications.

**CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

**Share purchase warrant valuation** / Based on changes in our business and general stock market conditions since our warrants were issued in 2011 and 2012, in Q3 2013, we undertook a review of our warrant fair value assumptions. Our previous assumption for warrant expected life was the warrant's remaining contractual term. Based on the pattern of exercises of our warrants we have reduced the expected life to a weighted average of 1.8 years. Our previous assumption for expected volatility in respect of our warrants was 40%. We are now

calculating volatility based on our historic share price fluctuations, which, at September 30, 2013, gave a weighted average expected volatility of 52.39%. The reduction in expected life has the effect of reducing the fair value of our warrants, whereas, the increase in our expectations for volatility increases the fair value of our warrants. These two warrant-pricing assumptions, however, had relatively little impact on the change in the fair value of our warrants from June 30, 2013 to September 30, 2013 as compared to the impact of the change in our stock price from \$4.84 to \$7.19.

There are no other changes to our critical accounting policies and estimates from those disclosed in the annual MD&A and the notes to our audited annual consolidated financial statements both contained in our 2012 Annual Report.

#### **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. The adoption of this standard did not have any impact on our 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. The adoption of this guidance did not have any impact on our consolidated 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

	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013	Q3 2013
<b>Revenue</b>								
Collaborations and contracts:								
DoD	\$ 2.8	\$ 3.5	\$ 2.5	\$ 1.9	\$ 3.6	\$ 2.0	\$ 2.5	\$ 2.9
Alnylam	0.7	-	-	-	-	-	-	-
Other	0.2	0.1	0.1	0.1	0.3	0.2	0.4	0.1
	3.7	3.6	2.6	2.0	3.9	2.2	2.9	3.0
Alnylam milestone payments	-	-	1.0	-	-	-	-	-
Spectrum and Talon payments	-	-	-	1.0	-	-	-	-
<b>Total revenue</b>	<b>3.7</b>	<b>3.6</b>	<b>3.6</b>	<b>3.0</b>	<b>3.9</b>	<b>2.2</b>	<b>2.9</b>	<b>3.0</b>
Expenses	(5.9)	(6.2)	(6.2)	(4.8)	(9.8)	(5.3)	(6.1)	(6.8)
Other income (losses)	0.3	(0.5)	0.7	(1.6)	44.2	0.5	0.1	(2.3)
<b>Net (loss) income</b>	<b>(1.8)</b>	<b>(3.2)</b>	<b>(1.9)</b>	<b>(3.4)</b>	<b>38.3</b>	<b>(2.6)</b>	<b>(3.1)</b>	<b>(6.1)</b>
<b>Basic net (loss)</b>								
<b>income per share</b>	<b>\$ (0.15)</b>	<b>\$ (0.25)</b>	<b>\$ (0.14)</b>	<b>\$ (0.25)</b>	<b>\$ 2.72</b>	<b>\$ (0.18)</b>	<b>\$ (0.22)</b>	<b>\$ (0.42)</b>
<b>Diluted net (loss)</b>								
<b>income per share</b>	<b>\$ (0.15)</b>	<b>\$ (0.25)</b>	<b>\$ (0.14)</b>	<b>\$ (0.25)</b>	<b>\$ 2.51</b>	<b>\$ (0.18)</b>	<b>\$ (0.22)</b>	<b>\$ (0.42)</b>

**Quarterly Trends / Revenue** / Our revenue is derived from research and development collaborations and contracts, licensing fees, milestone and royalty payments. Over the past two years, our principal source of ongoing revenue has been contract with the DoD to advance TKM-Ebola which began in July 2010.

In Q3 2010 we signed a contract with the DoD 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 DoD so they are also recorded as revenue. DoD revenue from the TKM-Ebola program also includes labour, overheads and incentive fee charges. Revenues and related contract expenses were lower in Q3 2012 due to a temporary stop-work order issued by the DoD in August 2012. The stop-work order was subsequently lifted on October 2, 2012 and the contract has resumed. DoD revenue was unusually high in Q4 2012 due to an increase in our overhead rates. As described in our critical accounting policies in our Annual Report, 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 which led to an increase in our TKM-Ebola contract overhead rates and, therefore, an increase in our revenue under the contract. Q1 2013 DoD revenue was lower than average as certain activities were still building momentum following the stop-work order. TKM-Ebola contract revenue increased in Q2 and Q3 2013 as technology transfer, manufacturing and non-clinical studies were all ongoing. On May 8, 2013 we announced the signing of a modification to the TKM-Ebola contract - see the "Results of Operations" section of this discussion.

In Q2 2012 we earned a \$1.0 million milestone from Alnylam following their initiation of a Phase II 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). Our first royalties for Marqibo were earned in Q3 2013 and were \$0.002 million.

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.

**Expenses** / Q3 2012 expenses were unusually low due in part to the TKM-Ebola contract stop-work order as discussed above. Our Q4 2012 expenses were unusually high as we paid staff bonuses and recorded \$2.5 million in license fee charges related to AlCana, Marina and Halo-Bio - see the "Overview" section of this discussion.

**Other income (losses)** / Other income in Q4 2012 consists primarily of \$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 the "Overview" section for further discussion of the lawsuit and settlement). Q3 2013 includes a \$2.5 million increase in the fair value of our warrant liability. This is largely attributable to the increase in our share price as compared to when the warrants were last valued at the end of Q2 2013.

**Net (loss) income** / 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 both Q3 2012 and Q3 2013 is largely due to increases in the fair value of our warrant liability which is caused by increases in our share price over the previous quarter ends.

## RESULTS OF OPERATIONS

### Three and nine months ended September 30, 2013 compared to the three and nine months ended September 30, 2012

For the first nine months of 2013 our net loss was \$11.8 million (\$0.82 per common share) as compared to a net loss of \$8.5 million (\$0.63 per common share) for the first nine months of 2012. For the three months ended September 30, 2013 ("Q3 2013"), our net loss was \$6.1 million (\$0.42 per common share) as compared to a net loss of \$3.4 million (\$0.25 per common share) for the three months ended September 30, 2012 ("Q3 2012").

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

(in millions Cdn\$)	Q3 2013	Q3 2012	Year-to-date 2013	Year-to-date 2012
<b>Collaborations and contracts</b>				
DoD	\$ 2.9	\$ 1.9	\$ 7.4	\$ 7.8
BMS	0.1	0.1	0.7	0.3
Other RNAi collaborators	-	-	0.1	0.1
<b>Total collaborations and contracts</b>	<b>3.0</b>	<b>2.1</b>	<b>8.2</b>	<b>8.2</b>
Alnylam milestone payments	-	-	-	1.0
Spectrum and Talon payments	-	1.0	-	1.0
<b>Total revenue</b>	<b>\$ 3.0</b>	<b>\$ 3.0</b>	<b>\$ 8.2</b>	<b>\$ 10.2</b>

**DoD revenue** / On July 14, 2010, we signed a contract with the DoD to advance an RNAi therapeutic utilizing our LNP technology to treat Ebola virus infection (see the "Overview" section for further discussion). Stage one of the contract, which is funded by the DoD, was initially budgeted at US\$34.8 million. This stage one funding is for the development of TKM-Ebola including completion of preclinical development, filing an IND application with the FDA and completing a Phase I 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 May 8, 2013, we announced that our contract with the DoD had been modified to support development plans that integrate advancements in our LNP formulation and manufacturing technologies, and provide for \$6.9 million in additional funding for the TKM-Ebola program. The contract modification increases the stage one targeted funding to US\$41.7 million. Revenue from the contract is being recognized using the percentage completion with cumulative catch-ups recorded for any changes in estimate.

DoD revenues and related contract expenses were lower in Q3 2012, as compared to Q3 2013, due to a temporary stop-work order issued by the DoD in August 2012. The stop-work order was subsequently lifted on October 2, 2012 and the contract resumed. DoD revenues were higher in the first half of 2012 as compared to the first half of 2013 as our Phase I clinical trial for TKM-Ebola was initiated at that time and we began to acquire materials for scaling up our TKM-Ebola drug product manufacturing process.



**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. 2013 year-to-date revenues are higher than 2012 year-to-date revenues as BMS have ordered more LNP formulations and at a larger scale.

**Other RNAi collaborators revenue** / We have active research agreements with a number of other RNAi collaborators, including pharmaceutical, biotech and agricultural companies.

**Alnylam revenue** / In Q2 2012 we earned a \$1.0 million milestone from Alnylam following initiation of their ALN-TTR02 Phase II human clinical trial. ALN-TTR02 is enabled by our LNP delivery technology.

**Spectrum and Talon payments** / 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). Spectrum, who acquired Talon in July 2013, began commercial sales of Marqibo in Q3 2013. We recorded Marqibo royalty income of \$0.002 million in Q3 2013.

**Revenue guidance for 2013** / In our 2012 Annual Report MD&A, we guided that, based on continued contract revenue from the U.S. Government and US\$10.0 million in milestone payments expected from Alnylam, our 2013 revenue would be in the range of \$20.0 to \$25.0 million. Given that payment of the US\$5.0 million ALN-VSP milestone is being disputed (see Overview section) we now expect our 2013 revenue to be in the range of \$15.0 to \$20.0 million.

**Expenses / Research, development, collaborations and contracts** / Research, development, collaborations and contracts expenses were \$5.7 million in Q3 2013 as compared to \$3.1 million in Q3 2012 and were \$14.9 million in the first nine months of 2013 as compared to \$10.8 million in the first nine months of 2012.

For reasons discussed in the revenue section above, our Q3 2013 TKM-Ebola expenses were higher than in Q3 2012 but are at similar levels when comparing year-to-date figures.

Spending on our TKM-PLK1 clinical trial has increased both in Q3 and year-to-date 2013 as compared to the respective 2012 periods. The total number of treatment cycles has increased in 2013 over 2012 as the rate of patient enrollment increased and some patients were able to continue in the trial for an extended period. We also incurred costs in 2013 related to planning further TKM-PLK1 trials and the expansion of current trial into two more clinics.

For both Q3 and year-to-date 2013, we incurred more early stage research expense than in the 2012 comparative periods as we work to identify and qualify additional drug candidates for development (see Overview section). Also, research and development salary and overhead expenses have been increasing through 2013 as compared to 2012 as we expand our capabilities and our product pipeline.

**General and administrative** / General and administrative expenses were \$1.0 million in Q3 2013 as compared to \$1.5 million in Q3 2012 and were \$2.8 million in the first nine months of 2013 as compared to \$5.7 million in the first nine months of 2012. Q3 and year-to-date 2012 general and administrative expenses were higher as they included legal fees incurred in respect of a lawsuit against Alnylam and AICana that was settled in November 2012. Slightly offsetting the reduction in legal fees is an increase in general and administrative salaries in Q3 and year-to-date 2013 as we have hired a number of new employees to support our expanding research and development activities.

**Depreciation of property and equipment** / Depreciation of property and equipment was \$0.2 million in Q3 2013 as compared to \$0.2 million in Q3 2012 and were \$0.5 million in the first nine months of 2013 as compared to \$0.7 million in the first nine months of 2012. Most of our recent property and equipment additions were related to our TKM-Ebola program and are not recorded as Company investments. As such, a large portion of our property and equipment is reaching full amortization. In the first nine months of 2013, however, we did spend \$0.5 million on property and equipment mostly related to information technology improvements.

**Change in fair value of warrant liability** / In conjunction with equity financings in 2011 and 2012, we issued warrants to purchase our common shares. 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 loss.

Setting aside warrant exercises, there was a \$2.2 million increase in the fair value of our warrant liability in the first nine months of 2013. This is largely the result of a significant increase in our share price over the period.

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.

## **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 September 30, 2013, we held \$36.9 million in cash and cash equivalents as compared to \$46.8 million at December 31, 2012.

Operating activities used cash of \$3.8 million in Q3 2013 as compared to \$1.3 million in Q3 2012. Operating activities used cash of \$9.6 million in the first nine months of 2013 as compared to \$7.3 million in the first nine months of 2012.

Investing activities used \$0.1 million in cash in Q3 2013 as compared to \$0.0 million in Q3 2012. Investing activities used \$0.5 million in cash in the first nine months of 2013 as compared to \$0.0 million in the first nine months of 2012. Capital expenditure was minimal in 2012 as we focused on the litigation against Alnylam and AlCana. Investing activities in the first nine months of 2013 were largely focused on improving our information technology systems.

Financing activities brought in \$0.1 million in Q3 2013 as compared to \$0.0 million in Q3 2012. Financing activities brought in \$0.3 million in the first nine months of 2013 as compared to \$3.8 million in the first nine months of 2012. In Q1 2012 we raised money through a private placement. In the first nine months of 2013 we received cash from stock option and warrant exercises.

Subsequent to our September 30, 2013 reporting date, we completed a public offering financing of 4,312,500 common shares priced at \$8.2456 (US\$8.00) for gross proceeds of \$35.6 million (US\$34.5 million). The estimated cost of the financing, including commissions and professional fees, is \$2.4 million, resulting in net estimated proceeds of \$33.1 million (US\$32.1 million). We intend to use the net proceeds of the financing for working capital and general corporate purposes, including, but not limited to progressing our research and development programs, including our various collaborative arrangements, as well as advancing and progressing our LNP technology.

Based on the guidance in our 2012 Annual Report MD&A, at that time, we believed that our current funds on hand, plus expected income, including payments from our current licensees, collaborative partners and the DoD would be sufficient to continue our product development into 2015. Including the net proceeds of our recent public offering financing, we now believe that our funds on hand will be sufficient to last us until early 2016 (see the "Risks and Uncertainties" section of this MD&A). Also, in our 2012 Annual Report MD&A, we guided that our cash balance would be greater than \$35.0 million at the end of 2013. Based on our updated cash projections we now expect our year-end 2013 cash balance to be in the range of \$65.0 to \$70.0 million.

### **Contractual obligations and off-Balance Sheet arrangements**

Other than as disclosed elsewhere in this MD&A, there have not been any material changes to our contractual obligations or off-balance sheet arrangements from those disclosed in our 2012 Form 20-F.

## **RELATED PARTY TRANSACTIONS**

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

## **OUTSTANDING SHARE DATA**

At November 1, 2013, we had 19,021,050 common shares issued and outstanding, outstanding options to purchase an additional 2,105,439 common shares and outstanding warrants to purchase an additional 1,024,928 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](http://www.sedar.com) or at [www.sec.gov/edgar](http://www.sec.gov/edgar).

At September 30, 2013 we held \$36.9 million in cash and cash equivalents. We believe our current funds on hand, plus expected income, including payments from our licensees, collaborative partners and the DoD will be sufficient to continue our product development until early 2016. 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 DoD contract to develop TKM-Ebola;
- revenues earned from our collaborative partnerships and licensing agreements, including milestone payments from Alnylam and royalties from sales of Marqibo from Spectrum;
- 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 September 30, 2013 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. 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**

For the nine months ended September 30, 2013, no changes were made in our internal controls over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.