UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of August 2013

Commission File Number: 001-34949

Tekmira Pharmaceuticals Corporation

(Translation of Registrant's Name Into English)

100-8900 Glenlyon Parkway Burnaby, British Columbia Canada, V5J 5J8 (Address of Principal Executive Offices)

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.)

Form 20-F ⊠ Form 40-F □

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

INCORPORATION BY REFERENCE

Exhibits 99.1 and 99.2 to this Form 6-K are hereby incorporated by reference into the Registration Statement of Tekmira Pharmaceuticals Corporation on Form S-8 (File No. 333-186185) and as an Exhibit to the Registration Statement of Tekmira Pharmaceuticals Corporation on Form F-10 (File No. 333-185883).

DOCUMENTS FILED AS PART OF THIS FORM 6-K

See the Exhibit Index hereto.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tekmira Pharmaceuticals Corporation

By: /S/ IAN C. MORTIMER

Name: Ian C. Mortimer

Title Executive Vice President and Chief Financial Officer

Date: August 12, 2013

EXHIBIT INDEX

Exhibit Number	Description
99.1	Unaudited Interim Condensed Consolidated Financial Statements for the three and six months ended June 30, 2013
99.2	Management's Discussion and Analysis of Financial Condition and Operations for the three and six months ended June 30, 2013
99.3	Form 52 - 109F2 - Certification of Interim Filings (Chief Executive Officer)
99.4	Form 52 - 109F2 - Certification of Interim Filings (Chief Financial Officer)

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 – Q2

Three and six months ended June 30, 2013 and June 30, 2012

Interim Condensed Consolidated Balance Sheets

(Unaudited) (Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	June 30 2013	December 31 2012
Assets		
Current assets:		
Cash and cash equivalents	\$ 40,736,004	\$ 46,785,518
Accounts receivable	1,732,156	1,069,437
Accrued revenue	3,222,836	2,361,836
Deferred expenses	306,586	429,221
Investment tax credits receivable	9,825	9,825
Prepaid expenses and other assets	854,828	327,609
Total current assets	46,862,235	50,983,446
Property and equipment	13,545,049	13,121,268
Less accumulated depreciation	(12,103,945)	(11,776,396)
Property and equipment net of accumulated depreciation	1,441,104	1,344,872
Total assets	\$ 48,303,339	\$ 52,328,318
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities (note 4)	\$ 5,188,098	\$ 3,776,287
Deferred revenue (note 3)	3,962,136	3,127,629
Warrants (note 2)	3,362,023	3,994,449
Total current liabilities	12,512,257	10,898,365
Deferred revenue, net of current portion (note 3)	_	718,779
Total liabilities	12,512,257	11,617,144
Stockholders' equity:		
Common shares		
Authorized—unlimited number with no par value		
Issued and outstanding:		
14,423,401 (December 31, 2012—14,305,356)	238,886,506	238,245,333
Additional paid-in capital	31,686,749	31,520,480
Deficit	(234,782,173)	(229,054,639)
Total stockholders' equity	35,791,082	40,711,174
Total liabilities and stockholders' equity	\$ 48,303,339	\$ 52,328,318
Nature of husiness and future exercises (note 1)		

Nature of business and future operations (note 1) Contingencies and commitments (note 6)

See accompanying notes to the interim condensed consolidated financial statements.

Page 2 of 12

Interim Condensed Consolidated Statements of Operations and Comprehensive Loss

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

	Three mor Jun		Six months ended June 30		
	2013	2013 2012		2012	
Revenue (note 3)					
Collaborations and contracts	\$ 2,928,878	\$ 2,601,847	\$ 5,124,161	\$ 6,165,829	
Licensing fees and milestone payments		1,018,100		1,018,100	
Total revenue	2,928,878	3,619,947	5,124,161	7,183,929	
Expenses					
Research, development, collaborations and contracts	5,060,845	3,572,507	9,249,654	7,709,036	
General and administrative	873,947	2,403,862	1,793,165	4,225,414	
Depreciation of property and equipment	156,922	225,949	327,549	466,786	
Total expenses	6,091,714	6,202,318	11,370,368	12,401,236	
Loss from operations	(3,162,836)	(2,582,371)	(6,246,207)	(5,217,307)	
Other income (losses)					
Interest income	149,885	29,325	298,803	53,539	
Foreign exchange gains (losses)	(62,982)	(5,331)	(68,441)	4,879	
Warrant issuance costs		—	—	(47,000)	
Decrease (increase) in fair value of warrant liability	(29,186)	635,022	288,311	122,656	
Net loss and comprehensive loss	<u>\$ (3,105,119)</u>	\$ (1,923,355)	\$ (5,727,534)	\$ (5,083,233)	
Loss per common share					
Basic and diluted	\$ (0.22)	\$ (0.14)	\$ (0.40)	\$ (0.38)	
Weighted average number of common shares					
Basic and diluted	14,406,911	13,999,626	14,375,538	13,389,599	

See accompanying notes to the interim condensed consolidated financial statements.

Page 3 of 12

Interim Condensed Consolidated Statement of Stockholders' Equity

For the six months ended June 30, 2013 (Unaudited) (Expressed in Canadian Dollars) (Prepared in accordance with U.S. GAAP)

					Total
	Number of	Share	Additional paid-in		stockholders'
	shares	capital	capital	Deficit	equity
Balance, December 31, 2012	14,305,356	\$238,245,333	\$ 31,520,480	\$(229,054,639)	\$40,711,174
Stock-based compensation	—	—	250,535	—	250,535
Issuance of common shares pursuant to exercise of options	35,375	176,283	(84,266)		92,017
Issuance of common shares pursuant to exercise of warrants	82,670	464,890	—		464,890
Net loss	—	—	—	(5,727,534)	(5,727,534)
Balance, June 30, 2013	14,423,401	238,886,506	31,686,749	(234,782,173)	35,791,082

See accompanying notes to the interim condensed consolidated financial statements.

Page 4 of 12

Interim Condensed Consolidated Statements of Cash Flow

(Unaudited) (Expressed in Canadian Dollars)

(Prepared in accordance with U.S. GAAP)

	Three mon June		Six mont June	
	2013	2012	2013	2012
OPERATING ACTIVITIES	¢ (D 105 110)	¢(1,000,055)		¢ (F 002 222)
Loss for the period	\$ (3,105,119)	\$(1,923,355)	\$ (5,727,534)	\$(5,083,233)
Items not involving cash:	450.000	225.040		100 500
Depreciation of property and equipment	156,922	225,949	327,549	466,786
Stock-based compensation expense	116,036	149,926	250,535	328,574
Foreign exchange losses arising on foreign currency cash balances Warrant issuance costs	2,662	10,369	9,114	39,284
		((25,022)	(200-211)	47,000
Change in fair value of warrant liability	29,186	(635,022)	(288,311)	(122,656)
Net change in non-cash operating items: Accounts receivable	(220,000)		(000 710)	(000 072)
Accounts receivable Accrued revenue	(238,986)	535,535	(662,719)	(968,973)
	262,762	(55,110) 43,091	(861,000)	76,769
Deferred expenses Investment tax credits receivable	61,317	113,572	122,635	158,654 113,572
Prepaid expenses and other assets	(25,316)	113,572	(527,219)	79,838
Accounts payable and accrued liabilities	(25,316) 592,036	(108,490)		(1,015,704)
Deferred revenue			1,411,811 115,728	(1,015,704) (157,281)
	(776,432)	(313,421)		
Net cash (used in) operating activities	(2,924,932)	(1,785,349)	(5,829,411)	(6,037,369)
INVESTING ACTIVITIES		(1.1.000)		
Acquisition of property and equipment	(217,242)	(11,928)	(423,781)	(12,767)
Net cash provided by used in investing activities	(217,242)	(11,928)	(423,781)	(12,767)
FINANCING ACTIVITIES				
Proceeds from issuance of common shares and warrants, net of issuance costs			—	3,841,515
Issuance of common shares pursuant to exercise of options	7,917	300	92,017	1,500
Issuance of common shares pursuant to exercise of warrants	63,000	_	120,775	
Net cash provided by financing activities	70,917	300	212,792	3,843,015
Foreign exchange losses arising on foreign currency cash balances	(2,662)	(10,369)	(9,114)	(39,284)
Decrease in cash and cash equivalents	(3,073,919)	(1,807,346)	(6,049,514)	(2,246,406)
Cash and cash equivalents, beginning of period	43,809,923	8,745,074	46,785,518	9,184,134
Cash and cash equivalents, end of period	\$40,736,004	\$ 6,937,728	\$40,736,004	\$ 6,937,728
Supplemental cash flow information				
Fair value of warrants exercised on a cashless basis	\$ 112,500	\$ —	\$ 222,225	\$ —
Investment tax credits received	\$ —	\$ 113,572	\$ —	\$ 113,572
Fair value of warrants issued in conjunction with public offering	\$ —	\$ —	\$ —	\$ 850,358

See accompanying notes to the interim condensed consolidated financial statements.

Page 5 of 12

Notes to Interim Condensed Consolidated financial statements (unaudited) (Expressed in Canadian dollars) Three and six months ended June 30, 2013 and June 30, 2012

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 June 30, 2013 and for all periods presented.

The results of operations for the three and six months ended June 30, 2013 and June 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 June 30, 2013, potential common shares of 3,396,671 (June 30, 2012 – 3,683,752) 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:

Level 1 inputs are quoted market prices for identical instruments available in active markets.

Page 6 of 12

Notes to Interim Condensed Consolidated financial statements (unaudited) (Expressed in Canadian dollars) Three and six months ended June 30, 2013 and June 30, 2012

- 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	June 30, 2013
Assets				
Cash	\$12,945,298		—	\$ 12,945,298
Guaranteed Investment Certificates	27,790,706		—	27,790,706
Total	\$40,736,004	_		\$ 40,736,004
Liabilities				
Warrants	—		\$3,362,023	\$ 3,362,023
	Level 1	Level 2	Level 3	December 31, 2012
Assets	Level 1	Level 2	Level 3	December 31, 2012
Assets Cash	Level 1 \$44,148,562	Level 2	Level 3	December 31, 2012 \$ 44,148,562
		Level 2 	Level 3	
Cash	\$44,148,562		Level 3	\$ 44,148,562
Cash Guaranteed Investment Certificates	\$44,148,562 2,636,956	_		\$ 44,148,562 2,636,956

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

		Opening liability of	Fair value of		
		warrants	warrants	Increase (decrease) in	
	Liability at beginning	issued in the	exercised	fair value of warrant	Liability at end
	of the period	period	in the period	liability	of the period
Six months ended June 30, 2013	\$ 3,994,449	\$ —	\$(344,115)	\$ (288,311)	\$ 3,362,023

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

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

	June 30, 2013	Dec	ember 31, 2012
Dividend yield	0.00%		0.00%
Expected volatility	40.00%		40.00%
Risk-free interest rate	1.35%		1.28%
Expected average term	3.3 years		3.8 years
Fair value of warrants outstanding	\$ 2.32	\$	2.51
Aggregate fair value of warrants outstanding	\$3,362,023	\$	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.

Page 7 of 12

Notes to Interim Condensed Consolidated financial statements (unaudited) (Expressed in Canadian dollars) Three and six months ended June 30, 2013 and June 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 June 30	Six months e	ended June 30	
	2013	2012	2013	2012	
Collaborations and contracts					
DoD (a)	\$2,526,349	\$2,467,087	\$4,482,868	\$5,929,331	
Alnylam (b)	—	—	—	9,713	
BMS (c)	332,571	134,760	571,335	184,890	
Other RNAi collaborators (d)	69,958	—	69,958	41,895	
Total research and development collaborations and contracts	2,928,878	2,601,847	5,124,161	6,165,829	
Licensing fees and milestone payments		—			
Alnylam milestone payments (b)		1,018,100		1,018,100	
Total licensing fees and milestone payments	—	1,018,100	_	1,018,100	
Total revenue	\$2,928,878	\$3,619,947	\$5,124,161	\$7,183,929	

The following table sets forth deferred collaborations and contracts revenue:

	June 30, 2013	December 31, 2012
DoD (a)	\$2,068,986	\$ 1,381,922
BMS current portion (c)	1,893,150	1,745,707
Deferred revenue, current portion	3,962,136	3,127,629
BMS long-term portion (c)		718,779
Total deferred revenue	\$3,962,136	\$ 3,846,408

Page 8 of 12

Notes to Interim Condensed Consolidated financial statements (unaudited) (Expressed in Canadian dollars) Three and six months ended June 30, 2013 and June 30, 2012

(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 AlCana Technologies Inc. ("AlCana")

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

As a result of the new Alnylam license agreement, on November 26, 2012, the Company received \$65,039,000 (US\$65,000,000) in cash from Alnylam. This includes US\$30,000,000 associated with the termination of the manufacturing agreement and US\$35,000,000 associated with the termination of the previous license agreements, as well as a modification of the milestone and royalty schedules associated with Alnylam's ALN-VSP, ALN-PCS, and ALN-TTR programs. In addition, Alnylam has transferred all agreed upon patents and patent applications related to LNP technology for the systemic delivery of RNAi therapeutic products, including the MC3 lipid family, to the Company, who will own and control prosecution of this intellectual property portfolio. The Company is the only entity able to sublicense its LNP intellectual property in future platform-type relationships. Alnylam has a license to use the Company's intellectual property to develop and commercialize products and may only grant access to the Company's LNP technology to its partners if it is part of a product sublicense. Alnylam will pay the Company milestones and royalties as Alnylam's LNP-enabled products are developed and commercialized.

Page 9 of 12

Notes to Interim Condensed Consolidated financial statements (unaudited) (Expressed in Canadian dollars) Three and six months ended June 30, 2013 and June 30, 2012

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 Ascletis Pharmaceuticals (Hangzhou) Co., Ltd. ("Ascletis") 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 Ascletis 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, and wishes to exercise arbitration proceedings as provided for under the agreement. The Company disputes Alnylam's position. 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.

Page 10 of 12

Notes to Interim Condensed Consolidated financial statements (unaudited) (Expressed in Canadian dollars) Three and six months ended June 30, 2013 and June 30, 2012

4. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities is comprised of the following:

	June 30, 2013	Dec	ember 31, 2012
Trade accounts payable	\$1,551,514	\$	801,701
Research and development accruals	835,309		308,917
License fee accruals	1,492,350		1,641,585
Professional fee accruals	512,064		599,058
Restructuring cost accruals	34,999		34,999
Deferred lease inducements	32,500		47,834
Other accrued liabilities	729,362		342,193
	\$5,188,098	\$	3,776,287

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 June 30, 2013 were \$1,642,878 and represent 95% 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 June 30, 2013 was the accounts receivable balance of \$1,732,156 (December 31, 2012—\$1,069,437).

All accounts receivable balances were current as at June 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 June 30, 2013, a cumulative contribution of \$3,701,571 has been received and the Company does not expect any further funding under this agreement. In return for the funding provided by TPC, the Company agreed to pay royalties on the share of future licensing and product revenue, if any, that is received by the Company on certain non-siRNA oligonucleotide product candidates covered by the funding under the agreement. These royalties are payable until a certain cumulative payment amount is achieved or until a pre-specified date. In addition, until a cumulative amount equal to the funding actually received under the agreement has been paid to TPC, the Company agreed to pay low single digit percentage royalties on any royalties the Company receives for Marqibo[®]. To June 30, 2013, the Company had not made any royalty payments to TPC.

Contingently payable promissory notes

On March 25, 2008, Protiva declared dividends totaling US\$12,000,000. The dividends were paid by Protiva issuing promissory notes on May 23, 2008. Recourse against Protiva for payment of the promissory notes will be limited to Protiva's receipt, if any, of up to US\$12,000,000 in license payments from Merck. Protiva will pay

Page 11 of 12

Notes to Interim Condensed Consolidated financial statements (unaudited) (Expressed in Canadian dollars) Three and six months ended June 30, 2013 and June 30, 2012

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.

Page 12 of 12

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND OPERATIONS

August 12, 2013 / This management discussion and analysis (MD&A) for the three and six months ended June 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 or the EDGAR website at www.sec.gov/edgar.

FORWARD-LOOKING STATEMENTS

This discussion and analysis contains "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws (collectively, "forward-looking statements"). Forward-looking statements are generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "budgets," "could," "estimates," "expects," "forecasts," "projects" and similar expressions, and the negative of such expressions. Forward-looking statements in this MD&A include statements about Tekmira's strategy, future operations, clinical trials, prospects and the plans of management; RNAi (ribonucleic acid interference) product development programs; estimates of the number of clinical development programs to be undertaken by Tekmira and its product development partners; selection of additional product candidates; timing of release of clinical data; the effects of Tekmira's products on the treatment of cancer, infectious disease, and other diseases; the effects of TKM-PLK1 on the treatment of cancer, including gastrointestinal neuroendocrine tumors (GI-NET), adrenocortical carcinoma (ACC), and hepatocellular carcinoma (HCC); the expected timing of the initiation of – and subsequent release of data from – a Phase I/II clinical trial with TKM-PLK1, which will enroll patients with advanced GI-NET or ACC tumors; the expected timing of the commencement of a pivotal trial in GI-NET in 2014; and, the evaluation of additional indications for Phase I/II development, including an anticipated Phase I/II clinical trial with hepatocellular carcinoma (HCC) patients, and guidance thereon; the modifications to the TKM-Ebola contract with the U.S. DoD's JPM-TMT office to integrate recent advancements in LNP formulation and manufacturing technology; the initiation of pre-clinical and chemistry, manufacturing and control studies that support the use of the advancements in the TKM-Ebola program; the completion of these studies and submission to the FDA to support the use of the enhanced product in a TKM-Ebola Phase I clinical trial, and the timing thereon; the initiation of a Phase I clinical trial for TKM-Ebola; the quantum and timing of funding that may be provided to Tekmira pursuant to the TKM-Ebola contract with the U.S. DoD's JPM-TMT Office; the evaluation of preclinical candidates with data generation thereon to support target selection; the timing and nomination of Tekmira's next product candidate for development; Tekmira's expectations of entering into a separate cross license agreement with AlCana, which includes anticipated milestone and royalty payments and an expected agreement for AlCana not to compete in the RNAi field for five years, and expected payments upon execution of the cross-license agreement with AlCana; the quantum and timing of future milestone royalty payments expected from the ALN-TTR02, ALN-VSP, ALN-PCS02 and other LNP-enabled product development programs of Alnvlam; the timing of an ALN-TTR02 pivotal or Phase III clinical trial, and related payments to Tekmira; the timing of enabling ALN-VSP to enter a clinical trial in China, and related payments to Tekmira; licenses from Alnylam for the discovery, development and commercialization of RNAi products directed to thirteen gene targets; the timing of Spectrum Pharmaceuticals' launch of Margibo; anticipated royalty payments based on sales of Margibo; the use of lipid nanoparticle technology by Tekmira's licensees and expected royalty payments from commercial sales of Tekmira's product development partners; statements about Tekmira's Unlocked Nucleobase Analog (UNA) license with Marina, as well as milestone and royalty payments thereon; statements with respect to revenue and expense fluctuation and guidance; the quantum and timing of potential funding; statements about Tekmira's cash runway extending into mid-2015 and estimated cash and cash equivalents at the end of 2013; and estimates of the length of time Tekmira's business will be funded by its anticipated financial resources.

Page 1 of 13

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

Additionally, there are known and unknown risk factors which could cause Tekmira's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, among others: Tekmira's research and development capabilities and resources may not meet current or expected demand; Tekmira's products may not prove to be effective in the treatment of cancer, infectious disease, or other diseases; 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; pre-clinical and clinical trials may be more costly or take longer to complete than anticipated and may not generate results that warrant future development of the tested drug candidate; the FDA may determine that the design and planned analysis of Tekmira's clinical trials do not adequately address the trial objectives in support of Tekmira's regulatory submissions; the FDA may not approve the commencement of Tekmira's planned clinical trials or approve the use of Tekmira's products; TKM-PLK1 might not enter into Phase I/II clinical trials in the timeframe anticipated, or at all; there may be no additional indications for TKM-PLK1 Phase I/II development; the DoD may reduce or cancel certain defense spending, including Tekmira's contract to develop TKM-Ebola, or adversely modify the contract with Tekmira; 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 our ability to commercialize TKM-Ebola; Tekmira may not complete the work or studies necessary for the submission of the new LNP formulation for TKM-Ebola to the FDA in the anticipated timeframe, or at all; the FDA may not approve the new LNP formulation for TKM-Ebola; Tekmira may not initiate a new TKM-Ebola Phase I clinical trial in the anticipated timeframe, or at all; 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; additional exclusive or nonexclusive licenses from Alnylam may not be received as anticipated, or at all; a Phase III or pivotal trial for ALN-TTR02 may not start as currently anticipated, or at all; payment of the ALN-VSP milestone related to enabling an ALN-VSP clinical trial may not happen as anticipated, or at all; 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; UNAs may not have the effect of increasing stability or reducing off-target effects when incorporated into RNAi drugs; Tekmira may never develop a commercially viable product that uses UNA technology, or at all; the possibility that Marqibo may not be accepted in the marketplace or that Spectrum may not be able to develop adequate marketing and distribution capabilities; the possibility that Tekmira may not receive milestone and royalty payments based on the successful development and commercialization of Spectrum's Marqibo, Brakiva, and Alocrest product candidates; 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

Page 2 of 13

statements; Tekmira's cash runway may not extend into mid-2015 as anticipated, and may be substantially less than required to continue current operations; and the possibility that Tekmira may not have sufficiently budgeted for expenditures necessary to carry out planned activities.

A more complete discussion of the risks and uncertainties facing Tekmira appears in Tekmira's Annual Report on Form 20-F for the year ended December 31, 2012, which is available at www.sedar.com or at www.sec.gov/edgar. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements, except as required by law.

OVERVIEW

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

Technology, product development and licensing agreements

Our therapeutic product pipeline consists of products being developed internally with our research and development resources. We also support the development of our partners' products and are developing TKM-Ebola, an anti-Ebola viral therapeutic, under a contract with the U.S. Department of Defense's (DoD) Joint Project Manager Transformational Medical Technologies (JPM-TMT) Office. Our focus is on advancing products that utilize our proprietary LNP technology for the delivery of small interfering RNA (siRNA) or Unlocked Nucleobase Analogs (UNAs). 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 non-exclusive access to use UNAs from Marina Biotech, Inc. for the development of RNAi therapeutic products.

In the field of RNAi therapeutics, we have licensed our LNP delivery technology to Alnylam and Merck & Co., Inc., and Alnylam has provided certain access to our LNP delivery technology to some of its partners. In addition, we have ongoing research relationships with Bristol-Myers Squibb Company, the United States National Cancer Institute, the DoD, through their JPM-TMT 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.

Internal Product Candidates

TKM-PLK1

Our lead 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.

PLK1 has been a target of interest for years, and evidence that patients with elevated levels of PLK1 in their tumors exhibit poorer prognosis and survival rates has been documented in medical literature. By using an RNAi approach and exploiting its naturally occurring mechanism of action, we can potentially overcome the limitations of other approaches and effectively silence PLK1.

Completion of TKM-PLK1 Phase I Clinical Trial

Results from the dose escalation portion of a Phase I clinical trial were presented at the 2013 American Association for Cancer Research (AACR) Annual Meeting. TKM-PLK1, which employs a unique lipid nanoparticle (LNP) formulation for oncology applications, was administered to 24 patients at doses ranging from 0.15 mg/kg to 0.90 mg/kg; with a total of 152 doses administered and a mean number of 6.2 doses per patient (range of 1-31 doses). The most common grade 1-2 adverse events were rigors (33%) and fever (25%). No dose-dependent changes in liver function tests were observed. Dose-limiting toxicities included: one grade 3 transient thrombocytopenia in one patient (at 0.9 mg/kg) and one grade 3 hypoxia/dyspnea in another patient (at 0.9 mg/kg). Based on these data, the maximum tolerated dose is estimated to be 0.75 mg/kg.

Page 3 of 13

Patients had a mean number of prior treatment regimens of 5.1 (range of 1-14). Forty-four percent (4 out of 9) of patients evaluable for response, treated at a dose equal to or greater than 0.6 mg/kg, showed clinical benefit. In particular, one patient with progressive, metastatic appendiceal carcinoid (neuroendocrine) cancer had a durable partial tumor response based on RECIST criteria, continuing for more than 10 months. Three other patients achieved stable disease, including one patient with metastatic appendiceal carcinoid (neuroendocrine) cancer, another patient with metastatic colorectal cancer, and a third patient with metastatic adrenocortical carcinoma.

We have completed a Phase I expansion cohort study examining safety and the maximum tolerated dosage (MTD) for TKM-PLK1 in advanced solid tumors. In the expansion cohort, TKM-PLK1 has been administered to a total of 12 patients. To date, four patients are evaluable for response, having received two cycles of TKM-PLK. Of the four patients, one patient with adrenocortical carcinoma achieved stable disease.

TKM-PLK1 Development Plans

Based on the encouraging results from the Phase I TKM-PLK1 clinical trial, which treated a variety of tumor types, we have initiated a Phase I/II clinical trial with TKM-PLK1, which will enroll patients with advanced Gastrointestinal Neuroendocrine Tumors (GI-NET) or Adrenocortical Carcinoma (ACC). The aim is to focus on these specific patients in order to gather additional data on the efficacy of TKM-PLK1 to guide future development of this promising agent. We expect to have data from this trial by mid-2014.

The TKM-PLK1 GI-NET and ACC clinical trial will be a multi-center, single arm, open label study designed to evaluate the safety, tolerability and pharmacokinetics of TKM-PLK1, as well as measure efficacy using RECIST and tumor biomarkers for GI-NET patients. TKM-PLK1 will be administered intravenously on a weekly protocol with each four week cycle consisting of three once-weekly doses followed by a rest week. It is expected that approximately 20 patients with refractory GI-NET or ACC tumors will be enrolled in this trial.

We also intend to initiate another Phase I/II clinical trial with TKM-PLK1, enrolling patients with Hepatocellular Carcinoma (HCC) in the first half of 2014. This clinical trial will be multi-center, open label, non-randomized, 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 the anti-tumor activity of TKM-PLK1 in HCC patients.

TKM-Ebola

For many years, the Zaire species of Ebola virus (ZEBOV) has been associated with periodic outbreaks of hemorrhagic fever in human populations with mortality rates reaching 90%. There are no approved treatments for Ebola or other hemorrhagic fever viruses. In May 2010, a series of studies demonstrating the ability of an RNAi therapeutic utilizing Tekmira's LNP technology to protect non-human primates from the Ebola virus, a highly contagious and lethal human infectious disease, were published in The Lancet. We conducted the studies in collaboration with infectious disease researchers from Boston University and the United States Army Medical Research Institute for Infectious Diseases (USAMRIID) and were funded in part by the U.S. Department of Defense's (DoD) Joint Project Manager Transformational Medical Technologies (JPM-TMT) Office. These preclinical studies demonstrated that when siRNA targeting the Ebola virus and delivered by Tekmira's LNP technology were used to treat previously infected non-human primates, the result was 100 percent protection from an otherwise lethal dose of Zaire Ebola virus (Geisbert et al., The Lancet, Vol 375, May 29, 2010).

In July 2010, we signed a contract with the DoD under their JPM-TMT program, to advance an RNAi therapeutic utilizing our LNP technology to treat Ebola virus infection. 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 productive collaboration with the JPM-TMT was modified and expanded to include significant 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 0.5 mg/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.

Page 4 of 13

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.

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

Other Preclinical Candidates

We are currently evaluating several preclinical candidates with potential in diverse therapeutic areas and generating data to support the advancement of the most promising of these targets. We expect to be in a position to nominate our next product candidate for development later in 2013.

Alnylam settlement and license agreement

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

As a result of the new Alnylam license agreement, Tekmira received a total of US\$65 million in cash payments in November 2012. This includes US\$30 million associated with the termination of the manufacturing agreement and US\$35 million associated with the termination of the previous license agreements, as well as a reduction of the milestone and royalty schedules associated with Alnylam's ALN-VSP, ALN-PCS02, and ALN-TTR02 programs. Of the US\$65 million received from Alnylam, US\$18.7 million was subsequently paid by us to our lead legal counsel representing us in the lawsuit against Alnylam and AlCana, in satisfaction of the contingent obligation owed to that counsel. We are also eligible to receive an additional US\$10 million in near-term milestones, comprised of a US\$5 million payment upon ALN-TTR02 entering a Phase III or pivotal clinical trial and a US\$5 million payment related to enabling drug production for the initiation of clinical trials for ALN-VSP in China. Both near-term milestones are expected to occur in 2013. In addition, Alnylam has transferred all agreed upon patents and patent applications related to LNP technology for the systemic delivery of RNAi therapeutic products, including the MC3 lipid family, to Tekmira, and we will own and control prosecution of this intellectual property portfolio. Tekmira is the only company able to sublicense LNP intellectual property in future platform-type relationships. Alnylam has a license to use 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 milestones and royalties as Alnylam's LNP-enabled products are developed and commercialized.

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

Alnylam currently has three LNP-enabled products in human clinical trials: ALN-TTR02, ALN-VSP, and ALN- PCS02.

Page 5 of 13

ALN-TTR02

Alnylam's ALN-TTR02 is an RNAi therapeutics targeting transthyretin (TTR) for the treatment of TTR-mediated amyloidosis (ATTR), a systemic disease caused by mutations in the TTR gene. ALN-TTR02 utilizes Tekmira's LNP technology. In July 2012, Phase I data from ALN-TTR02 were presented at the Boston University School of Medicine. Alnylam reported results that showed that administration of ALN-TTR02 resulted in statistically significant reductions in serum TTR protein levels of up to 94%. Suppression of TTR, the disease-causing protein in ATTR, was found to be rapid, dose dependent, durable, and specific after just a single dose. Phase II data for ALN-TTR02 were presented at the 2013 Biennial Meeting of the Peripheral Nerve Society in June 2013. Alnylam reported results from 19 patients that showed significant knock-down of up to 93% of circulating wild-type and mutant TTR in a multi-dose study. Multiple doses of ALN-TTR02 were reported to be generally safe and well tolerated. We are entitled to receive a \$5 million milestone payment when ALN-TTR02 enters a pivotal or Phase III clinical trial, which Alnylam has guided should occur by the end of 2013. We will also receive royalty payments based on commercial sales of ALN-TTR02.

ALN-VSP

In April 2009, Alnylam announced that they had initiated a Phase I human clinical trial for ALN-VSP. ALN-VSP is being developed as a treatment for advanced solid tumors with liver involvement. ALN-VSP comprises siRNA molecules delivered systemically using Tekmira's LNP technology. In June 2011, Alnylam presented Phase I human clinical trial data at American Society of Clinical Oncology (ASCO) meeting and disclosed that ALN-VSP was generally well tolerated, demonstrated evidence for anti-tumor activity, and was found to mediate RNAi activity in both hepatic and extra-hepatic tumors. The most recent ALN-VSP data were presented at the American Society of Clinical Oncology (ASCO) meeting in June 2012. Alnylam disclosed that, overall, the results demonstrated disease control lasting more than six months in the majority of patients treated on the extension study, including a complete response (CR) in an endometrial cancer patient who had multiple liver metastases. In this study, chronic dosing of up to 23 months with ALN-VSP was found to be generally safe and well tolerated. In July 2012, Alnylam disclosed that it has formed a strategic alliance with Ascletis Pharmaceuticals (Hangzhou) Co., Ltd., a privately held US-China joint venture pharmaceutical company, to develop and commercialize ALN-VSP in China, including Hong Kong, Macau, and Taiwan. We are entitled to receive a US\$5.0 million milestone payment once we have enabled ALN-VSP to enter clinical trials in China. We will also receive royalty payments based on commercial sales of ALN-VSP.

On June 21, 2013, we transferred manufacturing process technology to Ascletis to enable them to produce ALN-VSP and we believe that this fulfils our obligations in order to earn the US\$5.0 million milestone. However, Alnylam has demanded a declaration that we have not yet met our milestone obligations, and wishes to exercise arbitration proceedings as provided for under the agreement. We dispute Alnylam's position. We have not yet recorded any revenue in respect of this milestone.

ALN-PCS02

Alnylam is also developing ALN-PCS02, an RNAi therapeutic, which is enabled by Tekmira's LNP delivery technology, to treat hypercholesterolemia, or high levels of cholesterol in the blood. In April 2012, Alnylam presented ALN-PCS02 Phase I data at the American Heart Association's Arteriosclerosis, Thrombosis, and Vascular Biology (ATVB) 2012 Scientific Sessions held in Chicago, IL. Alnylam reported results that showed that administration of a single dose of ALN-PCS02, in the absence of concomitant lipid-lowering agents such as statins, resulted in statistically significant and durable reductions of PCSK9 plasma levels of up to 84% and lowering of low-density lipoprotein cholesterol (LDL-C), or "bad cholesterol," of up to 50%. ALN-PCS02 was shown to be safe and well tolerated in this study. In February 2013, Alnylam disclosed an exclusive global alliance with The Medicines Company to advance the ALN-PCS program. We will receive royalty payments based on commercial sales of ALN-PCS02.

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.

Page 6 of 13

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 to focus resources on advancing RNAi products using siRNAs and UNAs. There are no further payments due or contingently payable to Halo-Bio.

License agreement with Marina Biotech, Inc.

On November 29, 2012, we disclosed that we had obtained a worldwide, non-exclusive license to a novel RNAi payload technology called Unlocked Nucleobase Analog (UNA) from Marina for the development of RNAi therapeutics. UNAs can be incorporated into RNAi drugs and have the potential to improve them by increasing their stability and reducing off-target effects.

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.

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

As a result of the business combination with Protiva we acquired a non-exclusive royalty-bearing world-wide license agreement with Merck. Under the license, Merck will pay up to US\$17.0 million in milestones for each product they develop covered by Protiva's intellectual property, except for the first product for which Merck will pay up to US\$15.0 million in milestones, and will pay royalties on product sales. Merck has also granted a license to the Company to certain of its patents. The license agreement with Merck was entered into as part of the settlement of litigation between Protiva and a Merck subsidiary.

Bristol-Myers Squibb Company (BMS) research agreement

On May 10, 2010 we announced the expansion of our research collaboration with BMS. Under the new agreement, BMS will use siRNA molecules formulated by us in LNPs to silence target genes of interest. BMS will conduct the preclinical work to validate the function of certain genes and share the data with us. We can use the preclinical data to develop RNAi therapeutic drugs against the therapeutic targets of interest. BMS paid us US\$3.0 million concurrent with the signing of the agreement. We are required to provide a predetermined number of LNP batches over the four-year agreement. BMS will have a first right to negotiate a licensing agreement on certain RNAi products developed by us that evolve from BMS validated gene targets. On May 17, 2011 we announced a further expansion of the collaboration to include broader applications of our LNP technology and additional target validation work. Recognition of revenue from agreements with BMS is covered in the Revenue section of this MD&A.

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

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

Legacy Agreement

Spectrum Pharmaceuticals, Inc. license agreement

Marqibo[®], which is a liposomal formulation of the chemotherapy drug vincristine originally developed by Tekmira, was licensed from Tekmira to Talon Therapeutics in 2006, along with Alocrest (Optisomal Vinorelbine) and Brakiva (Optisomal Topotecan). In July 2013, Talon was acquired by Spectrum Pharmaceuticals, Inc.

Spectrum is responsible for all future development costs and future expenses of these licensed products. We are eligible to receive milestone payments of up to US\$18.0 million upon achievement of further development and regulatory milestones and, we will also receive single-digit royalties based on product sales.

In August 2012, Marqibo (vinCRIStine sulfate LIPOSOME injection) received accelerated approval from the FDA for the treatment of adult patients with Philadelphia chromosome negative (Ph-) acute lymphoblastic leukemia (ALL) in second or greater relapse or whose disease has progressed following two or more anti-leukemia

Page 7 of 13

therapies. In 2012, we received a US\$1.0 million milestone payment based on the FDA approval of Marqibo and will receive mid-single digit royalty payments based on Marqibo's commercial sales. Spectrum has guided that it expects Marqibo to be launched later this year through Spectrum's existing hematology sales force.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

There are no 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.

Page 8 of 13

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

	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013
Revenue								
Collaborations and contracts:								
DoD	\$ 2.0	\$ 2.8	\$ 3.5	\$ 2.5	\$ 1.9	\$ 3.6	\$ 2.0	\$ 2.5
Alnylam	1.5	0.7	—	—	—	—	—	
Other	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.4
	3.7	3.7	3.6	2.6	2.0	3.9	2.2	2.9
Alnylam milestone payments	0.5	_	_	1.0	—	—	—	
Talon milestone payment					1.0			
Total revenue	4.2	3.7	3.6	3.6	3.0	3.9	2.2	2.9
Expenses	(5.8)	(5.9)	(6.2)	(6.2)	(4.8)	(9.8)	(5.3)	(6.1)
Other income (losses)	0.2	0.3	(0.5)	0.7	(1.6)	44.2	0.5	0.1
Net (loss) income	(1.5)	(1.8)	(3.2)	(1.9)	(3.4)	38.3	(2.6)	(3.1)
Basic net (loss) income per share	\$(0.12)	\$(0.15)	\$(0.25)	\$(0.14)	\$(0.25)	\$2.72	\$(0.18)	\$(0.22)
Diluted net (loss) income per share	\$(0.12)	\$(0.15)	\$(0.25)	\$(0.14)	\$(0.25)	\$2.51	\$(0.18)	\$(0.22)

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

In January 2009 we signed a Manufacturing Agreement with Alnylam, which has subsequently been replaced by a new licensing agreement signed in November 2012, and under the new license agreement we are no longer manufacturing for Alnylam.

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. Expenses were higher in Q1 2012 as our Phase I clinical trial for TKM-Ebola was initiated during the quarter. Also in Q1 2012, we began to acquire materials for continued work on scaling up our TKM-Ebola drug product manufacturing process. Revenues 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 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 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 Q3 2011 we earned a \$0.5 million milestone from Alnylam following their initiation of a Phase I human clinical trial enabled by our LNP delivery technology. In Q2 2012 we earned a \$1.0 million milestone from Alnylam following their initiation of a Phase 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). We are eligible to receive royalty payments based on Marqibo's commercial sales.

Page 9 of 13

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).

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 Q3 2012 is largely due to the \$1.7 million increase in the fair value of our warrant liability which is caused by an increase in our share price over the previous quarter end.

RESULTS OF OPERATIONS

Three and six months ended June 30, 2013 compared to the three and six months ended June 30, 2012

For the first half of 2013 ("1H 2013") our net loss was \$5.7 million (\$0.40 per common share) as compared to a net loss of \$5.1 million (\$0.38 per common share) for the first half of 2012 ("1H 2012"). For the three months ended June 30, 2013 ("Q2 2013"), our net loss was \$3.1 million (\$0.22 per common share) as compared to a net loss of \$1.9 million (\$0.14 per common share) for the three months ended June 30, 2012 ("Q2 2012").

Revenue / Revenue is detailed in the following table:

(in millions Cdn\$)	Q2 2013	Q2 2012	1H 2013	1H 2012
Collaborations and contracts				
DoD	\$ 2.5	\$ 2.5	\$ 4.5	\$ 5.9
BMS	0.3	0.1	0.6	0.2
Other RNAi collaborators	0.1		0.1	<u>0.1</u> 6.2
Total collaborations and contracts	2.9	2.6	5.1	6.2
Alnylam milestone payments		1.0		1.0
Total revenue	\$ 2.9	\$ 3.6	\$ 5.1	\$ 7.2

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 were higher in 1H 2012 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. 1H 2013 revenues are higher than 1H 2012 revenues as BMS have requested more LNP formulations from us.

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.

Page 10 of 13

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 \$5.1 million in Q2 2013 as compared to \$3.6 million in Q2 2012 and were \$9.2 million in 1H 2013 as compared to \$7.7 million in 1H 2012.

Spending on our TKM-PLK1 clinical trial has increased in 1H 2013 over 1H 2012 as patient enrolment has accelerated. We have also incurred costs in 1H 2013 related to planning further TKM-PLK1 trials. Offsetting this was a substantial purchase of materials for the manufacture of drug product for the TKM-PLK1 phase 1 trial in 1H 2012.

In 1H 2013, we incurred more early stage research expense than in 1H 2012 as we work to identify additional drug candidates for development, including a \$0.2 million license fee payment to Marina as work continues on our UNA research.

For reasons discussed in the revenue section above, our 1H 2013 TKM-Ebola expenses were lower than in 1H 2012.

General and administrative / General and administrative expenses were \$0.9 million in Q2 2013 as compared to \$2.4 million in Q2 2012 and were \$1.8 million in 1H 2013 as compared to \$4.2 million in 1H 2012. Q1 2012 and 1H 2012 general and administrative expenses were higher as they included legal fees incurred in respect of a lawsuit against Alnylam and AlCana that was settled in November 2012.

Depreciation of property and equipment / Depreciation of property and equipment was \$0.2 million in Q2 2013 as compared to \$0.2 million in Q2 2012 and were \$0.3 million in 1H 2013 as compared to \$0.5 million in 1H 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 1H 2013, however, we did spend \$0.4 million on property and equipment for information technology upgrades.

Change in fair value of warrant liability / In conjunction with equity and debt financing transactions in 2011 and an equity private placement that closed on February 29, 2012, we 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 \$0.3 million decrease in the fair value of our warrant liability in 1H 2013. This is the result of a small decrease in our share price over the period combined with a decreasing expected average term for the warrants.

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

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 June 30, 2013, we held \$40.7 million in cash and cash equivalents as compared to \$46.8 million at December 31, 2012.

Operating activities used cash of \$2.9 million in Q2 2013 as compared to \$1.8 million in Q2 2012. Operating activities used cash of \$5.8 million in 1H 2013 as compared to \$6.0 million in 1H 2012. Excluding changes in non-cash operating items, cash used in operating activities in 1H 2013 increased to \$5.4 million from \$4.3 million in 1H 2012.

Page 11 of 13

Investing activities used \$0.2 million in cash in Q2 2013 as compared to \$0.0 million in Q2 2012. Investing activities used \$0.4 million in cash in 1H 2013 as compared to \$0.0 million in 1H 2012. Capital expenditure was minimal in 2012 as we focused on the litigation against Alnylam and AlCana. Investing activities in 1H 2013 were focused on upgrading our information technology systems.

Financing activities brought in \$0.1 million in Q2 2013 as compared to \$0.0 million in Q2 2012. Financing activities brought in \$0.2 million in 1H 2013 as compared to \$3.8 million in 1H 2012. In Q1 2012 we raised money through a private placement. In 1H 2013 we received cash from stock option and warrant exercises.

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. Now that we are at the midpoint of the year we are updating our cash runway guidance. We now believe that our current funds on hand will be sufficient to last us until mid-2015 (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, and considering that Alnylam is disputing payment of the US\$5.0 million ALN-VSP milestone (see Overview section), we now expect our year-end 2013 cash balance to be in the range of \$30.0 to \$35.0 million.

Contractual obligations

Changes to our contractual obligations, from those disclosed in our 2012 Form 20-F, are discussed above.

Off-Balance Sheet arrangements

Other than as disclosed elsewhere in this MD&A, there have not been any material changes to our 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 July 31, 2013, we had 14,527,194 common shares issued and outstanding, outstanding options to purchase an additional 1,959,885 common shares and outstanding warrants to purchase an additional 1,165,411 common shares.

RISKS AND UNCERTAINTIES

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

At June 30, 2013 we held \$40.7 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 mid-2015. Substantial additional funds will be required to continue with the active development of our pipeline products and technologies. In particular, our funding needs may vary depending on a number of factors including:

- revenues earned from our DoD contract to develop TKM-Ebola;
- revenues earned from our collaborative partnerships, 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;

Page 12 of 13

- 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 June 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 and by limiting holdings of U.S. dollar cash and cash equivalent balances to working capital levels. 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 six months ended June 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.

Page 13 of 13

Form 52-109F2 Certification of Interim Filings Full Certificate

I, Mark Murray, President and Chief Executive Officer of Tekmira Pharmaceuticals Corporation, certify the following:

- 1. *Review:* I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Tekmira Pharmaceuticals Corporation (the "issuer") for the interim period ended June 30, 2013.
- No misrepresentations: Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a
 material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under
 which it was made, with respect to the period covered by the interim filings.
- 3. *Fair presentation:* Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.
- 4. **Responsibility:** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.
- 5. *Design:* Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the end of the period covered by the interim filings
 - (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that
 - (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and
 - (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
 - (b) designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.
- 5.1 *Control framework:* The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is the Integrated Framework issued by the Committee of Sponsoring Organization of the Treadway Commission (COSO).
- 5.2 N/A
- 5.3 N/A

6. *Reporting changes in ICFR:* The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on April 1, 2013 and ended on June 30, 2013 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: August 13, 2013

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

Form 52-109F2 Certification of Interim Filings Full Certificate

I, Ian Mortimer, Executive Vice President and Chief Financial Officer of Tekmira Pharmaceuticals Corporation, certify the following:

- 1. *Review:* I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Tekmira Pharmaceuticals Corporation (the "issuer") for the interim period ended June 30, 2013.
- No misrepresentations: Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a
 material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under
 which it was made, with respect to the period covered by the interim filings.
- 3. *Fair presentation:* Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.
- 4. **Responsibility:** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.
- 5. **Design:** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the end of the period covered by the interim filings
 - (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that
 - (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and
 - (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
 - (b) designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.
- 5.1 *Control framework:* The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is the Integrated Framework issued by the Committee of Sponsoring Organization of the Treadway Commission (COSO).
- 5.2 N/A
- 5.3 N/A

6. *Reporting changes in ICFR:* The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on April 1, 2013 and ended on June 30, 2013 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: August 13, 2013

/s/ Ian Mortimer Ian Mortimer Executive Vice President and Chief Financial Officer