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**FORM 6-K**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**Report of Foreign Issuer**

**Pursuant to Rule 13a-16 or 15d-16 of  
the Securities Exchange Act of 1934**

For the Month of July, 2014

Commission File Number 1-32001

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**Lorus Therapeutics Inc.**

(Translation of registrant's name into English)

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**2 Meridian Road, Toronto, Ontario M9W 4Z7**

(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): \_\_\_\_\_

**Note:** Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

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): \_\_\_\_\_

**Note:** Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes

No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):82-\_\_\_\_\_.

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**SIGNATURE**

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.

Lorus Therapeutics Inc.

Date: July 16, 2014

By: /s/ "Gregory Chow"

Gregory Chow

Senior Vice President and Chief Financial Officer

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## EXHIBIT INDEX

- 99.1 Annual Financial Statements ending May 31, 2014
- 99.2 Management's Discussion and Analysis
- 99.3 Annual Information Form
- 99.4 CEO Certification
- 99.5 CFO Certification

Consolidated Financial Statements of

**LORUS THERAPEUTICS INC.**

Years ended May 31, 2014 and 2013



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Lorus Therapeutics Inc.

We have audited the accompanying consolidated financial statements of Lorus Therapeutics Inc., which comprise the consolidated statements of financial position as of May 31, 2014 and 2013, the consolidated statements of loss and comprehensive loss, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

### *Management's Responsibility for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditors' Responsibility*

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

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

### *Opinion*

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Lorus Therapeutics Inc. as of May 31, 2014 and 2013, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Chartered Professional Accountants, Licensed Public Accountants

July 15, 2014

Toronto, Canada

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

# LORUS THERAPEUTICS INC.

Consolidated Statements of Financial Position  
(Expressed in thousands of Canadian dollars)

	May 31, 2014	May 31, 2013
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents (note 4(a))	\$ 19,367	\$ 653
Short-term investments (note 4(b))	11,019	-
Prepaid expenses and other assets	495	365
<b>Total current assets</b>	<b>30,881</b>	<b>1,018</b>
<b>Non-current assets:</b>		
Equipment (note 5)	18	17
<b>Total non-current assets</b>	<b>18</b>	<b>17</b>
<b>Total assets</b>	<b>\$ 30,899</b>	<b>\$ 1,035</b>
<b>Liabilities and Shareholders' Equity (Deficiency)</b>		
<b>Current liabilities:</b>		
Accounts payable	\$ 649	\$ 713
Accrued liabilities (note 14)	1,283	1,103
<b>Total current liabilities</b>	<b>1,932</b>	<b>1,816</b>
<b>Long term liabilities:</b>		
Convertible promissory notes (note 7)	528	-
<b>Total long term liabilities</b>	<b>528</b>	<b>-</b>
<b>Shareholders' equity (deficiency):</b>		
<b>Share capital (note 9):</b>		
Common shares	212,938	174,522
Equity portion of convertible promissory notes (note 7)	88	-
Stock options (notes 9(e) and 10)	2,658	1,018
Contributed surplus (note 9(d))	21,410	21,217
Warrants (note 9(c))	1,857	2,421
<b>Deficit</b>	<b>(210,512)</b>	<b>(199,959)</b>
<b>Total shareholders' equity (deficiency)</b>	<b>28,439</b>	<b>(781)</b>
<b>Total liabilities and shareholders' equity (deficiency)</b>	<b>\$ 30,899</b>	<b>\$ 1,035</b>

See accompanying notes to consolidated financial statements.

On behalf of the Board:

“Warren Whitehead” \_\_\_\_\_ Director

“Bradley Thompson” \_\_\_\_\_ Director

# LORUS THERAPEUTICS INC.

Consolidated Statements of Loss and Comprehensive Loss

(Expressed in thousands of Canadian dollars, except for per common share data)

Years ended May 31, 2014 and 2013

	2014	2013
Revenue	\$ —	\$ —
Expenses:		
Research and development (notes 6 and 12)	3,015	3,317
General and administrative (note 12)	7,355	2,272
Operating expenses	10,370	5,589
Finance expense (note 11)	259	6
Finance income	(76)	(30)
Net finance (income) expense	183	(24)
Net loss and total comprehensive loss for the year	\$ (10,553)	\$ (5,565)
Basic and diluted loss per common share	\$ (0.17)	\$ (0.13)
Weighted average number of common shares outstanding used in the calculation of (in thousands):		
Basic and diluted loss per common share	62,592	42,251

See accompanying notes to consolidated financial statements.

# LORUS THERAPEUTICS INC.

Consolidated Statements of Changes in Shareholders' Equity  
(Expressed in thousands of Canadian dollars)

Years ended May 31, 2014 and 2013

	Share capital	Stock options	Warrants	Contributed surplus	Equity portion of debt	Deficit	Total
Balance, June 1, 2013	\$ 174,522	\$ 1,018	\$ 2,421	\$ 21,217	\$ –	\$ (199,959)	\$ (781)
Issuance of common shares (note 9(b)(ii))	6,927	–	350	–	–	–	7,277
Issuance of common shares (note 9(b)(i))	25,584	–	–	–	–	–	25,584
Issuance of warrants (note 9(b)(iii))	–	–	75	–	–	–	75
Issuance of convertible notes (note 7)	–	–	–	–	88	–	88
Exercise of warrants (note 9(c))	5,422	–	(964)	–	–	–	4,458
Exercise of options and DSU's (note 9(g))	483	(18)	–	–	–	–	465
Expiry of warrants	–	–	(25)	25	–	–	–
Stock-based compensation (note 10)	–	1,826	–	–	–	–	1,826
Cancellation and forfeiture of stock options	–	(168)	–	168	–	–	–
Net loss for the year	–	–	–	–	–	(10,553)	(10,553)
Balance, May 31, 2014	\$ 212,938	\$ 2,658	\$ 1,857	\$ 21,410	\$ 88	\$ (210,512)	\$ 28,439
Balance, June 1, 2012	\$ 170,036	\$ 535	\$ 609	\$ 21,186	\$ –	\$ (194,394)	\$ (2,028)
Issuance of units (note 9(b)(iv))	4,263	–	1,855	–	–	–	6,118
Exercise of warrants (note 9(c))	223	–	(43)	–	–	–	180
Stock-based compensation (note 10)	–	514	–	–	–	–	514
Forfeiture of stock options	–	(31)	–	31	–	–	–
Net loss for the year	–	–	–	–	–	(5,565)	(5,565)
Balance, May 31, 2013	\$ 174,522	\$ 1,018	\$ 2,421	\$ 21,217	\$ –	\$ (199,959)	\$ (781)

See accompanying notes to consolidated financial statements.



# LORUS THERAPEUTICS INC.

Consolidated Statements of Cash Flows  
(Expressed in thousands of Canadian dollars)

Years ended May 31, 2014 and 2013

	2014	2013
<b>Cash flows from operating activities:</b>		
Net loss for the year	\$ (10,553)	\$ (5,565)
Items not involving cash:		
Stock-based compensation	1,826	514
Depreciation of equipment	21	38
Finance income	(76)	(30)
Finance expense	259	6
Other	1	-
<b>Change in non-cash operating working capital (note 11)</b>	<b>(14)</b>	<b>(52)</b>
Cash used in operating activities	(8,536)	(5,089)
<b>Cash flows from financing activities:</b>		
Issuance of common shares and warrants, net of issuance costs (note 9(b)(i) and (ii))	32,861	6,118
Exercise of warrants, options and DSU's (note 9)	4,923	180
Issuance of convertible notes	600	-
Debt issuance costs	(40)	-
Issuance of promissory notes and loans	1,068	-
Repayment of promissory notes and loans	(1,068)	(900)
Interest paid on notes and loans	(129)	(6)
Cash provided by financing activities	38,215	5,392
<b>Cash flows from investing activities:</b>		
(Acquisition) maturity of investments	(11,019)	-
Purchase of equipment	(22)	-
Interest received	76	30
Cash (used in) provided by investing activities	(10,965)	30
Increase in cash and cash equivalents	18,714	333
Cash and cash equivalents, beginning of year	653	320
Cash and cash equivalents, end of year	\$ 19,367	\$ 653

Supplemental cash flow information (note 11)

See accompanying notes to consolidated financial statements.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 1. Reporting entity:

Lorus Therapeutics Inc. ("Lorus" or the "Company") is a biopharmaceutical company focused on the discovery, research and development of anticancer therapies. Lorus has worked to establish a diverse anticancer product pipeline, with products in various stages of development ranging from discovery and pre-clinical to clinical stage development. The Company is a publicly listed company incorporated under the laws of Canada. The Company's shares are listed on the Toronto Stock Exchange. The head office, principal address and records of the Company are located at 2 Meridian Road, Toronto, Ontario, Canada, M9W 4Z7.

## 2. Basis of presentation:

### (a) Statement of compliance:

These consolidated financial statements of the Company and its subsidiaries as at May 31, 2014 are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). The consolidated financial statements of the Company were approved and authorized for issue by the Board of Directors on July 15, 2014.

### (b) Functional and presentation currency:

The functional and presentation currency of the Company is the Canadian dollar.

### (c) Significant accounting judgments, estimates and assumptions:

The preparation of these consolidated financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities at the date of the consolidated financial statements and reported amounts of revenue and expenses during the reporting period. Actual outcomes could differ from those estimates. The consolidated financial statements include estimates, which, by their nature, are uncertain. The impacts of such estimates are pervasive throughout the consolidated financial statements and may require accounting adjustments based on future occurrences.

The estimates and underlying assumptions are reviewed on a regular basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised and in any future periods affected.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 2. Basis of presentation (continued):

The key assumptions concerning the future and other key sources of estimation uncertainty as of the date of the statement of financial position that have a significant risk of causing material adjustment to the carrying amounts of assets and liabilities within the next fiscal year include:

### (i) Valuation of contingent liabilities:

The Company utilizes considerable judgment in the measurement and recognition of provisions and the Company's exposure to contingent liabilities. Judgment is required to assess and determine the likelihood that any potential or pending litigation or any and all potential claims against the Company may be successful. The Company must estimate if an obligation is probable as well as quantify the possible economic cost of any claim or contingent liability. Such judgments and assumptions are inherently uncertain. The increase or decrease of one of these assumptions could materially increase or decrease the fair value of the liability and the associated expense.

### (ii) Valuation of tax accounts:

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Currently, the Company has deductible temporary differences which would create a deferred tax asset. Deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized. Management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies. To date, the Company has determined that none of its deferred tax assets should be recognized. The Company's deferred tax assets are mainly comprised of its net operating losses from prior years and prior year research and development expenses. These tax pools relate to entities that have a history of losses, have varying expiry dates, and may not be used to offset taxable income. As well, there are no taxable temporary differences or any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets. The generation of future taxable income could result in the recognition of some portion or all of the remaining benefits, which could result in an improvement in the Company's results of operations through the recovery of future income taxes.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 2. Basis of presentation (continued):

(iii) Valuation of share-based compensation and share purchase warrants:

Management measures the costs for share-based payments and share purchase warrants using market-based option valuation techniques. Assumptions are made and judgment is used in applying valuation techniques. These assumptions and judgments include estimating the future volatility of the share price, expected dividend yield, future employee turnover rates and future share option and share purchase warrant behaviours and corporate performance. Such judgments and assumptions are inherently uncertain. The increase or decrease of one of these assumptions could materially increase or decrease the fair value of share-based payments and share purchase warrants issued and the associated expense.

## 3. Significant accounting policies:

(a) Basis of consolidation:

The consolidated financial statements include the accounts of the Company its 80% owned subsidiary, NuChem and its 100% owned subsidiary Lorus Therapeutics Inc. USA ("Lorus USA"). NuChem has limited activity and the non-controlling interest is not material to the financial statements of the Company. Lorus USA was incorporated in April 2014 and did not have any activity during the year ended May 31, 2014. A subsidiary is an entity over which the Company has control, being the power to govern the financial and operating policies of the investee entity so as to obtain benefits from its activities. Accounting policies of the subsidiaries are consistent with the Company's accounting policies. All intra-group transactions, balances, revenue and expenses are eliminated on consolidation.

(b) Foreign currency translation:

Foreign currency transactions are translated into Canadian dollars at rates prevailing on the transaction dates. At the end of each reporting period, monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the rates in effect at that date. Gains or losses resulting from the translation to Canadian dollars are presented in the statement of loss and comprehensive loss for the year within general and administrative expenses.

(c) Derecognition of financial assets and liabilities:

A financial asset is derecognized when the right to receive cash flows from the asset have expired or when the Company has transferred its rights to receive cash flows from the asset.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 3. Significant accounting policies (continued):

A financial liability is derecognized when its contractual obligations are discharged, cancelled or expire.

### (d) Financial assets and liabilities:

Financial assets within the scope of IAS 39, *Financial Instruments - Recognition and Measurement* ("IAS 39"), are classified as either financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments or available-for-sale financial assets, as appropriate. When financial assets are recognized initially, they are measured at fair value, plus, in the case of financial assets not at fair value through profit or loss, directly attributable transaction costs. The Company determines the classification of its financial assets at initial recognition and, where allowed and appropriate, re-evaluates this designation at each financial year end.

The Company's financial instruments are comprised of the following:

<u>Financial assets</u>	<u>Classification</u>	<u>Measurement</u>
Cash and cash equivalents	Loans and receivables	Amortized cost
Short-term investments	Loans and receivables	Amortized cost

<u>Financial liabilities</u>	<u>Classification</u>	<u>Measurement</u>
Accounts payable, accrued liabilities and convertible promissory notes payable	Other liabilities	Amortized cost

The Company considers unrestricted cash on hand and guaranteed investment certificates held by Canadian Schedule A banks with original maturities of three months or less as cash and cash equivalents.

Fair value:

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy establishes three levels to classify the inputs to valuation techniques used to measure fair value.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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### 3. Significant accounting policies (continued):

- Level 1 - inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 - inputs are quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, inputs other than quoted prices that are observable for the asset or liability, or inputs that are derived principally from or corroborated by observable market data or other means; and
- Level 3 - inputs are unobservable (supported by little or no market activity). The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs.

The Company's financial assets as at May 31, 2014 and 2013 which include cash and cash equivalents and short term investments are classified as a Level 1 measurement.

#### (e) Equipment:

Equipment is measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. The Company records depreciation at rates that charge operations with the cost of the assets over their estimated useful lives on a straight-line basis as follows:

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Furniture and equipment	3 - 5 years
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The assets' residual value, useful life and methods of depreciation are reviewed at each reporting period and adjusted prospectively if appropriate.

#### (f) Research and development:

Expenditures on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit or loss as incurred.

Development activities involve a plan or design for the production of new or substantially improved products or processes. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. The expenditures capitalized would include the cost of materials, direct labour, overhead costs that are directly attributable to preparing the asset for its intended use, and borrowing costs on qualifying assets. Other development expenditures which do not meet the criteria for capitalization are recognized in profit or loss as incurred.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 3. Significant accounting policies (continued):

Capitalized development costs are recognized at cost less accumulated amortization and accumulated impairment losses.

The Company has not capitalized any development costs to date.

### (g) Investment tax credits:

Research and development investment tax credits, which are earned as a result of incurring qualifying research and development expenditures, are recorded as a reduction of the related expense or cost of the asset acquired when there is reasonable assurance that they will be realized.

The Company's claim for scientific research and experimental development ("SR&ED") deductions and related investment tax credits for income tax purposes are based on management's interpretation of the applicable legislation in the Income Tax Act (Canada). These amounts are subject to review and acceptance by the Canada Revenue Agency or the Ontario Ministry of Finance prior to collection.

### (h) Employee benefits:

#### (i) Short-term employee benefits:

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognized for the amount expected to be paid in short-term cash bonuses if the Company expects to pay these amounts as approved by the Board of Directors as a result of past services provided by the employee and the obligation can be estimated reliably.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 3. Significant accounting policies (continued):

### (ii) Stock-based compensation:

The Company has a stock-based compensation plan (the "Plan") available to officers, directors, employees and consultants with grants under the Plan approved by the Company's Board of Directors. Under the Plan, the exercise price of each option equals the closing trading price of the Company's stock on the day prior to the grant if the grant is made during the trading day or the closing trading price on the day of grant if the grant is issued after markets have closed. Vesting is provided for at the discretion of the Board of Directors and the expiration of options is to be no greater than 10 years from the date of grant.

Details regarding the determination of the fair value of equity settled share-based transactions are set out in note 10.

The Company uses the fair value based method of accounting for employee awards granted under the Plan. The Company calculates the fair value of each stock option grant using the Black-Scholes option pricing model at the grant date. The stock-based compensation cost of the options is recognized as stock-based compensation expense over the relevant vesting period of the stock options using an estimate of the number of options that will eventually vest.

Stock options awarded to non-employees are accounted for at the fair value of the goods received or the services rendered. The fair value is measured at the date the Company obtains the goods or the date the counterparty renders the service. If the fair value of the goods or services cannot be reliably measured, the fair value of the options granted will be used.

The Company has an alternate compensation plan that provides directors and senior management with the option of receiving director's fees, salary, bonuses or other remuneration ("Remuneration") in common shares rather than cash. Under the plan, the participant receives an allotment from treasury of such number of shares as will be equivalent to the cash value of the Remuneration determined by dividing the Remuneration by the weighted average closing common share price for the five trading days prior to payment date (the "5-day VWAP"). The issue price of the shares is the 5-day VWAP. There are currently no shares allotted for issuance under this plan.



# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 3. Significant accounting policies (continued):

The Company has a deferred share unit ("DSU") plan that provides directors the option of receiving payment for their services in the form of share units rather than common shares or cash. Officers may also receive compensation under the plan as determined by the Board of Directors. Share units entitle the director to elect to receive, on termination of his or her services with the Company, an equivalent number of common shares, or the cash equivalent of the market value of the common shares at that future date. The plan gives the holder of the DSU's the option between settlement in cash or shares of Lorus and the Board of Directors of Lorus has the final determination as to the method of settlement. It is currently the intention of the Board of Directors to comply with the wishes of the holder in terms of settlement method.

For units issued under this plan, the Company records an expense and a liability equal to the market value of the shares issued. The accumulated liability is adjusted for market fluctuations on a quarterly basis.

There are currently no shares allotted for issuance under this plan (May 31, 2013 – 780,000).

### (i) Loss per share:

Basic loss per share is computed by dividing the net loss available to common shareholders by the weighted average number of shares outstanding during the year. Diluted loss per share is computed similar to basic loss per share except that the weighted average shares outstanding is increased to include additional shares for the assumed exercise of stock options and warrants, if dilutive. The number of additional shares is calculated by assuming that outstanding stock options and warrants were exercised and that the proceeds from such exercises were used to acquire common stock at the average market price during the year. The inclusion of the Company's stock options and warrants in the computation of diluted loss per share has an anti-dilutive effect on the loss per share and, therefore, they have been excluded from the calculation of diluted loss per share.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 3. Significant accounting policies (continued):

### (j) Income taxes:

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized.

### (k) Provisions:

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognized as a finance cost.

Employee entitlements to annual leave are recognized as the employee earns them. A provision, stated at current cost, is made for the estimated liability at the end of each reporting period.

The Company has recorded a provision related to an indemnification as described in note 14.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 3. Significant accounting policies (continued):

### (l) Finance income and finance costs:

Finance income comprises interest income on funds invested. Interest income is recognized as it accrues in profit or loss using the effective interest method.

Finance costs comprise interest expense on borrowings and are recognized in profit or loss using the effective interest method.

### (m) Standards and Interpretations Adopted in Fiscal 2014:

On June 1, 2013, we adopted the following standards and amendments to existing standards:

IFRS 10, Consolidated Financial Statements, ("IFRS 10") replaces consolidation requirements in IAS 27, Consolidated and Separate Financial Statements, and SIC-12, Consolidation – Special Purpose Entities, and establishes principles for identifying when an entity controls other entities. The adoption of this standard did not have any impact on the Company's financial statements.

IFRS 12, Disclosure of Interests in Other Entities, ("IFRS 12") establishes comprehensive disclosure requirements for all forms of interests in other entities, including joint arrangements, associates, and special purpose vehicles. The adoption of this standard did not have any impact on the Company's financial statements.

IFRS 13, Fair Value Measurement, provides a single source of fair value measurement and disclosure requirements in IFRS. The adoption of this standard did not have a material impact on the Company's financial statements.

Amendments to IAS 1, Presentation of Financial Statements, requires entities to group items within other comprehensive income that may be reclassified to net income separately from those that will not be reclassified. The adoption of this standard did not have a material impact on the Company's financial statements.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 3. Significant accounting policies (continued):

(n) Recent accounting pronouncements:

(i) IFRS 9, *Financial Instruments* ("IFRS 9"):

IFRS 9, *Financial Instruments*, was issued in November 2009. It addresses classification and measurement of financial assets and financial liabilities. In November 2013, the IASB issued a new general hedge accounting standard, which forms part of IFRS 9 *Financial Instruments* (2013). In February 2014, a tentative decision established the mandatory effective application of IFRS 9 for annual periods beginning on or after January 1, 2018. The Company has not yet assessed the impact of adoption of IFRS 9 and does not intend to early adopt IFRS 9 in its financial statements.

## 4. Capital disclosures:

The Company's objectives when managing capital are to:

- Maintain a flexible capital structure which optimizes the cost of capital at acceptable risk; and
- Ensure sufficient cash resources to fund its research and development activity, to pursue partnership and collaboration opportunities and to maintain ongoing operations.

The capital structure of the Company consists of equity comprised of share capital, share purchase warrants, stock options, contributed surplus and deficit. The Company manages its capital structure and makes adjustments to it in light of economic conditions. The Company, upon approval from its Board of Directors, will balance its overall capital structure through new share issuances, acquiring or disposing of assets, adjusting the amount of cash balances or by undertaking other activities as deemed appropriate under the specific circumstances.

The Company is not subject to externally imposed capital requirements, and the Company's overall strategy with respect to capital risk management remains unchanged from the year ended May 31, 2013.

(a) Cash and cash equivalents:

Cash and cash equivalents consists of cash of \$2.3 million (May 31, 2013 - \$144 thousand) and funds deposited into high interest savings accounts totalling \$17.1 million (May 31, 2013 - \$509 thousand). The current interest rate earned on these deposits is between 1.2% and 1.25% (May 31, 2013 - 1.25%).

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 4. Capital disclosures (continued):

### (b) Short term investments:

As at May 31, 2014, short term investments consist of guaranteed investment certificates with Canadian financial institutions having high credit ratings. Short-term investments include eleven investments with maturity dates from April 22, 2015 to May 8, 2016, bearing an interest rate from 1.56% to 1.85% per annum.

There were no short term investments outstanding as of May 31, 2013.

## 5. Equipment:

May 31, 2014	Cost	Accumulated depreciation	Net book value
Furniture and equipment	\$ 2,936	\$ 2,918	\$ 18
May 31, 2013	Cost	Accumulated depreciation	Net book value
Furniture and equipment	\$ 2,914	\$ 2,897	\$ 17

## 6. Research and development programs:

The Company has product candidates in two classes of anti-cancer therapies:

- small molecule therapies based on anti-proliferative and anti-metastatic properties that act at novel cancer specific targets; and
- immunotherapy, based on stimulating anti-cancer properties of the immune system and by direct tumour cell killing.

### (a) Small molecule program:

The Company is developing small molecule cancer therapies that target solid tumours with indications addressing large cancer markets. The Company's proprietary group of small molecule compounds includes lead drug LOR-253 in acute myeloid leukemia (AML), myelodysplastic syndromes (MDS) and other hematologic malignancies.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 6. Research and development programs (continued):

### (b) Immunotherapy:

The Company's immunotherapy product candidate is Interleukin-17E ("IL-17E"). IL-17E is a protein-based therapeutic in the pre-clinical stage of development. The Company is not currently developing IL-17E

Program costs by product class are as follows:

	2014	2013
Small molecule program	\$ 2,199	\$ 2,701
Immunotherapy	88	425
	\$ 2,287	\$ 3,126

See note 12 for all components of research and development expenditures.

## 7. Convertible promissory notes and loans payable:

### a) Convertible promissory notes

In September 2013 the Company completed a private placement of convertible promissory notes for aggregate gross proceeds of \$600 thousand.

Each convertible promissory note consists of a \$1 thousand principal amount of unsecured promissory note convertible into common shares of the Company at a price per share of \$0.30. The promissory notes bear interest at a rate of 10% per annum, payable quarterly and are due September 26, 2015.

Certain related parties participated in the transaction. A company related to Mr. Abramson, a former director of Lorus acquired \$100 thousand of the promissory notes, Mr. Inwentash acquired \$150 thousand of the promissory notes and Sprott Asset Management which then held more than 10% of the common shares of Lorus and the ability to acquire control of more than 20% of Lorus acquired \$112 thousand of the promissory notes.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 7. Convertible promissory notes and loans payable (continued):

The promissory notes are a compound financial instrument containing a liability component and an equity component represented by the conversion feature. The fair value of the liability component was estimated by discounting the future cash flows associated with the debt at a discounted rate of approximately 19% which represents the estimated borrowing cost to the Company for similar promissory notes with no conversion feature. The residual value of \$88 thousand was allocated to the conversion feature.

Subsequent to initial recognition, the promissory notes are being accounted for at amortized cost using the effective interest rate method. The Company incurred costs associated with the financing of \$17 thousand. These costs along with the adjustment for the conversion feature are being accreted using the effective interest rate method over the 24 month life of the notes.

	2014	2013
Promissory Notes	\$ 600	\$ —
Less: Equity component of notes	(88)	—
Less: Issue costs	(17)	—
	495	—
Accretion in carrying amount of notes	33	—
Balance, end of period	\$ 528	\$ —

### b) Loans payable

In September 2013 the Company entered into loan agreements for proceeds of \$150 thousand. The loans were unsecured, bore interest at a rate of 10% per annum payable quarterly and were due September 30, 2015. The Company repaid the loans and all accrued and unpaid interest thereon on April 25, 2014.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)

(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 8. Financial instruments:

### (a) Financial instruments:

The Company has classified its financial instruments as follows:

	May 31, 2014	May 31, 2013
<b>Financial assets:</b>		
Cash and cash equivalents, consisting of high interest savings account, measured at amortized cost	\$ 19,367	\$ 653
Short term investments, consisting of guaranteed investment certificates, measured at amortized cost.	11,019	–
<b>Financial liabilities:</b>		
Accounts payable, measured at amortized cost	649	713
Accrued liabilities, measured at amortized cost	1,283	1,103
Convertible promissory notes, measured at amortized cost	528	–

At May 31, 2014, there are no significant differences between the carrying values of these amounts and their estimated market values due to their short-term nature, with the exception of the convertible promissory notes. The fair value of the convertible promissory notes has been determined to be substantially the same as the carrying amount based on management's assessment of market conditions which have not changed substantially since the issuance of the notes.

### (b) Financial risk management:

The Company has exposure to credit risk, liquidity risk and market risk. The Company's Board of Directors has the overall responsibility for the oversight of these risks and reviews the Company's policies on an ongoing basis to ensure that these risks are appropriately managed.

#### (i) Credit risk:

Credit risk is the risk of financial loss to the Company if a customer, partner or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's cash and cash equivalents. The carrying amount of the financial assets represents the maximum credit exposure.



# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 8. Financial instruments (continued):

The Company manages credit risk associated with its cash and cash equivalents by maintaining minimum standards of R1-low or A-low investments and the Company invests only in highly rated Canadian corporations which are capable of prompt liquidation.

### (ii) Liquidity risk:

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. To the extent that the Company does not believe it has sufficient liquidity to meet its current obligations, management and the Board consider securing additional funds through equity, debt or partnering transactions. The Company manages its liquidity risk by continuously monitoring forecasts and actual cash flows. All of the Company's financial liabilities are due within the current operating period with the exception of the convertible promissory notes which are due in September 2015.

### (iii) Market risk:

Market risk is the risk that changes in market prices, such as interest rates, foreign exchange rates and equity prices, will affect the Company's income or the value of its financial instruments.

The Company is subject to interest rate risk on its cash and cash equivalents and short-term investments. The Company does 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 the interest rates on the investments, owing to the relative short-term nature of the investments. The Company does not have any material interest bearing liabilities subject to interest rate fluctuations.

Financial instruments potentially exposing the Company to foreign exchange risk consist principally of accounts payable and accrued liabilities. The Company holds minimal amounts of U.S. dollar denominated cash, purchasing on an as-needed basis to cover U.S. dollar denominated payments. At May 31, 2014, U.S. dollar denominated accounts payable and accrued liabilities amounted to \$769 thousand (May 31, 2013 - \$448 thousand). Assuming all other variables remain constant, a 10% depreciation or appreciation of the Canadian dollar against the U.S. dollar would result in an increase or decrease in loss and comprehensive loss for the year of \$77 thousand (May 31, 2013 - \$45 thousand). The Company does not have any forward exchange contracts to hedge this risk.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 9. Share capital:

(a) Continuity of common shares and warrants:

	Common shares		Warrants	
	Number (In thousands)	Amount	Number (In thousands)	Amount
Balance, May 31, 2012	21,228	\$ 170,036	5,678	\$ 609
Issuance of units (b)(iv)	20,625	4,263	20,625	1,720
Issuance of finders warrants (b)(iv)	–	–	1,238	135
Exercise of warrants (c)	398	223	(398)	(43)
<b>Balance, May 31, 2013</b>	<b>42,251</b>	<b>\$ 174,522</b>	<b>27,143</b>	<b>\$ 2,421</b>
Expiry of broker warrants	–	–	(194)	(25)
Issuance of warrants (b)(iii)	–	–	918	75
Warrant exercises	10,419	5,422	(10,419)	(964)
Finders warrants (b)(iv)	–	–	1,238	–
Option exercises	68	39	–	–
December equity offering and overallotment (b)(ii)	14,640	6,927	878	350
April equity offering and overallotment (b)(i)	56,500	25,584	–	–
DSU exercise	780	444	–	–
<b>Balance, May 31, 2014</b>	<b>124,658</b>	<b>\$ 212,938</b>	<b>19,564</b>	<b>\$ 1,857</b>

(b) Equity issuances:

(i) April 2014 Public Equity Offering and Overallotment

In April 2014, the Company completed a public offering of common shares. The Company issued 50,000,000 common shares at a purchase price of \$0.50 per common share and an additional 6,500,000 common shares upon the partial exercise of the over-allotment option for aggregate gross proceeds of \$28.3 million. The total costs associated with the transaction were approximately \$2.7 million which includes a cash commission of \$2.0 million based on 7% of the gross proceeds received as part of the offering.

Mr. Sheldon Inwentash and his joint actors ("Mr. Inwentash") a related party of the Company by virtue of exercising control or direction over more than 10% of the common shares of the Company participated in this offering and acquired an aggregate of 1.3 million common shares.

(ii) December Public Equity Offering and Overallotment

In December 2013, Lorus completed a public offering of common shares. Lorus issued 12,730,000 common shares at a price of \$0.55 per common share and an additional 1,909,500 common shares upon the exercise of the overallotment option for aggregate gross proceeds of \$8.1 million.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)

(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 9. Share capital (continued):

The total costs associated with the transaction were approximately \$1.1 million which include a cash commission of \$483 thousand based on 6% of the gross proceeds received as part of the offering, and the issuance of 878,370 broker warrants with an estimated fair value of \$350 thousand. The fair value of these warrants was determined using the Black Scholes model with a 24 month time to maturity, an assumed volatility of 130% and a risk free interest rate of 1.5%. Each broker warrant is exercisable into one common share of the Company at a price of \$0.55 for a period of twenty four months following closing of the offering.

Mr. Inwentash a related party of the Company by virtue of exercising control or direction over more than 10% of the common shares of the Company participated in the Offering and acquired an aggregate of 1,820,000 common shares.

### (iii) June 2013 Private Placement

In June 2013 the Company completed a private placement of units ("Units" in this section) at a price of \$1 thousand per unit, for aggregate gross proceeds of \$918 thousand.

Each Unit consisted of (i) a \$1 thousand principal amount of unsecured promissory note and (ii) 1,000 common share purchase warrants. The promissory notes bore interest at a rate of 10% per annum, payable monthly and were due June 19, 2014. Each warrant entitled the holder thereof to acquire one common share of the Company at a price per common share equal to \$0.25 at any time until June 19, 2015.

Certain related parties participated in the transaction. Directors and officers (including Dr. Aiping Young, Dr. Jim Wright and Dr. Mark Vincent) acquired an aggregate of \$68 thousand of the promissory notes. A company related to a Mr. Abramson, a former director of the Company acquired \$250 thousand of the promissory notes and Mr. Inwentash acquired \$100 thousand of the promissory notes.

The Units contained a liability component and an equity component represented by the warrants to purchase common shares. The fair value of the liability component of \$843 thousand was estimated by discounting the future cash flows associated with the debt at a discounted rate of approximately 19% which represents the estimated borrowing cost to the Company for similar promissory notes with no warrants. The residual value of \$75 thousand was allocated to the warrants. The Company incurred costs associated with the financing of \$23 thousand. These costs were amortized using the effective interest rate method over the 12 month life of the notes.

These notes and any interest accrued thereon were repaid in full in April 2014.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)

(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 9. Share capital (continued):

### (iv) June 2012 Private Placement

On June 8, 2012 Lorus completed a private placement (the "Private Placement") of 20,625,000 units at a subscription price of \$0.32 per unit, each unit ("Unit") consisting of one common share and one common share purchase warrant for gross proceeds to Lorus of \$6.6 million. Each warrant was exercisable for a period of 24 months from the date of issuance at an exercise price of \$0.45 (the "Warrants"). Any unexercised warrants expired on June 8, 2014.

Lorus paid a cash finder's fee of \$396 thousand based on 6% of the gross proceeds of the Private Placement and issued 1,237,500 finder's warrants with an exercise price of \$0.32 each. Each finder's warrant was exercisable into Units consisting of 1,237,500 common shares and 1,237,500 Warrants. In May 2014, the finder's Warrants were exercised which results in an additional 1,237,500 warrants for exercise.

The total costs associated with the transaction were approximately \$617 thousand which includes the \$135 thousand which represented the estimated fair value of the finders warrants issued as part of the Private Placement. Each such finder warrant was exercisable for one Unit at a price of \$0.32 per Unit for a period of 24 months following the closing of the Offering. The Company allocated the net proceeds of the Offering to the common shares and the common share purchase warrants based on their estimated relative fair values. Based on relative fair values, \$4.3 million of the net proceeds were allocated to the common shares and \$1.7 million to the common share purchase warrants.

### (c) Warrants:

#### *Warrants exercised during the year ended May 31, 2014:*

<u>(in thousands)</u>	<u>Number</u>	<u>Proceeds</u>
August 2011 warrants (i)	3,920	\$ 1,764
June 2012 private placement warrants (ii)	4,911	2,210
June 2012 broker warrants (iii)	1,238	396
June 2013 private placement warrants (iv)	350	88
<b>Total</b>	<b>10,419</b>	<b>\$ 4,458</b>

In addition to the cash proceeds received the original fair value related to these warrants of \$964 thousand was transferred from warrants to share capital. This resulted in a total amount of \$5.4 million credited to share capital.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)

(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 9. Share capital (continued):

### *Warrants exercised during the year ended May 31, 2013:*

<i>(in thousands)</i>	Number	Proceeds
August 2011 warrants (i)	398 \$	180
Total	398 \$	180

In addition to the cash proceeds received the original fair value related to these warrants of \$43 thousand was transferred from warrants to share capital. This resulted in a total amount of \$223 thousand credited to share capital.

### *Summary of outstanding warrants:*

<i>(in thousands)</i>	2014	2013
August 2011 warrants (i)	1,166	5,086
August 2011 broker warrants (i)	–	194
June 2012 private placement warrants (ii)	16,952	20,625
June 2012 broker warrants (iii)	–	1,238
June 2013 private placement warrants (iv)	568	–
December 2013 broker warrants (v)	878	–
Number of warrants outstanding, end of year	19,564	27,143

- (i) August 2011 warrants are exercisable into common share of Lorus at a price per share of \$0.45 and expiring in August 2016. During the year ended May 31, 2014, 3.9 million warrants were exercised. In August 2013, 194 thousand broker warrants associated with this transaction expired unexercised.
- (ii) June 2012 warrants are exercisable into common shares of Lorus at a price per share of \$0.45 and expired on June 8, 2014. During the year 3.674 million were exercised. Subsequent to the year end in June an additional 14.7 million warrants were exercised with the remaining 2.2 million expiring unexercised.
- (iii) June 2012 broker warrants were exercisable into common shares of Lorus at a price per share of \$0.32 per unit. Each unit was comprised of 1 common share of Lorus and 1 common share purchase warrant exercisable at a price per share of \$0.45 and expiring on June 8, 2014. In May 2014 the broker warrants were exercised and an additional 1.238 million common share purchase warrants were issued.
- (iv) June 2013 private placement warrants are exercisable into common shares of Lorus at a price per share of \$0.25 and expiring in June 2015.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 9. Share capital (continued):

(v) December 2013 broker warrants are exercisable into common shares of Lorus at a price per share of \$0.55 and expiring in December 2015.

### (d) Continuity of contributed surplus:

Contributed surplus is comprised of the cumulative grant date fair value of expired share purchase warrants and expired stock options as well as the cumulative amount of previously expensed and unexercised equity settled share-based payment transactions.

	2014		2013	
Balance, beginning of year	\$	21,217	\$	21,186
Expiry of broker warrants (c)		25		–
Forfeiture of stock options		65		31
Cancellation of stock options		103		–
Balance, end of year	\$	21,410	\$	21,217

### (e) Continuity of stock options:

	2014		2013	
Balance, beginning of year	\$	1,018	\$	535
Stock option expense		1,826		514
Exercise of stock options		(18)		–
Forfeiture of stock options		(65)		(31)
Cancellation of stock options		(103)		–
Balance, end of year	\$	2,658	\$	1,018

### (f) Loss per share:

Loss per common share is calculated using the weighted average number of common shares outstanding for the year ending May 31, 2014 of 62.592 million and 42.251 million as of May 31, 2013, calculated as follows:

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 9. Share capital (continued):

(in thousands)	2014	2013
Issued common shares, beginning of year	42,251	21,228
Effect of April 2014 public offering (note 9(b)(i))	9,417	–
Effect of December 2013 public offering (note 9(b)(ii))	7,161	–
Effect of Warrant exercises (note 9(c))	3,611	398
Effect of option and DSU exercises	152	–
Effect of private placement (note 9(b)(iv))	–	20,625
Issued weighted average common shares, end of year	62,592	42,251

The effect of any potential exercise of the Company's stock options and warrants outstanding during the year has been excluded from the calculation of diluted loss per common share as it would be anti-dilutive.

### (g) Deferred share unit plan:

As at May 31, 2014, nil deferred share units are outstanding (May 31, 2013 – 780,000). 780,000 common shares of the Company were issued in April 2014 in satisfaction of the outstanding deferred share unit liability. The shares issued had a fair value of \$444 thousand.

## 10. Stock-based compensation:

### Stock option plan:

Under the Company's stock option plan, options, rights and other entitlements may be granted to directors, officers, employees and consultants of the Company to purchase up to a maximum of 15% of the total number of outstanding common shares, estimated at 18,698,000 options, rights and other entitlements as at May 31, 2014. Options are granted at the fair market value of the common shares on the closing market date immediately preceding the date of the grant. Options vest at various rates (immediate to three years) and have a term of 10 years. Stock option transactions for the two years ended May 31, 2014 are summarized as follows:

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 10. Stock-based compensation (continued):

*Option numbers are in (000's)*

	2014		2013	
	Options	Weighted average exercise price	Options	Weighted average exercise price
Outstanding, beginning of year	3,359	\$ 0.46	1,612	\$ 0.44
Granted	6,878	0.55	1,780	0.48
Exercised	(68)	0.31	–	–
Forfeited	(35)	1.85	(33)	0.54
Cancelled	(250)	0.50	–	–
Outstanding, end of year	9,884	0.52	3,359	0.46

The following table summarizes information about stock options outstanding at May 31, 2014:

*Option numbers are in (000's)*

Range of exercise prices	Options outstanding			Options exercisable		
	Options	Weighted average remaining contractual life (years)	Weighted average exercise price	Options	Weighted average exercise price	
\$0.18 - \$ 0.22	1,466	7.6	\$ 0.21	1,418	\$ 0.21	
\$0.23 - \$ 0.48	2,324	8.5	0.43	2,119	0.42	
\$0.49 - \$ 0.60	3,333	9.8	0.50	181	0.50	
\$0.61 - \$ 9.90	2,761	9.4	0.78	1,529	0.92	
	9,884	9.0	0.52	5,247	0.51	

The following assumptions were used in the Black-Scholes option pricing model to determine the fair value of stock options granted during the year:

	2014	2013
Exercise price	\$ 0.29-0.78	\$ 0.475
Grant date share price	\$ 0.29-0.78	\$ 0.475
Risk-free interest rate	1.5%-3.0%	3.0%
Expected dividend yield	–	–
Expected volatility	125%-135%	135%
Expected life of options	5 years	5 years
Weighted average fair value of options granted or modified during the year	\$ 0.55	\$ 0.42



# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)

(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 10. Stock-based compensation (continued):

The Company uses historical data to estimate the expected dividend yield and expected volatility of its common shares in determining the fair value of stock options. The expected life of the options represents the estimated length of time the options are expected to remain outstanding.

Stock options granted by the Company during the year ended May 31, 2014 consisted of 1,820,500 options which vested immediately, 850,000 options that vested 50% upon issuance and 25% on each of the next two anniversaries and 3,320,000 options which vest 50%, 25% and 25% on each of the next three anniversaries, 850,000 options which vest in equal installments over 36 months and 37,500 options which vest in October 2014.

Stock options granted by the Company during the year ended May 31, 2013 had various vesting schedules. Options granted to directors consisted of 160,000 options that vested 50% upon issuance and 50% one year later. Options granted to the former CEO of 1,050,000 vest 50% after one year and 25% on each of August 2, 2014 and August 2, 2015. Upon the departure of the former CEO in March 2014 the vesting of these options was accelerated and they are fully vested as of May 31, 2014. Options granted to certain members of management totaled 325,000 and vested 50% upon certain performance criteria measured as of May 31, 2013 and 25% May 31, 2014 and 25% on May 31, 2015. Options granted to employees totaled 245,000 and vest 50% after one year and 25% on each of August 2, 2015 and August 2, 2016.

Refer to note 12 for a breakdown of stock option expense by function.

## 11. Additional cash flow disclosures:

Net change in non-cash operating working capital is summarized as follows:

	2014	2013
Prepaid expenses and other assets	\$ (130)	\$ (72)
Accounts payable	(64)	391
Accrued liabilities	180	(371)
	\$ (14)	\$ (52)

During the year ended May 31, 2014 the Company paid \$75 thousand in interest expense on the \$918 thousand promissory notes as described in note 9(b) (iii). These notes and all unpaid interest were repaid in April 2014. The interest accrued at a rate of 10% per annum. In addition the Company incurred interest in the year ended May 31, 2014 on the loan agreements and convertible promissory notes described in note 7 of \$51 thousand of which \$14 thousand was accrued and unpaid at May 31, 2014. The interest accrues at a rate

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 11. Additional cash flow disclosures (continued):

of 10% per annum and is paid quarterly. The loan agreements and all interest accrued thereon were repaid in April 2014. In addition the Company paid interest of \$3 thousand at a rate of 10% per annum to the withheld pay of employees. All amounts withheld from employees had been repaid in December 2013.

During the year ended May 31, 2013, the Company incurred \$6 thousand in interest expense on a \$900 thousand promissory note due to a former Director. The interest was paid at a rate of 10%.

## 12. Other expenses:

Components of research and development expenses:

	2014	2013
Program costs (note 6)	\$ 2,287	\$ 3,126
Severance cost for former President and COO	326	–
Deferred share unit costs	90	(40)
Stock-based compensation	296	198
Depreciation of equipment	16	33
	\$ 3,015	\$ 3,317

Components of general and administrative expenses:

	2014	2013
General and administrative excluding salaries	\$ 2,658	\$ 1,368
Salaries	2,217	675
Severance cost of former President and COO	762	–
Deferred share unit costs	183	(92)
Stock-based compensation	1,530	316
Depreciation of equipment	5	5
	\$ 7,355	\$ 2,272

## 13. Related party transactions:

See also notes 7 and 9 for related party transactions.

These transactions were in the normal course of business and have been measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)

(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 13. Related party transactions (continued):

Compensation of key management personnel:

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the Company's activities as a whole. The Company has determined that key management personnel consists of the members of the Board of Directors along with the officers of the Company. For the year ended May 31, 2014 the officers were the Chairman, President and Chief Executive Officer, the Chief Financial Officer and the Chief Business Officer as well as the Director of Finance, the Vice President of Research and the former President and Chief Operating Officer. For the year ended May 31, 2013 the officers were the former President and Chief Operating Officer, the Director of Finance and the Vice President of Research.

Officer compensation:

	2014	2013
Salaries and short-term employee benefits	\$ 2,357	\$ 727
Severance payment to the former COO	1,088	-
Deferred share units	273	(132)
Stock-based compensation	1,475	358
	\$ 5,193	\$ 953

Director compensation:

	2014	2013
Directors' fees	\$ 386	\$ 180
Stock-based compensation	179	73
	\$ 565	\$ 253

Included in accounts payable and accrued liabilities is \$268 thousand (May 31, 2013 - \$126 thousand) due to directors and officers of the Company relating to directors' fees, and reimbursements for employment expenses. These amounts are unsecured, non-interest bearing and have no fixed terms of repayment.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 14. Commitments, contingencies and guarantees:

### (a) Operating lease commitments:

The Company has entered into operating leases for premises and equipment under which it is obligated to make minimum annual payments as described below:

	Less than 1 year	1 - 3 years	3 - 5 years	Total
Operating leases	\$ 149	\$ 5	nil	\$ 154

The Company's current facility lease expires in March 2015.

### (b) Other contractual commitments:

The Company holds a non-exclusive license from Genentech Inc. to certain patent rights to develop and sub-license a certain polypeptide. The Company does not expect to make any milestone or royalty payments under this agreement in the fiscal years ended May 31, 2015 or 2016, and cannot reasonably predict when such milestones and royalties will become payable, if at all.

### (c) Guarantees:

The Company entered into various contracts, whereby contractors perform certain services for the Company. The Company indemnifies the contractors against costs, charges and expenses in respect of legal actions or proceedings against the contractors in their capacity of servicing the Company. The maximum amounts payable from these guarantees cannot be reasonably estimated. Historically, the Company has not made significant payments related to these guarantees.

The Company indemnifies its directors and officers against any and all claims or losses reasonably incurred in the performance of their service to the Company to the extent permitted by law. The Company has acquired and maintains liability insurance for its directors and officers. The fair value of this indemnification is not determinable.

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

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## 14. Commitments, contingencies and guarantees (continued):

### (d) Indemnification on plan of arrangement:

On July 10, 2007, Lorus completed a plan of arrangement and corporate reorganization whereby the assets and liabilities of Lorus were transferred from one corporate entity into a new corporate entity which continued to operate as Lorus Therapeutics Inc. Under the arrangement, the Company agreed to indemnify the old entity and its directors, officers and employees from and against all damages, losses, expenses, other third party costs and legal expenses, to which any of them may be subject arising out of any matter occurring:

- (i) prior to, at or after the effective time of the arrangement ("Effective Time") and directly or indirectly relating to any of the assets transferred to the Company pursuant to the arrangement (including losses for income, sales, excise and other taxes arising in connection with the transfer of any such asset) or conduct of the business prior to the Effective Time;
- (ii) prior to, at or after the Effective Time as a result of any and all interests, rights, liabilities and other matters relating to the assets transferred to the Company pursuant to the arrangement; and
- (iii) prior to or at the Effective Time and directly or indirectly relating to, with certain exceptions, any of the activities of the old entity or the arrangement.

The Company recorded a liability of \$50 thousand, which it believes to be a reasonable estimate of the fair value of the obligation for the indemnifications provided as at May 31, 2014. There have been no claims on this indemnification to date.

## 15. Income taxes:

Provision for income taxes:

Major items causing the Company's income tax rate to differ from the statutory rate of approximately 26.5% (2013 - 26.5%) are as follows:

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)  
 (Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 15. Income taxes (continued):

	2014	2013
Loss before income taxes	\$ (10,553)	\$ (5,565)
Statutory Canadian corporate tax rate	26.5%	26.5%
Anticipated tax recovery	\$ (2,797)	\$ (1,475)
Non-deductible permanent differences	599	138
Change in deferred tax benefits deemed not probable to be recovered	2,839	1,553
Undeducted financing costs	(730)	(235)
Other	89	19
	\$ -	\$ -

The Company has undeducted research and development expenditures, totalling \$23.3 million that can be carried forward indefinitely. In addition, the Company has non-capital loss carryforwards of \$25.3 million. To the extent that the non-capital loss carryforwards are not used, they expire as follows:

2015	\$ 10
2026	11
2027	4
2028	4,359
2029	3,753
2030	650
2031	2,908
2032	2,571
2033	3,473
2034	7,513
	\$ 25,252

# LORUS THERAPEUTICS INC.

Notes to Consolidated Financial Statements (continued)

(Tabular amounts in thousands of Canadian dollars, except per share amounts)

Years ended May 31, 2014 and 2013

## 15. Income taxes (continued):

Deferred tax assets have not been recognized in respect of the following items:

	2014	2013
Net operating losses carried forward	\$ 6,692	\$ 4,701
Research and development expenditures	6,185	5,731
Equipment book over tax depreciation	450	448
Intangible asset	3,097	3,097
Undeducted financing costs	890	235
Ontario harmonization tax credit	–	287
Ontario Research and Development Tax Credit	395	327
Cumulative eligible capital	358	358
Other	–	44
<b>Unrecognized deferred tax asset</b>	<b>\$ 18,067</b>	<b>\$ 15,228</b>

## 16. Subsequent events:

In June 2014, 14.7 million warrants related to the June 2012 private placement at a price of \$0.45 were exercised for proceeds of \$6.6 million. The remaining 2.2 million warrants expired unexercised.

On June 16, 2014 5.3 million stock options were granted to officers of the Company at an exercise price of \$0.475. The options vest over a three year term and have a contractual life of ten years.

These transactions will be accounted for in the first quarter of fiscal 2015.



**MANAGEMENT DISCUSSION AND ANALYSIS**

**MAY 31, 2014**



## MANAGEMENT'S DISCUSSION AND ANALYSIS

July 15, 2014

This management's discussion and analysis of Lorus Therapeutics Inc. ("Lorus", the "Company", "we", "our", "us" and similar expressions) should be read in conjunction with the Company's annual audited financial statements for the year ended May 31, 2014, and the annual information form of the Company for the year ended May 31, 2014 which can be found on SEDAR at [www.sedar.com](http://www.sedar.com).

### CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This management's discussion and analysis may contain forward-looking statements within the meaning of securities laws. Such statements include, but are not limited to, statements relating to:

- our business strategy;
- our ability to obtain the substantial capital we require to fund research and operations;
- our plans to secure strategic partnerships to assist in the further development of our product candidates;
- our plans to conduct clinical trials and preclinical programs;
- our expectations regarding the progress and the successful and timely completion of the various stages of our drug discovery, preclinical and clinical studies and the regulatory approval process;
- our plans, objectives, expectations and intentions; and
- other statements including words such as "anticipate", "contemplate", "continue", "believe", "plan", "estimate", "expect", "intend", "will", "should", "may", and other similar expressions.

The forward-looking statements reflect our current views with respect to future events, are subject to risks and uncertainties, and are based upon a number of estimates and assumptions that, while considered reasonable by us, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements, including, among others:

- our ability to obtain the substantial capital we require to fund research and operations;
- our lack of product revenues and history of operating losses;
- our early stage of development, particularly the inherent risks and uncertainties associated with (i) developing new drug candidates generally, (ii) demonstrating the safety and efficacy of these drug candidates in clinical studies in humans, and (iii) obtaining regulatory approval to commercialize these drug candidates;
- our drug candidates require time-consuming and costly preclinical and clinical testing and regulatory approvals before commercialization;
- clinical studies and regulatory approvals of our drug candidates are subject to delays, and may not be completed or granted on expected timetables, if at all, and such delays may increase our costs and could delay our ability to generate revenue;
- the regulatory approval process;
- our ability to recruit patients for clinical trials;
- the progress of our clinical trials;
- our liability associated with the indemnification of our predecessor and its directors, officers and employees in respect of an arrangement completed in 2007;
- our ability to find and enter into agreements with potential partners;
- our ability to attract and retain key personnel;
- our ability to obtain and maintain patent protection;
- our ability to protect our intellectual property rights and not infringe on the intellectual property rights of others;
- our ability to comply with applicable governmental regulations and standards;
- development or commercialization of similar products by our competitors, many of which are more established and have or have access to greater financial resources than us;
- commercialization limitations imposed by intellectual property rights owned or controlled by third parties;
- potential product liability and other claims;
- our ability to maintain adequate insurance at acceptable costs;
- further equity financing, which may substantially dilute the interests of our shareholders;
- changing market conditions; and
- other risks detailed from time-to-time in our on-going quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the United States Securities and Exchange Commission ("SEC"), and those which are discussed under the heading "Risk Factors" in this document.

Should one or more of these risks or uncertainties materialize, or should the assumptions set out in the section entitled "Risk Factors" underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this management's discussion and analysis or, in the case of documents incorporated by reference herein, as of the date of such documents, and we do not intend, and do not assume any obligation, to update these forward-looking statements, except as required by law. We cannot assure you that such statements will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

## **DEVELOPMENT UPDATE STRATEGIC REVIEW PROCESS**

On September 12, 2013, the Company formed a special committee composed of independent directors to review strategic alternatives available to the Company and secure the long-term financial and operational sustainability of the Company with a view to enhance shareholder value (the "Special Committee"). On October 28, 2013, the Special Committee, after having considered and reviewed a number of options, concluded its review. The special committee recommended that the board of directors of Lorus (the "Board") approve the appointments of William G. Rice, Ph.D. as Chief Executive Officer and Chairman of the Board and of Daniel D. Von Hoff, M.D., to serve as a special advisor to fulfill the functions of the Company's Senior Vice President of Medical Affairs. Additionally, on October 29, 2013, Lorus announced the addition of Brian Druker, M.D. as the Chair of the Company's newly formed Scientific Advisory Board.

## **CHANGES IN MANAGEMENT**

On October 28, 2013, William G. Rice, Ph.D., was appointed as Chief Executive Officer and Chairman of the Board while Dr. Aiping Young continued as President and Chief Operating Officer of the Company until she departed the Company on March 18, 2014. Lorus also appointed Daniel D. Von Hoff, M.D., to serve as a special advisor to fulfill the functions of the Company's Senior Vice President of Medical Affairs. Dr. Von Hoff is an independent contractor and advisor but is not an employee of Lorus. The Board, after receiving the recommendation of the Special Committee, unanimously approved the appointments. In doing so, the Board determined that such appointments were in the best interest of Lorus, as they were considered to enhance the management team and advisory team with the addition of two seasoned and experienced biotechnology executives bringing extensive clinical development and capital raising experience and improving the awareness and presence of the Company in the United States. On April 10, 2014, Dr. Rice was additionally appointed as President of the Company.

On October 29, 2013, Brian Druker, M.D., was appointed as the Chair of the Company's Scientific Advisory Board. Like Dr. Von Hoff, Dr. Druker is an independent contractor and advisor but not an employee of Lorus.

On December 2, 2013, Avanish Vellanki was appointed as Chief Business Officer of the Company, to manage global business development, licensing and corporate strategy, and Gregory K. Chow was appointed as Chief Financial Officer, and has responsibility for corporate finance and accounting functions for the Company. On April 10, 2014, Messrs. Vellanki and Chow were additionally appointed as Senior Vice Presidents of the Company.

## **PROGRAM UPDATES**

Lorus is a clinical stage biotechnology company with a commitment to discovering and developing targeted therapies addressing unmet medical needs in oncology. We aim to develop therapeutics focused on novel cellular targets on the leading edge of cancer research coupled to companion diagnostics to identify the optimal patient population for our products. Our pipeline of cancer drug candidates includes small molecule products and immunotherapies providing additive or synergistic efficacy without leading to overlapping toxicities with existing anti-cancer regimens, facilitating the adoption of doublet or possibly triplet therapies.

We believe the future of cancer treatment and management lies in the prospective selection and treatment of patients predisposed to response based on a drug's unique mechanism of action. We are of the view that many drugs currently approved for the treatment and management of cancer are not selective for the specific genetic alterations (targets) that cause the patient's tumor and hence lead to significant toxicities due to off-target effects. Lorus' strategy is to continue the development of our programs that address a common underlying pathway within a patient population, and we intend to apply this strategy across several therapeutic indications in oncology, including hematologic malignancies and solid tumor indications. Our lead program, LOR-253, is a first-in-class inducer of the Krüppel-like factor 4 gene (the "Klf4 Gene") for patients with advanced hematologic malignancies, including acute myeloid leukemia ("AML") and myelodysplastic syndromes ("MDS").

Our lead program is LOR-253, a small molecule found to induce the transcription of the Klf4 Gene in vitro studies. LOR-253 was discovered and identified by Lorus scientists based upon the magnitude of its anti-proliferative and anti-metastatic activity across a multitude of cell lines. In vitro studies conducted at Lorus have demonstrated significant potency of LOR-253 in AML cell lines, and ten to 1000 times greater potency than in solid tumor cell lines. In vitro analyses with relevant AML cell lines, have demonstrated that LOR-253 led to significant elevation of the Krüppel-like factor 4 protein (the "KLF4 Protein"), with the anticipated increase in cyclin-dependent kinase inhibitor 1 (p21, a protein that halts the cell cycle and prevents cells from proliferating), caspase-3 (an enzyme activated during programmed cell death to chop up other proteins), and Annexin-V (a protein used as a marker for the initiation of programmed cell death), leading to G1 cell cycle arrest and apoptosis (programmed cell death). LOR-253 is administered as an intravenous infusion in patients. We have reported initial results from the Phase I clinical study of LOR-253 in patients with various solid tumors, and in that study we observed evidence of anti-tumor activity as a single agent at doses that were safe and well tolerated. Our plans are to advance LOR-253 to a Phase 1b clinical study in relapsed / refractory hematologic malignancies, including patients with AML, MDS and various lymphomas, based upon the common underlying, leukemia-causing profile of Klf4 Gene suppression. The development of LOR-253 currently represents the main focus of Lorus.

Lorus is currently pursuing the clinical development of LOR-253 in AML, based on in vitro data demonstrating significant sensitivity to AML cell lines and recent academic research implicating up-regulation of the protein CDX2 (the "CDX2 Protein"), and suppression of the KLF4 Protein, as a possible leukemogenic trigger in AML. This CDX2 Protein-KLF4 Protein signature has been observed to be absent in the normal hematopoietic stem and progenitor cells of healthy individuals. The CDX2 Protein is reported by Faber et. al. to epigenetically silence the Klf4 Gene tumor suppressor as a critical oncogenic event (transforming normal cells to cancer cells) in AML, and LOR-253 has demonstrated the ability in preclinical investigations to up-regulate the Klf4 Gene and induce tumor-killing effect. We believe these findings warrant investigation of the potential clinical utility of LOR-253 in the treatment of patients with suppressed Klf4 Gene in AML, MDS, and, potentially, other hematologic malignancies.

Lorus is currently developing and validating a companion diagnostic for LOR-253. The diagnostic will assess the extent of genetic expression of Cdx2 and Klf4 in patients as a potential predictor of response to therapy with LOR-253, as well as assess post-treatment expression levels as biomarkers of efficacy.

#### ***Acute Myeloid Leukemia***

AML is a rapidly progressing cancer of the blood and bone marrow characterized by the uncontrolled proliferation of dysfunctional myeloblasts that do not mature into healthy blood cells. It is the most common form of acute leukemia in adults. The American Cancer Society estimates there were approximately 14,590 new cases of AML and approximately 10,370 deaths from AML in the U.S. in 2013 and that there will be approximately 18,860 new cases of AML and approximately 10,460 deaths from AML in the U.S. in 2014. Standard induction therapy with chemotherapy is successful in many AML patients, but the majority of these patients will relapse with treatment refractory disease. Typical relapse rates in patients less than, and greater than, 60 years of age are approximately 48% and 71% respectively, as reported by Datamonitor Healthcare.

#### ***Myelodysplastic Syndromes***

MDS are a group of blood and bone marrow disorders. In MDS, stem cells do not mature normally, and the number of blasts (immature cells) and dysplastic (abnormally developed) cells increases. Also, the number of healthy mature cells decreases, meaning there are fewer normal red blood cells, white blood cells, and platelets. The numbers of blood cells are often called blood cell counts. Because of the decrease in healthy cells, people with MDS often have anemia (a low red blood cell count), and may have neutropenia (a low white blood cell count) and thrombocytopenia (a low platelet count). Also, the chromosomes (long strands of genes) in the bone marrow cells may be abnormal. According to the American Cancer Society there are approximately 13,000 new cases of MDS annually in the US. Additionally, Datamonitor Healthcare reports median survival in higher risk MDS patients may range between five months and two years. There are several subtypes of MDS, and some subtypes of MDS may eventually turn into AML.

#### ***Solid Tumors***

Phase 1 data with LOR-253 in patients with solid tumors and extensive preclinical data in solid tumor cells, including non-small cell lung cancer ("NSCLC"), have identified an opportunity for LOR-253 in patients possessing cancers with reduced Klf4 Gene expression. Our prior Phase 1 study with LOR-253 also exhibited a favorable safety profile for LOR-253 without an identified maximally tolerated dose over a 28-day cycle. Various solid tumors have exhibited suppressed levels of Klf4 Gene in scientific publications, including colorectal, gastric, pancreatic and cervical cancers, as well as NSCLC. NSCLC is an indication that we consider has a large market potential and important unmet need worldwide, in which the Klf4 Gene is a tumor suppressor that is present in case-matched normal cells but depressed in NSCLC tumor cells. In the future, Lorus may evaluate the clinical utility of LOR-253 in additional studies in a subset of NSCLC patients that may be predisposed to a response with a therapeutic activating the Klf4 Gene.

#### ***Small Molecular Program***

In April 2013, Lorus entered into a research and license option agreement with Elanco, the animal health division of Eli Lilly and Company ("Elanco"), to investigate a new proprietary series of Lorus' compounds for veterinary medicine. Pursuant to the agreement, Elanco will fund the research program and was granted an exclusive option to license the worldwide rights for selected compounds for veterinary use; the terms of which will be negotiated if the option is exercised by Elanco. Lorus retains the rights to develop and commercialize these compounds for human use and intends to use the animal data from the collaboration as a basis for a partnership with a third party that will seek to develop the technology for the treatment of patients with cancer. Lead optimization is underway and the next goal is to identify a clinical drug candidate which can be developed for both human and animal use.

## FINANCING ACTIVITIES

### EQUITY FINANCING'S

#### April 2014

In April 2014, we completed a public offering of common shares. Lorus issued 56,500,000 common shares at a purchase price of \$0.50 per common share, including 6,500,000 common shares pursuant to the partial exercise of the over-allotment option, for aggregate gross proceeds of \$28.3 million. The total costs associated with the transaction were approximately \$2.7 million which includes a cash commission of \$2.0 million based on 7% of the gross proceeds received as part of the offering.

Mr. Sheldon Inwentash and his joint actors ("Mr. Inwentash") a related party of Lorus by virtue of exercising control or direction over more than 10% of the common shares of Lorus participated in this offering and acquired an aggregate of 1.3 million common shares.

#### December 2013

On December 10, 2013, we completed a public offering of common shares. Lorus issued a total of 12,730,000 common shares at a price of \$0.55 per common share, for aggregate gross proceeds of \$7.0 million as part of such offering.

The total costs associated with the transaction were approximately \$999 thousand which includes a cash commission of \$420 thousand based on 6% of the gross proceeds received as part of the offering, and the issuance of 763,800 broker warrants with an estimated fair value of \$304 thousand using the Black Scholes model. Each broker warrant is exercisable into one common share of the Company at a price of \$0.55 for a period of twenty four months following closing of the offering.

Mr. Inwentash, a related party of the Company by virtue of exercising control or direction over more than 10% of the common shares of the Company participated in this offering and acquired an aggregate of 1,820,000 common shares.

On January 8, 2014, the underwriters conducting the offering exercised in full their over-allotment option to purchase an additional 1,909,500 common shares of the Company at a price of \$0.55 per common share for additional gross proceeds of \$1.0 million. The total costs associated with the exercise of the over-allotment option were approximately \$125 thousand based on 6% of the gross proceeds received as part of the exercise of the over-allotment option, and the issuance of 114,570 broker warrants with an estimated fair value of \$46 thousand using the Black Scholes model. Each broker warrant is exercisable into one common share of the Company at a price of \$0.55 for a period of twenty four months following the closing of the over-allotment option exercise.

### WARRANT EXERCISES

During the year ended May 31, 2014, 10,419,246 warrants (May 31, 2013 – 398 thousand) were exercised for proceeds of \$4.5 million (May 31, 2013 – \$180 thousand).

#### *Warrants exercised during the year ended May 31, 2014:*

<i>(in thousands)</i>	Number	Proceeds
August 2011 warrants (i)	3,920	\$ 1,764
June 2012 private placement warrants (ii)	4,911	\$ 2,210
June 2012 broker warrants (iii)	1,238	\$ 396
June 2013 private placement warrants (iv)	350	\$ 88
Total	10,419	\$ 4,458

#### *Summary of outstanding warrants:*

<i>(in thousands)</i>	2014	2013
August 2011 warrants (i)	1,166	5,086
August 2011 broker warrants (i)	-	194
June 2012 private placement warrants (ii)	16,952	20,625
June 2012 broker warrants (iii)	-	1,238
June 2013 private placement warrants (iv)	568	-
December 2013 broker warrants (v)	878	-
Number of warrants outstanding, end of year	19,564	27,143

- (i) August 2011 warrants are exercisable into common share of Lorus at a price per share of \$0.45 and expire in August 2016. During the year ended May 31, 2014, 3.9 million warrants were exercised. In August 2013, 194 thousand broker warrants associated with this transaction expired unexercised.
- (ii) June 2012 warrants are exercisable into common shares of Lorus at a price per share of \$0.45 and expired on June 8, 2014. During the year 3.674 million were exercised. Subsequent to the year end in June an additional 14.7 million warrants were exercised with the remaining 2.2 million expiring unexercised.
- (iii) June 2012 broker warrants were exercisable into common shares of Lorus at a price per share of \$0.32 per unit. Each unit was comprised of 1 common share of Lorus and 1 common share purchase warrant exercisable at a price per share of \$0.45 and expire on June 8, 2014. In May 2014 the broker warrants were exercised and an additional 1.238 million common share purchase warrants were issued.
- (iv) June 2013 private placement warrants are exercisable into common shares of Lorus at a price per share of \$0.25 and expiring in June 2015.
- (v) December 2013 broker warrants are exercisable into common shares of Lorus at a price per share of \$0.55 and expiring in December 2015.

#### **PROMISSORY NOTES AND WARRANTS**

In June 2013, we completed a private placement of units at a price of \$1 thousand per unit, for aggregate gross proceeds of \$918 thousand.

Each unit consisted of (i) a \$1,000 principal amount of unsecured promissory note and (ii) 1,000 common share purchase warrants. The promissory notes bore interest at a rate of 10% per annum, payable monthly and were due June 19, 2014. Each warrant entitled the holder to purchase one common share of Lorus at a price per common share equal to \$0.25 at any time until June 19, 2015.

Certain related parties participated in the transaction. Directors and officers (including Dr. Aiping Young, Dr. Jim Wright and Dr. Mark Vincent) acquired an aggregate of \$68 thousand of the promissory notes. A company related to Mr. Abramson, a former director of Lorus acquired \$250 thousand of the promissory notes and Mr. Inwentash acquired \$100 thousand of the promissory notes.

The units contained a liability component and an equity component represented by the warrants to purchase common shares. The fair value of the liability component was estimated by discounting the future cash flows associated with the debt at a discounted rate of approximately 19% which represents the estimated borrowing cost to Lorus for similar promissory notes with no warrants. The residual value was allocated to the warrants. The Company incurred costs associated with the financing of \$23 thousand. These costs were amortized using the effective interest rate method over the 12 month life of the notes.

The notes and interest accrued thereon were repaid in full in April 2014.

#### **CONVERTIBLE PROMISSORY NOTES**

In September 2013, we completed a private placement of convertible promissory notes for aggregate gross proceeds of \$600 thousand.

Each convertible promissory note consists of a \$1,000 principal amount of unsecured promissory note convertible into common shares of the Company at a price per share of \$0.30. The promissory notes bear interest at a rate of 10% per annum, payable quarterly and are due September 26, 2015.

Certain related parties participated in the transaction. A company related to Mr. Abramson, a former director of Lorus acquired \$100 thousand of the promissory notes, Mr. Inwentash acquired \$150 thousand of the promissory notes and Sprott Asset Management which held more than 10% of the common shares of Lorus and the ability to acquire control of more than 20% of Lorus acquired \$112 thousand of the promissory notes.

The promissory notes are a compound financial instrument containing a liability component and an equity component represented by the conversion feature. The fair value of the liability component was estimated by discounting the future cash flows associated with the debt at a discounted rate of approximately 19% which represents the estimated borrowing cost to Lorus for similar promissory notes with no conversion. The residual value of \$88 thousand was allocated to the conversion feature. Subsequent to initial recognition, the notes are being accounted for at amortized cost using the effective interest rate method.

Lorus incurred costs associated with the financing of \$17 thousand. These costs along with the adjustment for the conversion feature are being accreted using the effective interest rate method over the 24 month life of the notes.

	May 31, 2014	May 31, 2013
Promissory Notes	\$ 600	\$ -
Less: Equity component of notes	(88)	-
Less: Issue costs	(17)	-
	495	-
Accretion in carrying value of notes	33	-
Balance, end of period	\$ 528	\$ -

#### LOANS PAYABLE

In September 2013 we entered into loan agreements for proceeds of \$150 thousand. The loans were unsecured, bore interest at a rate of 10% per annum payable quarterly and were due September 30, 2015. We repaid the loans and all accrued and unpaid interest thereon on April 25, 2014.

#### JUNE 2012 PRIVATE PLACEMENT

On June 8, 2012 we completed a private placement of 20,625,000 units at a subscription price of \$0.32 per unit and each unit consisted of one common share and one common share purchase warrant for gross proceeds to Lorus of \$6.6 million.

Each warrant was exercisable for a period of 24 months from the date of issuance at an exercise price of \$0.45.

We paid a cash finder's fee of \$396 thousand based on 6% of the gross proceeds of the private placement and issued 1,237,500 finder's warrants at an exercise price of \$0.32 each. Each finder's warrant was exercisable into units consisting of 1,237,500 common shares and 1,237,500 warrants.

#### WARRANT EXPIRY

Broker warrants with a carrying amount of \$25 thousand expired unexercised in August 2013. The impact of the expiry was a reclassification of the amount from Warrants to Contributed Surplus.

#### LIQUIDITY AND CAPITAL RESOURCES

Since its inception, Lorus has financed its operations and technology acquisitions primarily from equity and debt financing, proceeds from the exercise of warrants and stock options, and interest income on funds held for future investment. We plan to continue our development programs from internal resources as they are available.

We currently do not earn any revenues from our drug candidates and are therefore considered to be in the development stage. The continuation of our research and development activities and the commercialization of the targeted therapeutic products are dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and payments from strategic partners. We have no current sources of significant payments from strategic partners.

#### CASH POSITION

At May 31, 2014, we had cash and cash equivalents and short term investments of \$30.4 million compared to \$653 thousand at May 31, 2013. We generally invest our cash in excess of current operations requirements in highly rated and liquid instruments. Investment decisions are made in accordance with an established investment policy administered by senior management and overseen by the Board. As at May 31, 2014 our cash was invested in cash of \$2.3 million (May 31, 2013 - \$144 thousand) and funds deposited into High Interest Savings Accounts totaling \$17.1 million (May 31, 2013 - \$509 thousand). Working capital (representing primarily cash, cash equivalents and short term investments other current assets less current liabilities) at May 31, 2014 was \$28.9 million (May 31, 2013 - negative \$798 thousand).

We do not expect to generate positive cash flow from operations for the foreseeable future due to additional research and development costs, including costs related to drug discovery, preclinical testing, clinical trials, manufacturing costs and operating expenses associated with supporting these activities. It is expected that negative cash flow will continue until such time, if ever, that we receive regulatory approval to commercialize any of our products under development and/or royalty or milestone revenue from any such products exceeds expenses.

## RESULTS OF OPERATIONS

Our net loss and comprehensive loss for the year ended May 31, 2014 increased to \$10.6 million (\$0.17 per share) compared to \$5.6 million (\$0.13 per share) for the year ended May 31, 2013. The increase in net loss and comprehensive loss for the year ended May 31, 2014 compared with the prior year is due to increased general and administrative costs of \$5.1 million associated with the hiring of three new executives, increased stock based compensation expense, severance costs of \$1.1 million paid to the former President and COO as well as increased legal, patent, travel, Board and consulting costs associated with a significant increase in corporate activity.

We utilized cash of \$8.5 million in our operating activities in the year ended May 31, 2014 compared with \$5.1 million in the prior year. The increase in the current year is the result of higher due to an increased net loss associated with adding new members of management, severance payments to the former President and COO and generally increased levels of corporate activity.

At May 31, 2014, we had cash and cash equivalents and short term investments of \$30.4 million compared to \$653 thousand at May 31, 2013.

## SELECTED ANNUAL FINANCIAL DATA

The following selected consolidated financial data have been derived from, and should be read in conjunction with, the accompanying audited consolidated financial statements for the year ended May 31, 2014 which are prepared in accordance with IFRS.

### Consolidated Statements of Loss and Comprehensive Loss

Years ended May 31,

(amounts in Canadian 000's except for per common share data)

	2014		2013		2012
<b>REVENUE</b>	\$ —	\$	—	\$	—
<b>EXPENSES</b>					
Research and development	3,015		3,317		2,170
General and administrative	7,355		2,272		2,430
<b>Operating expenses</b>	<b>10,370</b>		<b>5,589</b>		<b>4,600</b>
Finance expense	259		6		20
Finance income	(76)		(30)		(6)
<b>Net finance expense (income)</b>	<b>183</b>		<b>(24)</b>		<b>14</b>
<b>Net loss and total comprehensive loss for the year</b>	<b>10,553</b>		<b>5,565</b>		<b>4,614</b>
<b>Basic and diluted loss per common share</b>	<b>\$ 0.17</b>	\$	<b>0.13</b>	\$	<b>0.23</b>
<b>Weighted average number of common shares outstanding used in the calculation of:</b>					
<b>Basic and diluted loss per share</b>	<b>62,592</b>		<b>42,251</b>		<b>20,260</b>
<b>Total Assets</b>	<b>\$ 30,899</b>	\$	<b>1,035</b>	\$	<b>668</b>
<b>Total Long-term liabilities</b>	<b>\$ 528</b>	\$	<b>—</b>	\$	<b>—</b>

### Research and Development

Research and development expenses totaled \$3.0 million in the year ended May 31, 2014 compared to \$3.3 million during the prior year. Research and development expenses consist of the following:

	2014	2013
Program costs (see below)	\$ 2,287	3,126
Severance cost for former President & COO	326	-
Deferred share unit costs	90	(40)
Stock based compensation	296	198
Depreciation of equipment	16	33
	<b>\$ 3,015</b>	<b>3,317</b>

**Program costs by program:**

	2014	2013
Small molecule program	\$ 2,199	2,701
Immunotherapy	88	425
	\$ 2,287	3,126

Research and development expenditures have decreased by \$302 thousand in the current year to \$3.0 million compared with \$3.3 million in the year ended May 31, 2013. The reduced spending is primarily the result of lower program costs.

Spending on the LOR-253 program was reduced in the current year as a Phase I trial in patients with advanced solid tumors has been completed and further clinical development and expenditures were paused while the appropriate strategic and clinical direction for the drug candidate was determined and additional financing was secured. In addition, further spending on the IL-17E program was also paused during that period. We expect a significant increase in spending on the LOR-253 program in fiscal 2015 as we anticipate commencing clinical trials.

The severance cost for our former President and COO was paid in full in April 2014. The total severance amount of \$1.1 million was allocated between general and administrative (\$762 thousand) and research and development (\$326 thousand). There are no ongoing obligations related to the severance payment. The allocation was based upon the time spent by the former President and COO on research and development vs. general and administrative activities.

Deferred share unit costs increased in the year ended May 31, 2014 due to an increase in the share price of Lorus and the associated fair value of the units. A recovery of deferred share unit costs was recorded in the year ended May 31, 2013, which resulted from a reduction in our share price during the year. In April 2014, 780,000 common shares of Lorus were issued in payment of the outstanding DSU liability with a fair value of \$445 thousand. There were no outstanding DSU's as of May 31, 2014.

Stock based compensation costs were higher in the year ended May 31, 2014 compared with the prior year due to grants issued to new consultants and Scientific Advisory Board members.

**General and Administrative**

General and administrative expenses totaled \$7.4 million for the year ended May 31, 2014 compared to \$2.3 million in the prior year. General and administrative expenses consisted of the following:

	2014	2013
General and administrative excluding salaries	\$ 2,658	1,368
Salaries	2,217	675
Severance cost for former President and COO	762	-
Deferred share unit costs	183	(92)
Stock based compensation	1,530	316
Depreciation of equipment	5	5
	\$ 7,355	2,272

General and administrative expenses excluding salaries increased in the current year due to increased travel, consulting and corporate legal costs associated with the change in strategic direction, additional members of management and generally increased corporate and financing activities. In addition there were increased costs for both director fees primarily due to the strategic review and patent costs due to new patents filed and a review of our existing patent portfolio.

Salary charges in the year ended May 31, 2014 increased over the prior year period due to costs associated with the appointment of additional members of management and bonuses granted on the date of employment as well as upon the closing of the December 2013 and April 2014 equity offerings as described above.

The severance cost for our former President and COO was paid in full in April 2014 and the details are described under 'Research and Development' above.

Deferred share unit costs increased as described under 'Research and Development' above.

Stock based compensation expense was significantly higher in the year ended May 31, 2014 compared with the prior year due to option grants to new members of management, some of which vested immediately resulting in the entire fair value of the options being recognized in the current year compared with fewer option grants in the prior year periods which vested over a longer period of time. In addition stock options were granted in April 2014 to directors, officers and employees following the close of the equity financing described above.



### **Finance Expense**

Finance expense totaled \$259 thousand for the year ended May 31, 2014 compared with \$6 thousand in the prior year. Finance expense incurred in the year ended May 31, 2014 relates to the 10% promissory notes issued in June 2013 described above and repaid in April 2014 as well as the 10% convertible promissory notes and non-convertible promissory notes issued in September 2013 described above. The non-convertible promissory notes were repaid in April 2014. Finance expense incurred in the year ended May 31, 2013 relates to interest accrued at a rate of 10% on the related party promissory notes repaid in June 2012. There were no interest-bearing liabilities outstanding at May 31, 2013.

### **Finance Income**

Finance income totaled \$76 thousand in the year ended May 31, 2014, compared to \$30 thousand in the same period in the prior year. Finance income represents interest earned on our cash and cash equivalent and short term investment balances and the increase in finance income during the current year is the result of a higher average cash and cash equivalents balance throughout the year ended May 31, 2014 compared with the prior year.

### **Net loss and total comprehensive loss for the year**

Our net loss and total comprehensive loss for the year ended May 31, 2014 was \$10.6 million (\$0.17 per share) compared to \$5.6 million (\$0.13 per share) in the year ended May 31, 2013. The increase in net loss and total comprehensive loss of \$5.0 million in the year ended May 31, 2014 compared with the prior year is due primarily to an increase in general and administrative expenses of \$5.1 million in the current year offset by lower research and development expenses of \$302 thousand.

### **QUARTERLY FINANCIAL INFORMATION (UNAUDITED)**

The selected financial information provided below is derived from the Company's unaudited quarterly financial statements for each of the last eight quarters.

Research and development expenditures in the fiscal 2014 quarters are lower compared with the same quarters in the prior year due to reduced activity on the LOR-253 clinical program as it was completed in early 2014 and we focused on the strategic review and securing additional cash resources. In the fourth quarter of 2014 expenditures increased due to the allocation of severance costs related to the former President and COO to research and development of \$326 thousand. It is expected that research and development costs will increase in fiscal 2015.

The increased general and administrative costs in the quarter ended November 30, 2013 is due to stock option grants during the quarter which vested immediately and resulted in higher than normal stock based compensation expense. In addition costs associated with hiring three new executives during the quarter increased salary related costs. In the three months ended February 28, 2014 general and administrative expenses were higher due to additional members of management, bonuses and increased travel, consulting and legal costs. General and administrative expenses were lower in the quarters of August 31, 2013, May 31, 2013 and February 28, 2013 due to the reduction of previously recorded Deferred Share Unit ("DSU") expense. The DSU was 'marked to market' and as our share price declined during the last three quarters so did the associated liability resulting in a reduction of expense.

The increase in general and administrative expense in the three months ended May 31, 2014 is due to severance costs associated with the former President and COO (\$762 thousand), bonus costs, and increased Board, consulting and legal fees associated with activities during the quarter.

Cash used in operating activities fluctuates significantly due primarily to losses and the timing of payments and increases and decreases in the accounts payables and accrued liabilities balances. Cash used in operating activities in the quarters ended May 31, 2013 and August 31, 2013 were lower as we delayed making payments to suppliers in order to conserve cash resources.

	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
<i>(Amounts in 000's except for per common share data)</i>	May 31, 2014	Feb 28, 2014	Nov 30, 2013	Aug 31, 2013	May 31, 2013	Feb 28, 2013	Nov 30, 2012	Aug 31, 2012
(unaudited)								
Revenue	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Research and development expense	1,012	597	791	615	860	889	910	658
General and administrative expense	3,195	1,771	1,938	451	462	491	714	605
Net loss	(4,221)	(2,433)	(2,798)	(1,101)	(1,318)	(1,371)	(1,613)	(1,263)
Basic and diluted net loss per share	\$ (0.04)	\$ (0.04)	\$ (0.06)	\$ (0.03)	\$ (0.03)	\$ (0.03)	\$ (0.04)	\$ (0.03)
Cash (used in) operating activities	\$ (3,928)	\$ (2,191)	\$ (1,484)	\$ (933)	\$ (904)	\$ (1,273)	\$ (1,336)	\$ (1,576)

#### FOURTH QUARTER 2014 AND 2013 (UNAUDITED)

Our net loss and comprehensive loss for the three months ended May 31, 2014 increased to \$4.2 million compared with \$1.3 million in the three months ended May 31, 2013. The increase in net loss is primarily attributable to increased general and administrative costs of \$2.7 million in the three months ended May 31, 2014 compared with the prior year.

General and administrative expenses increased to \$3.2 million in the three months ended May 31, 2014 compared with \$462 thousand in the three months ended May 31, 2013. The increase is due to:

- Severance payments to the former President and CEO of \$1.1 million of which \$762 thousand were allocated to general and administrative expenses;
- Increased stock based compensation expense of \$323 thousand related to stock options granted in the fourth quarter;
- Increased salary, benefit and travel costs associated with three new members of management; and
- Increased legal, patent, Board and consulting costs associated with increased levels of corporate activity.

Cash used in operating activities in the three months ended May 31, 2014 increased to \$3.9 million compared with \$904 thousand in the three months ended May 31, 2013 which is primarily due to the increased loss in the current three month period.

#### SUBSEQUENT EVENTS

In June 2014, 14,667,124 warrants related to the June 2012 private placement at a price of \$0.45 were exercised for proceeds of \$6.6 million. The remaining 2.2 million warrants expired unexercised.

On June 16, 2014 5,283,550 stock options were granted to officers of the Company at an exercise price of \$0.475. The options vest over a three year term and have a contractual life of ten years.

These transactions will be accounted for in the first quarter of fiscal 2015.

#### CRITICAL ACCOUNTING POLICIES

##### *Critical Accounting Policies and Estimates*

The Company periodically reviews its financial reporting and disclosure practices and accounting policies to ensure that they provide accurate and transparent information relative to the current economic and business environment. As part of this process, the Company has reviewed its selection, application and communication of critical accounting policies and financial disclosures. Management has discussed the development and selection of the critical accounting policies with the Audit Committee of the Board of Directors and the Audit Committee has reviewed the disclosure relating to critical accounting policies in this MD&A. Other important accounting policies are described in note 3 of the Financial Statements.

##### **(a) Valuation of contingent liabilities:**

The Company utilizes considerable judgment in the measurement and recognition of provisions and the Company's exposure to contingent liabilities. Judgment is required to assess and determine the likelihood that any potential or pending litigation or any and all potential claims against the Company may be successful. The Company must estimate if an obligation is probable as well as quantify the possible economic cost of any claim or contingent liability. Such judgments and assumptions are inherently uncertain. The increase or decrease of one of these assumptions could materially increase or decrease the fair value of the liability and the associated expense.

**(b) Valuation of tax accounts:**

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Currently, the Company has deductible temporary differences which would create a deferred tax asset. Deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized. Management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies. To date, the Company has determined that none of its deferred tax assets should be recognized. The Company's deferred tax assets are mainly comprised of its net operating losses from prior years and prior year research and development expenses. These tax pools relate to entities that have a history of losses, have varying expiry dates, and may not be used to offset taxable income. As well, there are no taxable temporary differences or any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets. The generation of future taxable income could result in the recognition of some portion or all of the remaining benefits, which could result in an improvement in the Company's results of operations through the recovery of future income taxes.

**(c) Valuation of share-based compensation and share purchase warrants:**

Management measures the costs for share-based payments and share purchase warrants using market-based option valuation techniques. Assumptions are made and judgment is used in applying valuation techniques. These assumptions and judgments include estimating the future volatility of the share price, expected dividend yield, future employee turnover rates and future share option and share purchase warrant behaviours and corporate performance. Such judgments and assumptions are inherently uncertain. The increase or decrease of one of these assumptions could materially increase or decrease the fair value of share-based payments and share purchase warrants issued and the associated expense.

**RECENT ACCOUNTING PRONOUNCEMENTS NOT YET ADOPTED**

**IFRS 9, Financial Instruments ("IFRS 9"):**

IFRS 9, Financial Instruments, was issued in November 2009. It addresses classification and measurement of financial assets and financial liabilities. In November 2013, the IASB issued a new general hedge accounting standard, which forms part of IFRS 9 Financial Instruments (2013). In February 2014, a tentative decision established the mandatory effective application of IFRS 9 for annual periods beginning on or after January 1, 2018. The Company has not yet assessed the impact of adoption of IFRS 9 and does not intend to early adopt IFRS 9 in its financial statements.

**RELATED PARTY TRANSACTIONS**

See 'Financing Activities' for additional related party transactions and details.

These transactions were in the normal course of business and have been measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

See note 13 to the Financial Statements for disclosures of key management personnel compensation and directors compensation.

**CONTRACTUAL OBLIGATIONS AND OFF-BALANCE SHEET FINANCING**

At May 31, 2014, we had contractual obligations requiring annual payments as follows:

*(Amounts in 000's)*

	Less than 1 year	1-3 years	3-5 years	Total
<b>Operating leases</b>	149	5	nil	154

The Company's current facility lease expires in March 2015.

We hold a non-exclusive license from Genentech Inc. to certain patent rights to develop and sub-license a certain polypeptide. We do not expect to make any milestone or royalty payments under this agreement in the fiscal years ended May 31, 2014 or 2015, and cannot reasonably predict when such milestones and royalties will become payable, if at all.

As at May 31, 2014, we have not entered into any off- balance sheet arrangements.

**Indemnification**

On July 10, 2007, we completed a plan of arrangement and corporate reorganization. As part of the arrangement, we agreed to indemnify the other party and its directors, officers and employees from and against all damages, losses, expenses (including fines and penalties), other third party costs and legal expenses, to which any of them may be subject arising out of the arrangement.

We have recorded a liability of \$50 thousand, which we believe to be a reasonable estimate of the fair value of the obligation for the indemnifications provided as at May 31, 2014. There have been no claims on this indemnification to date.

## FINANCIAL INSTRUMENTS

### (a) Financial instruments

We have classified our financial instruments as follows:

	As at May 31, 2014	As at May 31, 2013
<b>Financial assets</b>		
Cash and cash equivalents, consisting of high interest savings accounts, measured at amortized cost	\$ 19,367	\$ 653
Short term investments, consisting of guaranteed investment certificates, measured at amortized cost	11,019	-
<b>Financial liabilities</b>		
Accounts payable, measured at amortized cost	649	713
Accrued liabilities, measured at amortized cost	1,283	1,103
Convertible promissory note, measured at amortized cost	528	-

At May 31, 2014, there are no significant differences between the carrying values of these amounts and their estimated market values due to their short-term nature, with the exception of the convertible promissory notes. The fair value of the convertible promissory notes has been determined to be substantially the same as the carrying amount based on management's assessment of market conditions which have not changed substantially since the issuance of the notes.

### (b) Financial risk management

We have exposure to credit risk, liquidity risk and market risk. Our Board of Directors has the overall responsibility for the oversight of these risks and reviews our policies on an ongoing basis to ensure that these risks are appropriately managed.

#### (i) Credit risk

Credit risk is the risk of financial loss to us if a customer, partner or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from our cash and cash equivalents. The carrying amount of the financial assets represents the maximum credit exposure.

We manage credit risk for our cash and cash equivalents by maintaining minimum standards of R1-low or A-low investments and we invest only in highly rated Canadian corporations with debt securities that are traded on active markets and are capable of prompt liquidation.

#### (ii) Liquidity risk

Liquidity risk is the risk that we will not be able to meet our financial obligations as they come due. To the extent that we do not believe we have sufficient liquidity to meet our current obligations, the Board considers securing additional funds through equity, debt or partnering transactions. We manage our liquidity risk by continuously monitoring forecasts and actual cash flows. All of our financial liabilities are due within the current operating period with the exception of the convertible promissory notes which are due in September 2015.

#### (iii) Market risk

Market risk is the risk that changes in market prices, such as interest rates, foreign exchange rates and equity prices will affect our income or the value of our financial instruments.

We are subject to interest rate risk on our cash and cash equivalents however 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 interest rates on the investments, owing to the relative short-term nature of the investments. We do not have any material interest bearing liabilities subject to interest rate fluctuations.

Financial instruments potentially exposing us to foreign exchange risk consist principally of accounts payable and accrued liabilities. We hold minimal amounts of U.S. dollar denominated cash, purchasing on an as-needed basis to cover U.S. dollar denominated payments. At May 31, 2014, U.S. dollar denominated accounts payable and accrued liabilities amounted to \$769 thousand (May 31, 2013 - \$448 thousand). Assuming all other variables remain constant, a 10% depreciation or appreciation of the Canadian dollar against the U.S. dollar would result in an increase or decrease in loss for the year and comprehensive loss of \$77 thousand (May 31, 2013 - \$45 thousand). We do not have any forward exchange contracts to hedge this risk.

We do not invest in equity instruments of other corporations.

### **(c) Capital management**

Our primary objective when managing capital is to ensure that we have sufficient cash resources to fund our development and commercialization activities and to maintain our ongoing operations. To secure the additional capital necessary to pursue these plans, we may attempt to raise additional funds through the issuance of equity or by securing strategic partners.

We include cash and cash equivalents and short-term deposits in the definition of capital.

We are not subject to externally imposed capital requirements and there has been no change with respect to the overall capital management strategy during the year ended May 31, 2014.

### **OUTLOOK**

Until one of our drug candidates receives regulatory approval and is successfully commercialized, Lorus will continue to incur operating losses. The magnitude of these operating losses will be largely affected by the timing and scope of future research and development, clinical trials and the Company's ability to raise additional and ongoing working capital and/or establish effective partnerships to share the costs of development and clinical trials.

### **RISK FACTORS**

Investing in our securities involves a high degree of risk. Before making an investment decision with respect to our common shares, you should carefully consider the following risk factors, in addition to the other information included or incorporated by reference into the most recently filed annual information form, as well as our historical consolidated financial statements and related notes. Management has reviewed the operations of the Company in conjunction with the Board of Directors and identified the following risk factors which are monitored on a bi-annual basis and reviewed with the Board of Directors. The risks set out below are not the only risks we face. If any of the following risks occur, our business, financial condition, prospects or results of operations and cash flows would likely suffer. In that case, the trading price of our common shares could decline and you may lose all or part of the money you paid to buy our common shares.

#### ***We are an early stage development company.***

We are at an early stage of development. In the past five years, none of our potential products has obtained regulatory approval for commercial use and sale in any country and as such, no significant revenues have resulted from product sales. Significant additional investment will be necessary to complete the development of any of our product candidates. Preclinical and clinical trial work must be completed before our potential products could be ready for use within the markets that we have identified. We may fail to develop any products, obtain regulatory approvals, enter clinical trials or commercialize any products. We do not know whether any of our potential product development efforts will prove to be effective, meet applicable regulatory standards, obtain the requisite regulatory approvals, be capable of being manufactured at a reasonable cost or be accepted in the marketplace. We also do not know whether sales, license fees or related royalties will allow us to recoup any investment we make in the commercialization of our products.

The product candidates we are currently developing are not expected to be commercially viable for at least the next several years and we may encounter unforeseen difficulties or delays in commercializing our product candidates. In addition, our potential products may not be effective or may cause undesirable side effects.

Our product candidates require significant funding to reach regulatory approval assuming positive clinical results. For example, our lead product candidate LOR-253, has completed a Phase I clinical trial in patients with solid tumors, and we have reported initial results. Additional funding or a partnership will be necessary to complete, if required, a Phase II or Phase III clinical trial. Such funding may be very difficult, or impossible to raise in the public or private markets or through partnerships. If funding or partnerships are not attainable, the development of these product candidates may be significantly delayed or stopped altogether. The announcement of a delay or discontinuation of development would likely have a negative impact on our share price.

***We need to raise additional capital.***

We have an ongoing need to raise additional capital. To obtain the necessary capital, we must rely on some or all of the following: additional share issues, debt issuances (including promissory notes), collaboration agreements or corporate partnerships and grants and tax credits to provide full or partial funding for our activities. Additional funding may not be available on terms that are acceptable to us or in amounts that will enable us to carry out our business plan.

Our need for capital may require us to:

- engage in equity financings that could result in significant dilution to existing investors;
- delay or reduce the scope of or eliminate one or more of our development programs;
- obtain funds through arrangements with collaborators or others that may require us to relinquish rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves; or
- license rights to technologies, product candidates or products on terms that are less favourable to us than might otherwise be available;
- considerably reduce operations; or
- cease our operations.

***We have a history of operating losses. We expect to incur net losses and we may never achieve or maintain profitability.***

We have not been profitable since our inception in 1986. Under IFRS, we reported net losses of \$10.6 million and \$5.6 million for the fiscal years ended May 31, 2014 and 2013, respectively, and as of May 31, 2014, we had an accumulated deficit of \$211 million.

We have not generated any significant revenue to date and it is possible that we will never have sufficient product sales revenue to achieve profitability. We expect to continue to incur losses for at least the next several years as we or our collaborators and licensees pursue clinical trials and research and development efforts. To become profitable, we, either alone or with our collaborators and licensees, must successfully develop, manufacture and market our current product candidate LOR-253 as well as continue to identify, develop, manufacture and market new product candidates. It is possible that we will never have significant product sales revenue or receive royalties on our licensed product candidates. If funding is insufficient at any time in the future, we may not be able to develop or commercialize our products, take advantage of business opportunities or respond to competitive pressures.

***We may be unable to obtain partnerships for our product candidates, which could curtail future development and negatively affect our share price. In addition, our partners might not satisfy their contractual responsibilities or devote sufficient resources to our partnership.***

Our strategy for the research, development and commercialization of our products requires entering into various arrangements with corporate collaborators, licensors, licensees and others, and our commercial success is dependent upon these outside parties performing their respective contractual responsibilities. The amount and timing of resources that such third parties will devote to these activities may not be within our control. These third parties may not perform their obligations as expected and our collaborators may not devote adequate resources to our programs. In addition, we could become involved in disputes with our collaborators, which could result in a delay or termination of the related development programs or result in litigation. We intend to seek additional collaborative arrangements to develop and commercialize some of our products. We may not be able to negotiate collaborative arrangements on favourable terms, or at all, in the future, and our current or future collaborative arrangements may not be successful.

If we cannot negotiate collaboration, licence or partnering agreements, we may never achieve profitability and we may not be able to continue to develop our product candidates. Phase II and Phase III clinical trials for LOR-253 would require significant amounts of funding and such funding may not be available to us.

***Clinical trials are long, expensive and uncertain processes and Health Canada or the United States Food and Drug Administration ("FDA") may ultimately not approve any of our product candidates. We may never develop any commercial drugs or other products that generate revenues.***

In the past five years none of our product candidates has received regulatory approval for commercial use and sale in North America. We cannot market a pharmaceutical product in any jurisdiction until it has completed thorough preclinical testing and clinical trials in addition to that jurisdiction's extensive regulatory approval process. Approval in one country does not assure approval in another country. In general, significant research and development and clinical studies are required to demonstrate the safety and effectiveness of our product candidates before we can submit any regulatory applications.

Clinical trials are long, expensive and uncertain processes. Clinical trials may not be commenced or completed on schedule and Health Canada or the FDA or any other regulatory body may not ultimately approve our product candidates for commercial sale. The clinical trials of any of our drug candidates could be unsuccessful, which would prevent us from advancing, commercializing or partnering the drug.

Even if the results of our preclinical studies or clinical trials are initially positive, it is possible that we will obtain different results in the later stages of drug development or that results seen in clinical trials will not continue with longer term treatment. Positive results in Phase I clinical trials may not be repeated in larger Phase II or Phase III clinical trials.

Our preclinical studies and clinical trials may not generate positive results that will allow us to move towards the commercial use and sale of our product candidates. Furthermore, negative preclinical or clinical trial results may cause our business, financial condition, or results of operations to be materially adversely affected. For example, as our lead product candidate LOR-253 has completed the Phase I testing in patients with solid tumors, for which we previously reported initial data, there is still a long development path ahead which will take many years to complete and like all of our potential drug candidates is prone to the risks of failure inherent in drug development.

Preparing, submitting and advancing applications for regulatory approval is complex, expensive and time intensive and entails significant uncertainty. A commitment of substantial resources to conduct time-consuming research, preclinical studies and clinical trials is required if we are to complete development of our products.

Later stage clinical trials of our products require that we identify and enroll a large number of patients with the illness under investigation. We may not be able to enroll a sufficient number of appropriate patients to complete our clinical trials in a timely manner, particularly in smaller indications and indications where this is significant competition for patients. If we experience difficulty in enrolling a sufficient number of patients to conduct our clinical trials, we may need to delay or terminate ongoing clinical trials and will not accomplish objectives material to our success. Delays in planned patient enrolment or lower than anticipated event rates in our current clinical trials or future clinical trials also may result in increased costs, program delays, or both.

In addition, unacceptable toxicities or adverse side effects may occur at any time in the course of preclinical studies or human clinical trials or, if any product candidates are successfully developed and approved for marketing, during commercial use of any approved products. The appearance of any unacceptable toxicities or adverse side effects could interrupt, limit, delay or abort the development of any of our product candidates or, if previously approved, necessitate their withdrawal from the market. Furthermore, disease resistance or other unforeseen factors may limit the effectiveness of our potential products.

Our failure to develop safe, commercially viable drugs would substantially impair our ability to generate revenues and sustain our operations and would materially harm our business and adversely affect our share price.

***We have agreed to indemnify our predecessor, Old Lorus, and its directors, officers and employees.***

In connection with the reorganization that we undertook in fiscal year 2008, we have agreed to indemnify our predecessor, Old Lorus, and its directors, officers and employees from and against all damages, losses, expenses (including fines and penalties), other third party costs and legal expenses, to which any of them may be subject arising out of any matter occurring:

- prior to, at or after the effective time of the arrangement transaction, and directly or indirectly relating to any of the assets of Old Lorus transferred to us pursuant to the arrangement transaction (including losses for income, sales, excise and other taxes arising in connection with the transfer of any such asset) or conduct of the business prior to the effective time of the arrangement;

- prior to, at or after the effective time as a result of any and all interests, rights, liabilities and other matters relating to the assets transferred by Old Lorus to us under the arrangement; and
- prior to or at the effective time and directly or indirectly relating to, with certain exceptions, any of the activities of Old Lorus or the arrangement.

This indemnification obligation could result in significant liability to us. To date no amount has been claimed on this indemnification obligation. Should a claim arise under this indemnification obligation it could result in significant liability to the Company which could have a negative impact on our liquidity, financial position, and ability to obtain future funding among other things.

***We may not achieve our projected development goals in the time frames we announce and expect.***

We set goals for, and make public statements regarding, the expected timing of the accomplishment of objectives material to our success, such as the commencement and completion of clinical trials, the partnership of our product candidates and our ability to secure the financing necessary to continue the development of our product candidates. The actual timing of these events can vary dramatically due to factors within and beyond our control, such as delays or failures in our clinical trials, the uncertainties inherent in the regulatory approval process, market conditions and interest by partners in our product candidates among other things. Our clinical trials may not be completed, and we may not make regulatory submissions or receive regulatory approvals as planned, or that we will secure partnerships for any of our product candidates. Any failure to achieve one or more of these milestones as planned would have a material adverse effect on our business, financial condition and results of operations.

***As a result of intense competition and technological change in the biotechnical and pharmaceutical industries, the marketplace may not accept our products or product candidates, and we may not be able to compete successfully against other companies in our industry and achieve profitability.***

Many of our competitors have:

- drug products that have already been approved or are in development, and operate large, well-funded research and development programs in the biotechnical and pharmaceutical fields;
- substantially greater financial, technical and management resources, stronger intellectual property positions and greater manufacturing, marketing and sales capabilities, areas in which we have limited or no experience; and
- significantly greater experience than we do in undertaking preclinical testing and clinical trials of new or improved pharmaceutical products and obtaining required regulatory approvals.

Consequently, our competitors may obtain Health Canada, FDA and other regulatory approvals for product candidates sooner and may be more successful in manufacturing and marketing their products than we or our collaborators are.

Our competitor's existing and future products, therapies and technological approaches will compete directly with the products we seek to develop. Current and prospective competing products may be more effective than our existing and future products insofar as they may provide greater therapeutic benefits for a specific problem or may offer easier delivery or comparable performance at a lower cost.

Any product candidate that we develop and that obtains regulatory approval must then compete for market acceptance and market share. Our products may not gain market acceptance among physicians, patients, healthcare payers, insurers, the medical community and other stakeholders. Further, any products we develop may become obsolete before we recover any expenses we incurred in connection with the development of these products. As a result, we may never achieve profitability.

***If we fail to attract and retain key employees, the development and commercialization of our products may be adversely affected.***

We depend on the principal members of our scientific and management staff. If we lose any of these persons, our ability to develop products and become profitable could suffer. The risk of being unable to retain key personnel may be increased by the fact that we have not executed long-term employment contracts with our employees, except for our senior executives. Our future success will also depend in large part on our ability to attract and retain other highly qualified scientific and management personnel. We face competition for personnel from other companies, academic institutions, government entities and other organizations.



**We may be unable to obtain patents to protect our technologies from other companies with competitive products, and patents of other companies could prevent us from manufacturing, developing or marketing our products.**

#### *Patent protection*

The patent positions of pharmaceutical and biotechnology companies are uncertain and involve complex legal and factual questions. The United States Patent and Trademark Office and many other patent offices in the world have not established a consistent policy regarding the breadth of claims that they will allow in biotechnology patents.

Allowable patentable subject matter and the scope of patent protection obtainable may differ between jurisdictions. If a patent office allows broad claims, the number and cost of patent interference proceedings in the United States, or analogous proceedings in other jurisdictions and the risk of infringement litigation may increase. If it allows narrow claims, the risk of infringement may decrease, but the value of our rights under our patents, licenses and patent applications may also decrease.

The scope of the claims in a patent application can be significantly modified during prosecution before the patent is issued. Consequently, we cannot know whether our pending applications will result in the issuance of patents or, if any patents are issued, whether they will provide us with significant proprietary protection or will be circumvented, invalidated or found to be unenforceable.

Publication of discoveries in scientific or patent literature often lags behind actual discoveries. Patent applications filed in the United States generally will be published 18 months after the filing date unless the applicant certifies that the invention will not be the subject of a foreign patent application. In many other jurisdictions, such as Canada, patent applications are published 18 months from the priority date. We may not be aware of such literature. Accordingly, we cannot be certain that the named inventors of our products and processes were the first to invent that product or process or that we were the first to pursue patent coverage for our inventions.

In addition, U.S. patent laws may change which could prevent or limit us from filing patent applications or patent claims in the United States to protect our products and/or technologies or limit the exclusivity periods that are available to patent holders for U.S. patents. For example, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law in 2011 and includes a number of significant changes to U.S. patent law. These include changes to transition from a "first-to-invent" system to a "first-to-file" system and to the way issued patents are challenged. These changes may favor larger and more established companies that have more resources to devote to patent application filing and prosecution. It is not clear what, if any, impact the Leahy-Smith Act will ultimately have on the cost of prosecuting our patent applications in the United States, our ability to obtain patents in the United States based on our discoveries and our ability to enforce or defend our U.S. issued patents.

#### *Enforcement of intellectual property rights*

Protection of the rights revealed in published patent applications can be complex, costly and uncertain. Our commercial success depends in part on our ability to maintain and enforce our proprietary rights. If third parties engage in activities that infringe our proprietary rights, our management's focus will be diverted and we may incur significant costs in asserting our rights. We may not be successful in asserting our proprietary rights, which could result in our patents being held invalid or a court holding that the third party is not infringing, either of which would harm our competitive position.

Others may design around our patented technology. We may have to participate in interference proceedings declared by the United States Patent and Trademark Office, European opposition proceedings, or other analogous proceedings in other parts of the world to determine priority of invention and the validity of patent rights granted or applied for, which could result in substantial cost and delay, even if the eventual outcome is favourable to us. Our pending patent applications, even if issued, may not be held valid or enforceable.

#### *Trade secrets*

We also rely on trade secrets, know-how and confidentiality provisions in our agreements with our collaborators, employees and consultants to protect our intellectual property. However, these and other parties may not comply with the terms of their agreements with us, and we might be unable to adequately enforce our rights or obtain adequate compensation for the damages caused by unauthorized disclosure or use of our trade secrets or know how. Our trade secrets or those of our collaborators also may be independently discovered by others.

***Our products and product candidates may infringe the intellectual property rights of others, or others may infringe on our intellectual property rights which could increase our costs.***

Our success also depends on avoiding infringement of the proprietary technologies of others. In particular, there may be certain issued patents and patent applications claiming subject matter which we or our collaborators may be required to license in order to research, develop or commercialize LOR-253, our lead product candidate. In addition, third parties may assert infringement or other intellectual property claims against us. An adverse outcome in these proceedings could subject us to significant liabilities to third-parties, require disputed rights to be licensed from third-parties or require us to cease or modify our use of the technology. If we are required to license third-party technology, a license under such patents and patent applications may not be available on acceptable terms or at all. Further, we may incur substantial costs defending ourselves in lawsuits against charges of patent infringement or other unlawful use of another's proprietary technology. We may also need to bring claims against others who we believe are infringing our rights in order to become or remain competitive and successful. Any such claims can be time consuming and expensive to pursue.

***If product liability, clinical trial liability or environmental liability claims are brought against us or we are unable to obtain or maintain product liability, clinical trial or environmental liability insurance, we may incur substantial liabilities that could reduce our financial resources.***

The clinical testing and commercial use of pharmaceutical products involves significant exposure to product liability, clinical trial liability, environmental liability and other risks that are inherent in the testing, manufacturing and marketing of our products. These liabilities, if realized, could have a material adverse effect on the Company's business, results of operations and financial condition.

We have obtained limited product liability insurance coverage for our clinical trials on humans; however, our insurance coverage may be insufficient to protect us against all product liability damages. Regardless of merit or eventual outcome, liability claims may result in decreased demand for a future product, injury to reputation, withdrawal of clinical trial volunteers, loss of revenue, costs of litigation, distraction of management and substantial monetary awards to plaintiffs. Additionally, if we are required to pay a product liability claim, we may not have sufficient financial resources to complete development or commercialization of any of our product candidates and our business and results of operations will be adversely affected. In general, insurance will not protect us against some of our own actions, such as negligence.

As the Company's development activities progress towards the commercialization of product candidates, our liability coverage may not be adequate, and the Company may not be able to obtain adequate product liability insurance coverage at a reasonable cost, if at all. Even if the Company obtains product liability insurance, its financial position may be materially adversely affected by a product liability claim. A product liability claim could also significantly harm the Company's reputation and delay market acceptance of its product candidates. Additionally, product recalls may be issued at the direction of the FDA, other government agencies or other companies having regulatory control for pharmaceutical sales. If a product recall occurs in the future, such a recall could adversely affect our business, financial condition or reputation.

***We have no manufacturing capabilities and face supply risks. We depend on third-parties, including a number of sole suppliers, for manufacturing and storage of our product candidates used in our clinical trials. Product introductions may be delayed or suspended if the manufacture of our products is interrupted or discontinued.***

Other than limited quantities for research purposes, we do not have manufacturing facilities to produce supplies of LOR-253 or any of our other product candidates to support clinical trials or commercial launch of these products, if they are approved. We are dependent on third parties for manufacturing and storage of our product candidates. If the supply of necessary components is interrupted, components from alternative suppliers may not be available in sufficient volumes or at acceptable quality levels within required timeframes, if at all, to meet the needs of the Company. An inability to contract for a sufficient supply of our product candidates on acceptable terms, or delays or difficulties in the manufacturing process or our relationships with our manufacturers, may lead to us not having sufficient product to conduct or complete our clinical trials or support preparations for the commercial launch of our product candidates, if approved. This may lead to substantial lost revenue opportunity and contract liability to third parties.

#### ***Reliance on Licensor(s) to Maintain Patent Rights***

The Company's commercial success depends, in part, on maintaining and defending patent rights related to products that the Company may market in the future. Since the Company may not fully control the patent prosecution of any licensed patent applications it is possible that the licensors will not devote the same resources or attention to the prosecution of the licensed patent applications as the Company would if it controlled the prosecution of the applications. The licensors may also not pursue and successfully prosecute, enforce or defend any potential patent infringement or invalidity claim, may fail to maintain their issued patents or prosecute or maintain their patent applications, or may pursue any litigation less aggressively than the Company would. Consequently, the resulting patent protection, if any, may not be as strong or comprehensive, which could have a material adverse effect on the Company.

### ***Extensive Government Regulation***

Government regulation is a significant factor in the development, production and marketing of the Company's products. Research and development, testing, manufacture, marketing and sales of pharmaceutical products or related products are subject to extensive regulatory oversight, often in multiple jurisdictions, which may cause significant additional costs and/or delays in bringing products to market, and in turn, may cause significant losses to investors. The regulations applicable to the Company's product candidates may change. Even if granted, regulatory approvals may include significant limitations on the uses for which products can be marketed or may be conditioned on the conduct of post-marketing surveillance studies. Failure to comply with applicable regulatory requirements can, among other things, result in warning letters, the imposition of civil penalties or other monetary payments, delay in approving or refusal to approve a product candidate, suspension or withdrawal of regulatory approval, product recall or seizure, operating restrictions, interruptions of clinical trials or manufacturing, injunctions or criminal prosecution. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of the Company's product candidates.

Requirements for regulatory approval vary widely from country to country. Whether or not approved in Canada or the United States, regulatory authorities in other countries must approve a product prior to the commencement of marketing the product in those countries. The time required to obtain any such approval may be longer or shorter than in Canada or the United States. Approved drugs, as well as their manufacturers, are subject to continuing and ongoing review, and discovery of problems with these products or the failure to adhere to manufacturing or quality control requirements may result in regulatory restrictions being imposed.

### **Risks Related to Our Common Shares**

***Our share price has been and may continue to be volatile and an investment in our common shares could suffer a decline in value.***

You should consider an investment in our common shares as risky and invest only if you can withstand a significant loss and wide fluctuations in the market value of your investment. We receive only limited attention by securities analysts and frequently experience an imbalance between supply and demand for our common shares. The market price of our common shares has been highly volatile and is likely to continue to be volatile. This leads to a heightened risk of securities litigation pertaining to such volatility. Factors affecting our common share price include but are not limited to:

- our ability to raise additional capital;
- the progress of our clinical trials;
- our ability to obtain partners and collaborators to assist with the future development of our products;
- general market conditions;
- announcements of technological innovations or new product candidates by us, our collaborators or our competitors;
- published reports by securities analysts;
- developments in patent or other intellectual property rights;
- the cash and short term investments held by us and our ability to secure future financing;
- public concern as to the safety and efficacy of drugs that we and our competitors develop; and
- shareholder interest in our common shares.

***Future sales of our common shares by us or by our existing shareholders could cause our share price to fall.***

The issuance of common shares by us could result in significant dilution in the equity interest of existing shareholders and adversely affect the market price of our common shares. Sales by existing shareholders of a large number of our common shares in the public market and the issuance of shares issued in connection with strategic alliances, or the perception that such additional sales could occur, could cause the market price of our common shares to decline and have an undesirable impact on our ability to raise capital.

***We are susceptible to stress in the global economy and therefore, our business may be affected by the current and future global financial condition.***

If the increased level of volatility and market turmoil that have marked recent years continue, our operations, business, financial condition and the trading price of our common shares could be materially adversely affected. Furthermore, general economic conditions may have a great impact on us, including our ability to raise capital, our commercialization opportunities and our ability to establish and maintain arrangements with others for research, manufacturing, product development and sales.

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

Our common shares are listed for trading on the TSX. However, there can be no assurance that an active trading market in our common shares on the TSX will be sustained or that we will be able to maintain our listing.

#### **DISCLOSURE CONTROLS AND INTERNAL CONTROL OVER FINANCIAL REPORTING**

The Company has implemented a system of internal controls that it believes adequately protects the assets of the Company and is appropriate for the nature of its business and the size of its operations. Our internal control system was designed to provide reasonable assurance that all transactions are accurately recorded, that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that our assets are safeguarded. These internal controls include disclosure controls and procedures designed to ensure that information required to be disclosed by the Company is accumulated and communicated as appropriate to allow timely decisions regarding required disclosure.

Internal control over financial reporting means a process designed by or under the supervision of the Chief Executive Officer and the Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The internal controls are not expected to prevent and detect all misstatements due to error or fraud.

During the year ended May 31, 2014 the Company hired a Chief Financial Officer. The former acting Chief Financial Officer is continuing with the responsibilities as Director of Finance and the Chief Financial Officer provides an additional level of review over financial documents. Management believes that the addition of the Chief Financial Officer will strengthen the Company's internal controls over financial reporting on an ongoing basis.

As at May 31, 2014, the Company's management has assessed the effectiveness of our internal control over financial reporting and disclosure controls and procedures using the Committee of Sponsoring Organizations of the Treadway Commission's 1992 framework. Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that these controls and procedures are effective.

#### **UPDATED SHARE INFORMATION**

As at July 15, 2014, the Company had 139,324,451 common shares issued and outstanding. In addition, as of July 15, 2014 there were 15,167,496 common shares issuable upon the exercise of outstanding stock options, 2,00,000 shares issuable upon the conversion of outstanding promissory notes and 2,612,620 common shares issuable upon the exercise of common share purchase warrants. Of these warrants 1,166,250 are priced at \$0.45 and expire in August 2016, 568,000 are priced at \$0.25 and expire in June 2015 and 878,370 are priced at \$0.55 and expire in December 2015.

#### **ADDITIONAL INFORMATION**

Additional information relating to Lorus, including Lorus' 2014 annual information form and other disclosure documents, is available on SEDAR at [www.sedar.com](http://www.sedar.com).



**ANNUAL INFORMATION FORM**

**Fiscal year ended May 31, 2014**

July 15, 2014

2 Meridian Road, Toronto, Ontario M9W 4Z7  
Telephone: (416) 798-1200  
Fax: (416) 798-2200

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## CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This annual information form may contain forward-looking statements within the meaning of securities laws. Such statements include, but are not limited to, statements relating to:

- our business strategy;
- our ability to obtain the substantial capital we require to fund research and operations;
- our plans to secure strategic partnerships to assist in the further development of our product candidates;
- our plans to conduct clinical trials and preclinical programs;
- our expectations regarding the progress and the successful and timely completion of the various stages of our drug discovery, preclinical and clinical studies and the regulatory approval process;
- our plans, objectives, expectations and intentions; and
- other statements including words such as “anticipate”, “contemplate”, “continue”, “believe”, “plan”, “estimate”, “expect”, “intend”, “will”, “should”, “may”, and other similar expressions.

The forward-looking statements reflect our current views with respect to future events, are subject to risks and uncertainties, and are based upon a number of estimates and assumptions that, while considered reasonable by us, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements, including, among others:

- our ability to obtain the substantial capital we require to fund research and operations;
- our lack of product revenues and history of operating losses;
- our early stage of development, particularly the inherent risks and uncertainties associated with (i) developing new drug candidates generally, (ii) demonstrating the safety and efficacy of these drug candidates in clinical studies in humans, and (iii) obtaining regulatory approval to commercialize these drug candidates;
- our drug candidates require time-consuming and costly preclinical and clinical testing and regulatory approvals before commercialization;
- clinical studies and regulatory approvals of our drug candidates are subject to delays, and may not be completed or granted on expected timetables, if at all, and such delays may increase our costs and could delay our ability to generate revenue;
- the regulatory approval process;
- our ability to recruit patients for clinical trials;
- the progress of our clinical trials;
- our liability associated with the indemnification of our predecessor and its directors, officers and employees in respect of an arrangement completed in 2007;
- our ability to find and enter into agreements with potential partners;
- our ability to attract and retain key personnel;
- our ability to obtain patent protection;
- our ability to protect our intellectual property rights and not infringe on the intellectual property rights of others;
- our ability to comply with applicable governmental regulations and standards;
- development or commercialization of similar products by our competitors, many of which are more established and have or have access to greater financial resources than us;
- commercialization limitations imposed by intellectual property rights owned or controlled by third parties;
- potential product liability and other claims;
- our ability to maintain adequate insurance at acceptable costs;
- further equity financing, which may substantially dilute the interests of our shareholders;
- changing market conditions; and
- other risks detailed from time-to-time in our on-going quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the United States Securities and Exchange Commission (“SEC”), and those which are discussed under the heading “Risk Factors” in this document.

Should one or more of these risks or uncertainties materialize, or should the assumptions set out in the section entitled “Risk Factors” underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this annual information form or, in the case of documents incorporated by reference herein, as of the date of such documents, and we do not intend, and do not assume any obligation, to update these forward-looking statements, except as required by law. We cannot assure you that such statements will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

Unless otherwise indicated, or the context requires otherwise, the information appearing in this annual information form is stated as at May 31, 2014 and references in this annual information form to "\$" or "dollars" are to Canadian dollars.

In this annual information form, the terms "Company", "Lorus", "we", "our", "us" and similar expressions refer to Lorus Therapeutics Inc.

For ease of reference, a glossary of terms used in this annual information form can be found beginning on page 30.

## THE COMPANY

Lorus Therapeutics Inc. was incorporated under the *Business Corporations Act* (Ontario) on September 5, 1986 under the name RML Medical Laboratories Inc. ("Old Lorus"). On October 28, 1991, RML Medical Laboratories Inc. amalgamated with Mint Gold Resources Ltd., resulting in Old Lorus becoming a reporting issuer (as defined under applicable securities law) in Ontario, on such date. On August 25, 1992, Old Lorus changed its name to IMUTEC Corporation. On November 27, 1996, Old Lorus changed its name to Imutec Pharma Inc., and on November 19, 1998, Old Lorus changed its name to Lorus Therapeutics Inc. On October 1, 2005, Old Lorus continued under the *Canada Business Corporations Act*.

On July 10, 2007 (the "Arrangement Date"), Old Lorus completed a plan of arrangement and corporate reorganization with, among others, 6650309 Canada Inc. ("New Lorus"), 6707157 Canada Inc. and Pinnacle International Lands, Inc. As a result of the plan of arrangement and reorganization each common share of Old Lorus was exchanged for one common share of New Lorus. New Lorus continued the business of Old Lorus after the Arrangement Date with the same officers and employees and continued to be governed by the same board of directors as Old Lorus prior to the Arrangement Date. References in this annual information form to the Company, Lorus, "we", "our", "us" and similar expressions, unless otherwise stated, are references to Old Lorus prior to the Arrangement Date and New Lorus after the Arrangement Date.

The address of the Company's head and registered office is 2 Meridian Road, Toronto, Ontario, Canada, M9W 4Z7. Our corporate website is [www.lorusthera.com](http://www.lorusthera.com). The contents of the website are specifically not included in this annual information form by reference.

Lorus has two subsidiaries: NuChem Pharmaceuticals Inc. ("NuChem"), a company incorporated under the laws of Ontario, Canada, and Lorus Therapeutics U.S. Inc. ("Lorus USA"), a company incorporated under the laws of Delaware, USA. Lorus owns 80% of the issued and outstanding voting share capital of NuChem and 100% of the issued and outstanding voting share capital of Lorus USA. NuChem has limited activity and the non-controlling interest is not material to the financial statements of the Company. Lorus USA was incorporated in April 2014 and did not have any activity during the year ended May 31, 2014.

Our common shares are listed on the Toronto Stock Exchange ("TSX") under the symbol "LOR".

## GENERAL DEVELOPMENT OF THE BUSINESS



Lorus is a clinical stage biotechnology company with a commitment to discovering and developing targeted therapies addressing unmet medical needs in oncology. We aim to develop therapeutics focused on novel cellular targets on the leading edge of cancer research coupled to companion diagnostics to identify the optimal patient population for our products. Our pipeline of cancer drug candidates includes small molecule products and immunotherapies providing additive or synergistic efficacy without leading to overlapping toxicities with existing anti-cancer regimens, facilitating the adoption of doublet or possibly triplet therapies.



We believe the future of cancer treatment and management lies in the prospective selection and treatment of patients predisposed to response based on a drug's unique mechanism of action. We are of the view that many drugs currently approved for the treatment and management of cancer are not selective for the specific genetic alterations (targets) that cause the patient's tumor and hence lead to significant toxicities due to off-target effects. Lorus' strategy is to continue the development of our programs that address a common underlying pathway within a patient population, and we intend to apply this strategy across several therapeutic indications in oncology, including hematologic malignancies and solid tumor indications. Our lead program, LOR-253, is a first-in-class inducer of the Krüppel-like factor 4 gene (the "Klf4 Gene") for patients with advanced hematologic malignancies, including acute myeloid leukemia ("AML") and myelodysplastic syndromes ("MDS").

The following table sets forth various product conditions in our pipeline and their respective stages of development.

Drug	Indication	Partners	Discovery	Pre-Clinical	Phase 1	Phase 2
<b>LOR-253</b> <i>(KLF4 Activator)</i>	Solid Tumors	—	Completed	Completed	Completed	
	Relapsed / Refractory Hematologic Malignancies	—	Completed	Completed	Planning Underway	Planning Underway
<b>IL-17E<sup>1</sup></b> <i>(Immunomodulator)</i>	Oncology	Genentech <sup>2</sup>	Completed	Completed		
<b>LOR-500<sup>1</sup></b> <i>(MELK Inhibitor)</i>	Oncology	—	Completed			
<b>Small Molecule Program</b>	Various	Eli Lilly / Elanco <sup>3</sup>	Completed			

 Completed  
 Planning Underway

<sup>1</sup> Not currently in development as Lorus is currently mainly focussing on developing LOR-253.

<sup>2</sup> Global IP license; Lorus owns rights in oncology.

<sup>3</sup> Exclusive rights to license for veterinary applications.

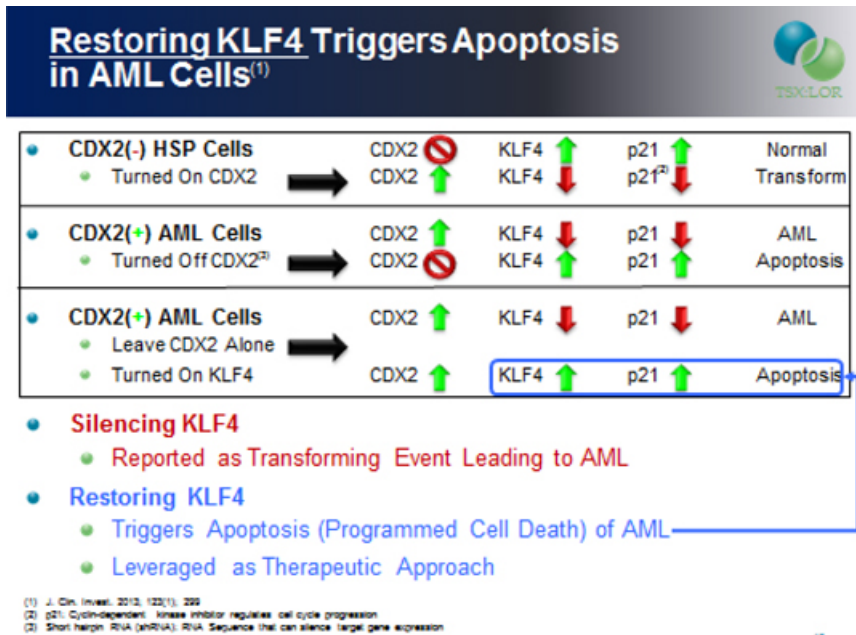
LORUS PRODUCT CANDIDATES PROFILE

Krüppel-Like Factor 4 & CDX2

Krüppel-like factors constitute a diverse family of genes (the "Klf Genes") that act by modifying the expression levels of other genes that control essential cellular processes such as proliferation, migration, differentiation, cell death and metastasis. Approximately 17 Klf Genes are known, with an array of roles that include serving as innate tumor suppressors. The Klf Genes give rise to the production of proteins (the "KLF Proteins"). Structurally, KLF Proteins include DNA binding domains that allow for the identification and regulation of other genes. Of particular importance, the Krüppel-like factor 4 protein (the "KLF4 Protein") is also reported to be impacted by the embryonic gene, Cdx2 (the "Cdx2 Gene").

The Cdx2 Gene, while not materially expressed in the bone marrow and blood cells of normal adults, was observed to be active in the malignant cells in a majority of patients with AML. It was subsequently noted that a screen of other genes affected by the expression of the Cdx2 Gene, and its protein product ("CDX2 Protein"), identified the Klf4 Gene as significantly impacted. It was proposed that CDX2 Protein affects KLF4 Protein levels by binding and epigenetically silencing the Klf4 Gene (Faber et. al., J Clin Invest. 2013;123(1):299–314). In other words, while the DNA base sequence remains unaltered, the transcriptional machinery around those bases are modified chemically to reduce the expression of the gene. In subsequent studies from Faber et. al., it was demonstrated that induction of the Cdx2 Gene, in cells lacking CDX2 Protein, subsequently decreased KLF4 Protein levels and promoted proliferation (Figure 1, First Bullet), while silencing the Cdx2 Gene in cells possessing CDX2 Protein alleviated the suppression of the Klf4 Gene and restored innate function (Figure 1, Second Bullet) to drive cellular apoptosis (programmed cell death) in AML cells. Further, in cells possessing an active Cdx2 Gene, Faber et. al. inserted an active Klf4 Gene to overcome innate KLF4 Protein suppression, and revealed that increased KLF4 Protein promoted apoptosis (Figure 1, Third Bullet).

Figure 1: Studies Assessing the Role of KLF4 in AML Cells



It has been suggested by Faber et. al. that a multitude of genetic abnormalities culminate in the aberrant expression of the Cdx2 Gene and ultimately converge on decreased Klf4 Gene transcription to yield diminished KLF4 Protein levels. Therefore, this CDX2 Protein-KLF4 Protein signature was speculated by Faber et. al. to be a potential trigger for AML. Separately, it was observed by Scholl et. al. in 2007 (J. Clin. Invest. 117:1037–1048 (2007)) that approximately 40% of patients with higher risk MDS possessed increased CDX2 Protein levels, and may represent the portion of the MDS population progressing to AML. Other opportunities in oncology in which the Klf4 Gene has been implicated to play a role include colorectal, gastric, cervical, prostate and lung cancers, among others.

#### **LOR-253: Lead Clinical Program**

Our lead program is LOR-253, a small molecule found to induce the transcription of the Klf4 Gene in *in vitro* studies. LOR-253 was discovered and identified by Lorus scientists based upon the magnitude of its antiproliferative and anti-metastatic activity across a multitude of cell lines. In vitro studies conducted at Lorus have demonstrated significant potency nanomolar IC50 concentrations LOR-253 in AML cell lines, and ten to 1000 times greater potency than in solid tumor cell lines. In vitro analyses with relevant AML cell lines, including THP1, HL-60 and Kasumi-1, have demonstrated that LOR-253 led to significant elevation of KLF4 Protein levels, with the anticipated increase in cyclin-dependent kinase inhibitor I (p21, a protein that halts the cell cycle and prevents cells from proliferating), caspase-3 (an enzyme activated during programmed cell death to chop up other proteins), and Annexin-V (used as a marker for the initiation of programmed cell death), leading to G1 cell cycle arrest and apoptosis (programmed cell death). LOR-253 is administered as an intravenous infusion in patients. We have reported initial results from the Phase I clinical study of LOR-253 in patients with various solid tumors, and in that study we observed evidence of anti-tumor activity as a single agent at doses that were safe and well tolerated.. Our plans are to advance LOR-253 to a Phase Ib clinical study in relapsed / refractory hematologic malignancies, including patients with AML, MDS, multiple myeloma and various lymphomas, based upon the common underlying, leukemia-causing profile of Klf4 Gene suppression. The development of LOR-253 currently represents the main focus of Lorus.

Lorus is currently pursuing the clinical development of LOR-253 in AML, based on in vitro data demonstrating significant sensitivity to AML cell lines and recent academic research implicating up-regulation of the CDX2 Protein, and suppression of the KLF4 Protein, as a possible leukemogenic trigger in AML. This CDX2 Protein-KLF4 Protein signature has been observed to be absent in the normal hematopoietic stem and progenitor cells of healthy individuals. The CDX2 Protein is reported by Faber et. al. to epigenetically silence the Klf4 Gene tumor suppressor as a critical oncogenic event (transforming normal cells to cancer cells) in AML, and LOR-253 has demonstrated the ability in preclinical investigations to up-regulate the Klf4 Gene and induce tumor-killing effect. We believe these findings warrant investigation of the potential clinical utility of LOR-253 in the treatment of patients with suppressed Klf4 Gene in AML, MDS, and other hematologic malignancies.

Lorus is currently developing and validating a companion diagnostic for LOR-253. The diagnostics will be designed to assess the extent of genetic expression of Cdx2 and Klf4 in patients as a potential predictor of response to therapy with LOR-253, as well as assess post-treatment expression levels as biomarkers of efficacy.

#### **Acute Myeloid Leukemia**

AML is a rapidly progressing cancer of the blood and bone marrow characterized by the uncontrolled proliferation of dysfunctional myeloblasts that do not mature into healthy blood cells. It is the most common form of acute leukemia in adults. The American Cancer Society estimates there were approximately 14,590 new cases of AML and approximately 10,370 deaths from AML in the U.S. in 2013 and that there will be approximately 18,860 new cases of AML and approximately 10,460 deaths from AML in the U.S. in 2014. Standard induction therapy with chemotherapy is successful in many AML patients, but the majority of these patients will relapse with treatment refractory disease. Typical relapse rates in patients less than, and greater than, 60 years of age are approximately 48% and 71% respectively, as reported by Datamonitor Healthcare.

## ***Myelodysplastic Syndromes***

MDS are a group of blood and bone marrow disorders. In MDS, stem cells do not mature normally, and the number of blasts (immature cells) and dysplastic (abnormally developed) cells increases. Also, the number of healthy mature cells decreases, meaning there are fewer normal red blood cells, white blood cells, and platelets. The numbers of blood cells are often called blood cell counts. Because of the decrease in healthy cells, people with MDS often have anemia (a lowered blood cell count), and may have neutropenia (a low white blood cell count) and thrombocytopenia (a low platelet count). Also, the chromosomes (long strands of genes) in the bone marrow cells may be abnormal. According to the American Cancer Society, there are approximately 13,000 new cases of MDS annually in the US. Additionally, Datamonitor Healthcare reports median survival in higher risk MDS patients may range between five months and two years. There are several subtypes of MDS, and some subtypes of MDS may eventually turn into AML.

## ***Solid Tumors***

Phase 1 data with LOR-253 in patients with solid tumors and preclinical data in solid tumor cells, including non-small cell lung cancer ("NSCLC"), have identified an opportunity for LOR-253 in patients possessing cancers with reduced Klf4 Gene expression. Our prior Phase 1 study with LOR-253 also exhibited a favorable safety profile for LOR-253 without an identified maximally tolerated dose over a 28-day cycle. Various solid tumors have exhibited suppressed levels of Klf4 Gene in scientific publications, including colorectal, gastric, pancreatic, prostate and cervical cancers, as well as NSCLC. NSCLC is an indication that we consider to have a large market potential and important unmet need worldwide, in which the Klf4 Gene is a tumor suppressor that is present in case-matched normal cells but depressed in NSCLC tumor cells. Lorus may evaluate the clinical utility of LOR-253 in additional studies in a subset of NSCLC patients that may be predisposed to a response with a therapeutically activating the Klf4 Gene.

In January 2011 Lorus announced the first patient enrolment in a Phase I dose-escalation study for LOR-253 in patients with advanced or metastatic solid tumors who are unresponsive to conventional therapy or for which no effective therapy is available. The study was initially being conducted at Memorial Sloan-Kettering Cancer Center in New York and later added MD Anderson Cancer Center in Houston as a second site. Objectives of the study included determination or characterization of the safety profile, maximum tolerated dose, and antitumor activity of LOR-253, as well as pharmacokinetics and recommended Phase II dose for subsequent clinical trials.

In June 2012, Lorus announced the addition of MD Anderson Cancer Center as a second site in the then ongoing LOR-253 Phase I clinical trial, under the direction of Dr. Jennifer Wheeler as the principal investigator. In addition, Lorus announced that the study had successfully completed the accelerated drug dose escalation stage (Stage 1), with further escalation under way in the non-accelerated dose escalation stage (Stage 2) for the purpose of determining the maximal tolerated dose level and recommended Phase II dose. The addition of a second site expanded patient availability for enrollment.

In January 2013, Lorus announced that Phase I clinical study of LOR-253 has successfully escalated to the target dose level based on predicted and observed clinical effects without limitation by toxicity. The success of this study allowed Lorus to initiate a biomarker clinical investigation to further explore the effects of the drug at relevant doses determined in the clinical trial.

In April 2013, Lorus announced the presentation of preclinical data for at the 2013 Annual Meeting of the American Association for Cancer Research ("AACR"), held in Washington, DC from April 6 – 10, 2013. The poster presentation titled "Utilization of KLF4 as a pharmacodynamic biomarker for in vivo anticancer activity of a novel small molecule drug LOR-253" covered data from preclinical studies on anticancer activity and tumor biomarker analysis for LOR-253 in animal models of human NSCLC. The studies show that LOR-253 has antitumor activity with a dose-response effect in NSCLC that is associated with a dose dependent increase of the KLF4 gene.

In July 2013 Lorus announced the results of the Phase 1 clinical trial of LOR-253. In this first-in-man, dose-escalation clinical study, LOR-253 demonstrated a favourable safety profile as well as encouraging signs of antitumor activity.

The design consisted of LOR-253 as a single agent in patients with advanced solid tumors resistant to multiple standard therapies. The study enrolled 27 patients, all of which had failed a median of 4 prior chemotherapies. Although this was primarily a dose-escalation safety study, efficacy and pharmacokinetics were also explored.

The clinical trial enrolled patients at 7 dose levels ranging from 20 to 229 mg/m<sup>2</sup>. Of the 27 patients enrolled, 17 were evaluable for efficacy. Of these 17 patients, 7 (41%) achieved stable disease by Response Evaluation Criteria In Solid Tumors ("RECIST") and this included patients with colorectal, lung, appendiceal, liver and uterine cancers. Dose related activity was demonstrated at the higher dose levels (176 and 229 mg/m<sup>2</sup>). At these two highest dose levels, 4 of 5 evaluable patients (80%) achieved sustained stable disease by RECIST ranging from 5.6 months to 8 months, representative of disease control. Of these, a patient with non-small cell lung cancer at the highest dose level additionally demonstrated non-index tumor shrinkage.

The safety assessment indicated that LOR-253 was well tolerated at all dose levels tested in this trial. The dose escalation was not limited by toxicity. The most common adverse event was Grade 1 or 2 fatigue seen in 3 patients. There was one Grade 3 toxicity, asymptomatic low blood phosphate level that was reversible by supplementation. The pharmacokinetic profile was consistent with the predictive profile seen preclinically, and the elimination profile and half-life in patients were suggestive of a very rapid distribution phase and prolonged retention.

#### **Small Molecular Program**

In April 2013, Lorus entered into a research and license option agreement with Elanco, the animal health division of Eli Lilly and Company ("Elanco"), to investigate a new proprietary series of Lorus' compounds for veterinary medicine. Pursuant to the agreement, Elanco will fund the research program and was granted an exclusive option to license the worldwide rights for selected compounds for veterinary use; the terms of which will be negotiated if the option is exercised by Elanco. Lorus retains the rights to develop and commercialize these compounds for human use and intends to use the animal data from the collaboration as a basis for a partnership with a third party that will seek to develop the technology for the treatment of patients with cancer. Lead optimization is underway and the next goal is to identify a clinical drug candidate which can be developed for both human and animal use.

#### **LOR-500**

This program aims to discover and develop potent, first-in-class small molecule inhibitors of maternal embryonic leucine zipper kinase ("MELK"). MELK plays an important role in cancer cell cycle, signaling pathways, and cancer stem cells. MELK is highly expressed in several cancer types and its expression correlates with poor prognosis in glioma and breast cancer. These findings provide strong support that selective targeting of MELK may be an effective cancer treatment strategy. Several compounds targeting MELK have been identified. Cancer associated kinases as drug targets are a very active area for research and development globally and kinase inhibitors are some of the best selling drugs in oncology with Imatinib, Sunitinib, Sorafenib and Erlotinib whose annual global sales amount to billions. Much of the current focus is on the development of selective kinase inhibitors that hit specific targets in cancer cells and cause less toxicity associated with off-target effect. Lorus believes that the LOR-500 program can produce one of the first selective MELK inhibitor in development for cancer treatment and the market potential for this novel drug could exceed \$1 billion annually.

LOR-500 is not currently in development.

### **Immunotherapy**

IL-17E (also known as IL-25) is a recently identified cytokine that plays an important role in Th2 type immune response. Lorus scientists were the first to discover the anticancer properties of IL-17E against a range of solid tumors, including human melanoma, pancreatic, colon, lung, ovarian and breast tumor models with very low toxicity. IL-17E is potent and does not require further optimization before proceeding to the formal Investigational New Drug ("IND")-enabling preclinical studies planned to support advancing to a Phase I clinical trial.

In May 2012, Lorus entered into a global license with Genentech, a member of the Roche Group, in respect of certain patents owned by Genentech for IL-17E. Detailed financial terms were not disclosed. Through this license, Genentech awarded to Lorus the rights to develop IL-17E as a treatment for a large number of cancers on a global basis.

In June 2012, Lorus announced that the Canadian Intellectual Property Office had issued Lorus' patent for IL-17E which protects the use of IL-17E to treat cancer, including many different solid tumors such as colon, breast, ovarian, pancreatic, and lung cancers as well as melanoma, until 2026.

In August 2012, Lorus announced that the National Research Council of Canada Industrial Research Assistance Program ("NRC-IRAP") had awarded funding to Lorus to support development of IL-17E for cancer therapy. The \$50,000 non-repayable contribution from NRC-IRAP was used for a pilot development project to manufacture IL-17E, which was carried out by researchers at the National Research Council who have extensive experience in the development, recovery and purification of recombinant proteins and peptides produced by different expression systems.

In December 2012, Lorus announced the presentation of new data at the 2012 American Association for Cancer Research ("AACR") Tumor Immunology: Multidisciplinary Science Driving Basic and Clinical Advances Conference. The presentation provided an overview of recent preclinical studies conducted by Lorus to assess the anticancer activity and safety of IL-17E. The studies show that IL-17E significantly inhibits the growth of colon and melanoma cancers in animal models, with no apparent signs of toxicity. The animal models used provide both a more complete assessment of the safety of IL-17E, and confirmation of the efficacy of IL-17E at safe doses. This is essential information for Lorus' strategy to bring IL-17E into clinical studies to treat human cancers.

In January 2013, the United States Patent and Trademark Office issued Lorus the U.S. patent protecting methods of treating cancer with IL-17E, both alone and in combination with anticancer therapy drugs including gemcitabine, paclitaxel, docetaxel, erlotinib, cisplatin, and bevacizumab. The patent covers the treatment of a wide range of cancers, including breast, lung, colon, pancreatic, gastric and ovarian tumors, as well as melanoma. Patents with similar protection for IL-17E are pending in Canada and Europe.

IL-17E is not currently being developed by Lorus.

## **BUSINESS OF THE COMPANY**

### **Strategic Review Process**

On September 12, 2013, the Company formed a special committee composed of independent directors to review strategic alternatives available to the Company and secure the long-term financial and operational sustainability of the Company with a view to enhance shareholder value (the "Special Committee"). On October 28, 2013, the Special Committee, after having considered and reviewed a number of options, concluded its review. The special committee recommended that the board of directors of Lorus (the "Board") approve the appointments of William G. Rice, Ph.D. as Chief Executive Officer and Chairman of the Board and of Daniel D. Von Hoff, M.D., to serve as a special advisor to fulfill the functions of the Company's Senior Vice President of Medical Affairs. Additionally, on October 29, 2013, Lorus announced the addition of Brian Druker, M.D. as the Chair of the Company's newly formed Scientific Advisory Board.

## **Changes in Management**

On October 28, 2013, William G. Rice, Ph.D., was appointed as Chief Executive Officer and Chairman of the Board while Dr. Aiping Young continued as President and Chief Operating Officer of the Company until she departed the Company on March 18, 2014. Lorus also appointed Daniel D. Von Hoff, M.D., to serve as a special advisor to fulfill the functions of the Company's Senior Vice President of Medical Affairs. Dr. Von Hoff is an independent contractor and advisor but is not an employee of Lorus. The Board, after receiving the recommendation of the Special Committee, unanimously approved the appointments. In doing so, the Board determined that such appointments were in the best interest of Lorus, as they were considered to enhance the management team and advisory team with the addition of two seasoned and experienced biotechnology executives bringing extensive clinical development and capital raising experience and improving the awareness and presence of the Company in the United States. On April 10, 2014, Dr. Rice was additionally appointed as President of the Company.

On October 29, 2013, Brian Druker, M.D., was appointed as the Chair of the Company's Scientific Advisory Board. Like Dr. Von Hoff, Dr. Druker is an independent contractor and advisor but not an employee of Lorus.

On December 2, 2013, Avanish Vellanki was appointed as Chief Business Officer of the Company, to manage global business development, licensing and corporate strategy, and Gregory K. Chow was appointed as Chief Financial Officer, and has responsibility for corporate finance and accounting functions for the Company. On April 10, 2014, Messrs. Vellanki and Chow were additionally appointed as Senior Vice Presidents of the Company.

## **Financial Strategy**

To meet our future financing requirements, we intend to finance our operations through some or all of the following methods: public or private equity financings, and collaborative and licensing agreements. We intend to pursue financing opportunities as they arise. See "Risk Factors".

### ***April 2014 Public Offering***

In April 2014, we completed a public offering of common shares. Lorus issued 56,500,000 common shares at a purchase price of \$0.50 per common share including 6,500,000 common shares pursuant to the partial exercise of an over-allotment option, for aggregate gross proceeds of \$28,250,000. The total costs associated with the transaction were approximately \$2,665,914 which includes a cash commission of \$1,977,500 based on 7% of the gross proceeds received as part of the offering.

Mr. Sheldon Inwentash and his joint actors ("Mr. Inwentash") a related party of Lorus by virtue of exercising control or direction over more than 10% of the common shares of Lorus participated in this offering and acquired an aggregate of 1,300,000 common shares.

### ***December 2013 Public Offering***

On December 10, 2013, we completed a public offering of common shares. Lorus issued a total of 12,730,000 common shares at a price of \$0.55 per common share, for aggregate gross proceeds of \$7,001,500 as part of such offering.

The total costs associated with the transaction were approximately \$999,440 which includes a cash commission of \$420,090 based on 6% of the gross proceeds received as part of the offering, and the issuance of 763,800 broker warrants with an estimated fair value of \$303,992 using the Black Scholes model. Each broker warrant is exercisable into one common share of the Company at a price of \$0.55 for a period of twenty four months following closing of the offering.

Mr. Inwentash, a related party of the Company by virtue of exercising control or direction over more than 10% of the common shares of the Company participated in this offering and acquired an aggregate of 1,820,000 common shares.

On January 8, 2014, the underwriters conducting the offering exercised in full their over-allotment option to purchase an additional 1,909,500 common shares of the Company at a price of \$0.55 per common share for additional gross proceeds of \$1,050,225. The total costs associated with the exercise of the over-allotment option were approximately \$125,612 based on 6% of the gross proceeds received as part of the exercise of the over-allotment option, and the issuance of 114,570 broker warrants with an estimated fair value of \$45,599 using the Black Scholes model. Each broker warrant is exercisable into one common share of the Company at a price of \$0.55 for a period of twenty four months following the closing of the over-allotment option exercise.

#### **Fiscal 2014 Warrant Exercises**

During the year ended May 31, 2014, 10,419,246 common share purchase warrants were exercised for proceeds of \$4,457,886.

##### *Warrants exercised during the year ended May 31, 2014:*

(in thousands)	Number	Proceeds
August 2011 warrants (i)	3,920	\$ 1,764
June 2012 private placement warrants (ii)	4,911	\$ 2,210
June 2012 broker warrants (iii)	1,238	\$ 396
June 2013 private placement warrants (iv)	350	\$ 88
<b>Total</b>	<b>10,419</b>	<b>\$ 4,458</b>

##### *Summary of outstanding warrants:*

(in thousands)	2014	2013
August 2011 warrants (i)	1,166	5,086
August 2011 broker warrants (i)	-	194
June 2012 private placement warrants (ii)	16,952	20,625
June 2012 broker warrants (iii)	-	1,238
June 2013 private placement warrants (iv)	568	-
December 2013 broker warrants (v)	878	-
<b>Number of warrants outstanding, end of year</b>	<b>19,564</b>	<b>27,143</b>

- (i) August 2011 warrants are exercisable into common share of Lorus at a price per share of \$0.45 and expire in August 2016. During the year ended May 31, 2014, 3.9 million warrants were exercised. In August 2013, 194 thousand broker warrants associated with this transaction expired unexercised.
- (ii) June 2012 warrants are exercisable into common shares of Lorus at a price per share of \$0.45 and expired on June 8, 2014. During the year 3.674 million were exercised. Subsequent to the year end in June an additional 14.7 million warrants were exercised with the remaining 2.2 million expiring unexercised.
- (iii) June 2012 broker warrants were exercisable into common shares of Lorus at a price per share of \$0.32 per unit. Each unit was comprised of 1 common share of Lorus and 1 common share purchase warrant exercisable at a price per share of \$0.45 and expire on June 8, 2014. In May 2014 the broker warrants were exercised and an additional 1.238 million common share purchase warrants were issued.



(iv) June 2013 private placement warrants are exercisable into common shares of Lorus at a price per share of \$0.25 and expiring in June 2015.

(v) December 2013 broker warrants are exercisable into common shares of Lorus at a price per share of \$0.55 and expiring in December 2015.

#### **June 2013 Promissory Notes and Warrants**

In June 2013 we completed a private placement of units at a price of \$1,000 per unit, for aggregate gross proceeds of \$918,000.

Each unit consisted of (i) a \$1,000 principal amount of unsecured promissory note and (ii) 1,000 common share purchase warrants. The promissory notes bore interest at a rate of 10% per annum, payable monthly and were due June 19, 2014. Each warrant entitled the holder to purchase one common share of Lorus at a price per common share equal to \$0.25 at any time until June 19, 2015.

Certain related parties participated in the transaction. Directors and officers (including Dr. Aiping Young, Dr. Jim Wright and Dr. Mark Vincent) acquired an aggregate of \$68,000 of the promissory notes. Mr. Inwentash acquired \$100,000 of the promissory notes.

These notes and any interest accrued thereon were repaid in full in April 2014.

#### **September 2013 Convertible Promissory Notes**

In September 2013 we completed a private placement of convertible promissory notes for aggregate gross proceeds of \$600,000.

Each convertible promissory note consists of a \$1,000 principal amount of unsecured promissory note convertible into common shares of the Company at a price per share of \$0.30. The promissory notes bear interest at a rate of 10% per annum, payable quarterly and are due September 26, 2015.

Mr. Inwentash acquired \$150,000 of the promissory notes.

#### **September 2013 Loans payable**

In September 2013 we entered into loan agreements for proceeds of \$150,000. The loan agreements were unsecured, bore interest at a rate of 10% per annum payable quarterly and were due September 30, 2015. We repaid the loans and all accrued and unpaid interest thereon on April 25, 2014.

#### **June 2012 Private Placement**

On June 8, 2012 we completed a private placement of 20,625,000 units at a subscription price of \$0.32 per unit and each unit consisted of one common share and one common share purchase warrant for gross proceeds to Lorus of \$6,600,000. Each warrant was exercisable for a period of 24 months from the date of issuance at an exercise price of \$0.45.

We paid a cash finder's fee of \$396,000 based on 6% of the gross proceeds of the private placement and issued 1,237,500 finder's warrants at an exercise price of \$0.32 each. Each finder's warrant was exercisable into units consisting of 1,237,500 common shares and 1,237,500 warrants.

#### **August 2011 Unit Offering**

On August 15, 2011 we closed a public offering for gross proceeds of \$2,193,600 whereby we issued 5,484,000 common shares and 5,677,515 warrants including broker warrants.

Each warrant entitles the holder to purchase one common share for five years after the closing of the offering at an exercise price of \$0.45. If on any date the 10-day volume weighted average trading price of the common shares on the TSX equals or exceeds 200% of the \$0.45 exercise price, then upon sending the holders of warrants written notice of and issuing a news release announcing such accelerated exercise date, the warrants shall only be exercisable for a period of 30 days following the date of notice.

## **Agreements**

### ***Manufacturing Agreements***

We currently rely upon subcontractors for the manufacture of our drug candidates. The subcontractors manufacture clinical material according to current Good Manufacturing Practices ("GMPs") at contract manufacturing organizations that have been approved by our quality assurance department staff, after having conducted audits to ensure such manufacturers meet the requirements of the relative regulatory authorities.

Manufactured product for clinical purposes is tested for conformance with product specifications prior to release by our quality assurance staff. GMP batches of our drug candidates are subjected to prospectively designed stability test protocols.

### ***Licence Agreements***

#### *Genentech*

The Company holds a non-exclusive license from Genentech Inc. ("Genentech") to certain patent rights to develop and sub-license a specified polypeptide. In consideration of the license, the Company paid an upfront amount and could be required to pay to Genentech additional milestones and royalties on sales. The initial amount paid upfront was a one-time non-creditable, non-refundable fee which was immaterial to the Company. The aggregate milestone amounts payable under the agreement total \$2,325,000. Additionally, the Company is obligated to make royalty payments after the first commercial sale of the polypeptide within a range of 1% to 5% on a country by country basis on an aggregate worldwide scale of net sales. No milestone or royalty payments under this agreement have become due and the Company will not make any milestone or royalty payments under this agreement during the fiscal year ending May 31, 2015. The Company cannot reasonably predict when such royalties will become payable, if at all. The agreement will terminate upon the expiration of the last-to-expire patent, which is expected to be in 2020. The agreement may be terminated (i) by the Company for any reason upon 60 days' prior written notice to Genentech or (ii) by Genentech for any material breach of the agreement by the Company, provided that the Company has the option to cure such breach within 30 days following written notice by Genentech.

### ***Collaboration Agreements***

#### *Elanco*

In April 2013, Lorus entered into a research and license option agreement with Elanco, the animal health division of Eli Lilly and Company, to investigate a new proprietary series of Lorus' compounds for veterinary medicine. Pursuant to the agreement, Elanco agreed to fund the research program and was granted an exclusive option to license from Lorus our worldwide rights for selected compounds for veterinary use; the terms of which will be negotiated if the option is exercised by Elanco. Lorus retains the rights to develop and commercialize these compounds for human use and intends to use the animal data from the collaboration as a basis for a partnership with a third party to develop the technology for the treatment of patients with cancer. Lead optimization is underway and the next goal is to identify a clinical drug candidate that can be developed for both human and animal use.

### ***Other***

From time to time, we enter into other research and technology agreements with third parties under which research is conducted and monies expended. These agreements outline the responsibilities of each participant and the appropriate arrangements in the event the research produces a product candidate.

## **Intellectual Property and Protection of Confidential Information and Technology**

We believe that our issued patents and pending applications are important in establishing and maintaining a competitive position with respect to our products and technology.

### ***Small Molecule***

We have been issued 18 patents and have 12 pending patents worldwide for our in-house small molecules. These patents cover LOR-253 composition of matter and methods of treating different cancers with LOR-253, including solid tumors and leukemia. Composition of matter patents expire in 2028 in the United States and 2026 in other countries. Our patents also include several compounds that are similar to LOR-253, which provide protection from competitors seeking to develop anticancer products that are related in chemical structure to LOR-253.

### ***Immunotherapy***

We have two issued patents and one pending patent for our IL-17E immunotherapy program. The patents, which expire in 2026, cover methods of treating cancer with IL-17E. Specific cancers listed in the patents include colon, breast, ovarian, cervical, lung gastric and prostate tumors. Lorus has entered into a license agreement with Genentech, which provides Lorus the right to use Genentech's IL-17E composition of matter patent for anticancer uses, as described above under License Agreements.

### ***Other Therapies***

We have 13 issued patents and one pending patent worldwide for our DNA-based therapeutics. These patents include composition of matter for the ribonucleotide reductase-targeted therapy LOR-2040 and methods of treating acute myeloid leukemia with this compound. Patents for composition of matter expire in 2017 and in 2024 for anticancer methods.

See "Risk Factors".

## **Regulatory Strategy**

Our overall regulatory strategy is to work with the appropriate government departments which regulate the use and sale of therapeutic drug products. This includes Health Canada in Canada, the Food and Drug Administration in the United States, the European Medicines Agency in Europe, and other local regulatory agencies with oversight of our preclinical studies, clinical trials and marketing of therapeutic products. Where possible, we intend to take advantage of opportunities for accelerated development of drugs designed to treat rare and serious or life-threatening diseases. We also intend to pursue priority evaluation of any application for marketing approval filed in Canada, the United States or the European Union and to file additional drug applications in other markets where commercial opportunities exist. We may not be able to pursue these opportunities successfully.

See "Regulatory Approval Process" and "Risk Factors".

## **Competition**

The biotechnology and pharmaceutical industries are characterized by rapidly evolving technology and intense competition. There are numerous companies in these industries that are focusing their efforts on activities similar to ours. Some of these are companies with established positions in the pharmaceutical industry and may have substantially more financial and technical resources, more extensive research and development capabilities, and greater marketing, distribution, production and human resources than Lorus. In addition, we face competition from other companies for opportunities to enter into partnerships with biotechnology and pharmaceutical companies and academic institutions.

Competition with our potential products may include chemotherapeutic agents, monoclonal antibodies, antisense therapies, small molecules, immunotherapies, vaccines and other biologics with novel mechanisms of action. These drugs may kill cancer cells indiscriminately, or through a targeted approach, and some have the potential to be used in non-cancer indications. We also expect that we will experience competition from established and emerging pharmaceutical and biotechnology companies that have other forms of treatment for the cancers that we target, including drugs currently in development for the treatment of cancer that employ a number of novel approaches for attacking these cancer targets. Cancer is a complex disease with more than 100 indications requiring drugs for treatment. The drugs in competition with our potential drugs have specific targets for attacking the disease, targets which are not necessarily the same as ours. These competitive drugs, however, could potentially also be used together in combination therapies with our drugs to manage the disease. Other factors that could render our potential products less competitive may include the stage of development, where competitors' products may achieve earlier commercialization, as well as superior patent protection, better safety profiles, or a preferred cost-benefit profile.

### **Human Resources**

As at May 31, 2014, we employed 19 full-time persons and three part-time persons in research and drug development and administration activities. Among our employees, five hold Ph.D.'s, five hold MSc degrees, one holds a DVM degree and numerous others hold degrees and designations such as BSc, CPA (CA), CPA (California) and MBA. To encourage a focus on achieving long-term performance, employees and members of the board of directors have the ability to acquire an ownership interest in the Company through Lorus' stock option and alternative compensation plans.

Our ability to develop commercial products and to establish and maintain our competitive position in light of technological developments will depend, in part, on our ability to attract and retain qualified personnel. There is a significant level of competition in the marketplace for such personnel. We believe that to date we have been successful in attracting and retaining the highly skilled personnel critical to our business. We have also chosen to outsource activities where necessary or where it is economically prudent to do so.

None of our employees are unionized, and we consider our relations with our employees to be good.

See "Risk Factors"

### **Properties**

Our head office, which occupies 20,500 square feet, is located at 2 Meridian Road, Toronto, Ontario. The leased premises include approximately 8,000 square feet of laboratory and research space. We believe that our existing facilities are adequate to meet our requirements for the near term. Our current lease expires on March 31, 2015. In addition to our Toronto lease we have entered into a lease agreement for office space in San Diego, California. This lease expires on December 31, 2014.

## **REGULATORY APPROVAL PROCESS**

The research, development, manufacture and marketing of pharmaceutical products are governed by various governmental authorities throughout the world to ensure efficacy and safety. In Canada, these activities are governed by the provisions of the *Food and Drugs Act* (Canada) and its regulations, the enforcement of which is ensured by the Therapeutic Products Directorate of the Health Products and Food Branch of Health Canada. In the United States, it is the Food and Drug Administration ("FDA") that has jurisdiction. Similar processes are conducted in other countries by similar regulatory bodies. Regulations in each jurisdiction require that licenses be obtained from regulatory agencies for drug manufacturing facilities and also mandate strict research and product testing standards in order to ensure quality in respect of the manufacturing of therapeutic products. Companies must establish that the production of their products comply with GMPs and the clinical development be conducted in accordance with good clinical practices in order to demonstrate the safety and effectiveness of the therapeutic drug candidate. While Lorus will pursue the approval of any product that it develops, success in acquiring regulatory approval for any such product is not assured. See "Risk Factors".

In order to market its pharmaceutical products in Canada and the United States, the product candidate must successfully satisfy the requirements of each of the following stages of the regulatory approval process and drug development:

**Preclinical Studies:** Preclinical studies involve extensive testing in laboratory animals to determine if a potential therapeutic product has utility in an in vivo disease model and has any adverse toxicological effects in animals. The conduct and results of these studies are reported to regulatory agencies in an IND application in the United States and a Clinical Trial Application ("CTA") in Canada, to gain approval to commence clinical trials of the product in human subjects or patients, depending on the indication for use.

**Phase I Clinical Trials:** Phase I clinical trials are designed to determine the pharmacokinetics, metabolism and pharmacologic actions of the drug in humans, the side effects associated with increasing doses and the maximum tolerated dose. These drug candidate studies, often short in duration, enroll only a small number of patients at each dose level.

**Phase II Clinical Trials:** Phase II studies are conducted to evaluate the safety of the drug in the intended patient population with the disease or condition under study and to determine the common short-term side effects and risks associated with the drug. Phase II studies are typically well controlled, closely monitored and conducted in a relatively small number of patients. These studies are usually designed to gain early evidence of the effectiveness of the drug candidate, along with its safety.

**Phase III Clinical Trials:** Phase III studies are expanded studies performed after preliminary evidence suggesting effectiveness of the drug is obtained. Phase III studies gather additional information about effectiveness and safety that is required to evaluate the overall benefit-risk profile of the drug candidate and to provide adequate basis for physician labeling. Phase III trials usually involve several hundred to several thousand patients.

Once these trials are completed, a company files a registration file named New Drug Submission in Canada and a New Drug Application in the United States. If such a registration file shows that the product was developed in accordance with the regulatory authorities' rules, regulations and guidelines and demonstrates a favorable risk/benefit analysis, then the regulatory authorities issue a notice of compliance (Canada) or an approval letter (US), which allows a company to market the product.

If and when marketing approval is granted by Health Canada or the FDA, the product is then approved for commercial sale in the respective jurisdiction. In addition to the approval of the drug itself, Health Canada and the FDA each require that the manufacturer of a therapeutic drug be in full compliance with the current GMPs in effect in Canada or the United States, respectively. A similar process for therapeutic drug approval is followed in most other countries with sophisticated regulatory bodies that have appropriate regulations and oversight.

## **RISK FACTORS**

Investing in our securities involves a high degree of risk. Before making an investment decision with respect to our common shares, you should carefully consider the following risk factors, in addition to the other information included or incorporated by reference into this annual information form, as well as our historical consolidated financial statements and related notes. Management has reviewed the operations of the Company in conjunction with the Board of Directors and identified the following risk factors which are monitored on a bi-annual basis and reviewed with the Board of Directors. The risks set out below are not the only risks we face. If any of the following risks occur, our business, financial condition, prospects or results of operations and cash flows would likely suffer. In that case, the trading price of our common shares could decline and you may lose all or part of the money you paid to buy our common shares.

### ***We are an early stage development company.***

We are at an early stage of development. In the past five years, none of our potential products has obtained regulatory approval for commercial use and sale in any country and as such, no significant revenues have resulted from product sales. Significant additional investment will be necessary to complete the development of any of our product candidates. Preclinical and clinical trial work must be completed before our potential products could be ready for use within the markets that we have identified. We may fail to develop any products, obtain regulatory approvals, enter clinical trials or commercialize any products. We do not know whether any of our potential product development efforts will prove to be effective, meet applicable regulatory standards, obtain the requisite regulatory approvals, be capable of being manufactured at a reasonable cost or be accepted in the marketplace. We also do not know whether sales, license fees or related royalties will allow us to recoup any investment we make in the commercialization of our products.

The product candidates we are currently developing are not expected to be commercially viable for at least the next several years and we may encounter unforeseen difficulties or delays in commercializing our product candidates. In addition, our potential products may not be effective or may cause undesirable side effects.

Our product candidates require significant funding to reach regulatory approval assuming positive clinical results. For example, our lead product candidate LOR-253, has completed a Phase I clinical trial in patients with solid tumors, and we have reported initial results. Additional funding or a partnership will be necessary to complete, if required, a Phase II or Phase III clinical trial. Such funding may be very difficult, or impossible to raise in the public or private markets or through partnerships. If funding or partnerships are not attainable, the development of these product candidates may be significantly delayed or stopped altogether. The announcement of a delay or discontinuation of development would likely have a negative impact on our share price.

***We need to raise additional capital.***

We have an ongoing need to raise additional capital. To obtain the necessary capital, we must rely on some or all of the following: additional share issues, debt issuances (including promissory notes), collaboration agreements or corporate partnerships and grants and tax credits to provide full or partial funding for our activities. Additional funding may not be available on terms that are acceptable to us or in amounts that will enable us to carry out our business plan.

Our need for capital may require us to:

- engage in equity financings that could result in significant dilution to existing investors;
- delay or reduce the scope of or eliminate one or more of our development programs;
- obtain funds through arrangements with collaborators or others that may require us to relinquish rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves; or
- license rights to technologies, product candidates or products on terms that are less favourable to us than might otherwise be available;
- considerably reduce operations; or
- cease our operations.

***We have a history of operating losses. We expect to incur net losses and we may never achieve or maintain profitability.***

We have not been profitable since our inception in 1986. Under IFRS, we reported net losses of \$10.6 million and \$5.6 million for the fiscal years ended May 31, 2014 and 2013, respectively, and as of May 31, 2014, we had an accumulated deficit of \$211 million.

We have not generated any significant revenue to date and it is possible that we will never have sufficient product sales revenue to achieve profitability. We expect to continue to incur losses for at least the next several years as we or our collaborators and licensees pursue clinical trials and research and development efforts. To become profitable, we, either alone or with our collaborators and licensees, must successfully develop, manufacture and market our current product candidate LOR-253 as well as continue to identify, develop, manufacture and market new product candidates. It is possible that we will never have significant product sales revenue or receive royalties on our licensed product candidates. If funding is insufficient at any time in the future, we may not be able to develop or commercialize our products, take advantage of business opportunities or respond to competitive pressures.

***We may be unable to obtain partnerships for our product candidates, which could curtail future development and negatively affect our share price. In addition, our partners might not satisfy their contractual responsibilities or devote sufficient resources to our partnership.***

Our strategy for the research, development and commercialization of our products requires entering into various arrangements with corporate collaborators, licensors, licensees and others, and our commercial success is dependent upon these outside parties performing their respective contractual responsibilities. The amount and timing of resources that such third parties will devote to these activities may not be within our control. These third parties may not perform their obligations as expected and our collaborators may not devote adequate resources to our programs. In addition, we could become involved in disputes with our collaborators, which could result in a delay or termination of the related development programs or result in litigation. We intend to seek additional collaborative arrangements to develop and commercialize some of our products. We may not be able to negotiate collaborative arrangements on favourable terms, or at all, in the future, and our current or future collaborative arrangements may not be successful.

If we cannot negotiate collaboration, licence or partnering agreements, we may never achieve profitability and we may not be able to continue to develop our product candidates. Phase II and Phase III clinical trials for LOR-253 would require significant amounts of funding and such funding may not be available to us.

***Clinical trials are long, expensive and uncertain processes and Health Canada or the United States Food and Drug Administration ("FDA") may ultimately not approve any of our product candidates. We may never develop any commercial drugs or other products that generate revenues.***

In the past five years none of our product candidates has received regulatory approval for commercial use and sale in North America. We cannot market a pharmaceutical product in any jurisdiction until it has completed thorough preclinical testing and clinical trials in addition to that jurisdiction's extensive regulatory approval process. Approval in one country does not assure approval in another country. In general, significant research and development and clinical studies are required to demonstrate the safety and effectiveness of our product candidates before we can submit any regulatory applications.

Clinical trials are long, expensive and uncertain processes. Clinical trials may not be commenced or completed on schedule and Health Canada or the FDA or any other regulatory body may not ultimately approve our product candidates for commercial sale. The clinical trials of any of our drug candidates could be unsuccessful, which would prevent us from advancing, commercializing or partnering the drug.

Even if the results of our preclinical studies or clinical trials are initially positive, it is possible that we will obtain different results in the later stages of drug development or that results seen in clinical trials will not continue with longer term treatment. Positive results in Phase I clinical trials may not be repeated in larger Phase II or Phase III clinical trials.

Our preclinical studies and clinical trials may not generate positive results that will allow us to move towards the commercial use and sale of our product candidates. Furthermore, negative preclinical or clinical trial results may cause our business, financial condition, or results of operations to be materially adversely affected. For example, as our lead product candidate LOR-253 has completed the Phase I testing in patients with solid tumors, for which we previously reported initial data, there is still a long development path ahead which will take many years to complete and like all of our potential drug candidates is prone to the risks of failure inherent in drug development.

Preparing, submitting and advancing applications for regulatory approval is complex, expensive and time intensive and entails significant uncertainty. A commitment of substantial resources to conduct time-consuming research, preclinical studies and clinical trials is required if we are to complete development of our products.

Later stage clinical trials of our products require that we identify and enroll a large number of patients with the illness under investigation. We may not be able to enroll a sufficient number of appropriate patients to complete our clinical trials in a timely manner, particularly in smaller indications and indications where this is significant competition for patients. If we experience difficulty in enrolling a sufficient number of patients to conduct our clinical trials, we may need to delay or terminate ongoing clinical trials and will not accomplish objectives material to our success. Delays in planned patient enrolment or lower than anticipated event rates in our current clinical trials or future clinical trials also may result in increased costs, program delays, or both.

In addition, unacceptable toxicities or adverse side effects may occur at any time in the course of preclinical studies or human clinical trials or, if any product candidates are successfully developed and approved for marketing, during commercial use of any approved products. The appearance of any unacceptable toxicities or adverse side effects could interrupt, limit, delay or abort the development of any of our product candidates or, if previously approved, necessitate their withdrawal from the market. Furthermore, disease resistance or other unforeseen factors may limit the effectiveness of our potential products.

Our failure to develop safe, commercially viable drugs would substantially impair our ability to generate revenues and sustain our operations and would materially harm our business and adversely affect our share price.

***We have agreed to indemnify our predecessor, Old Lorus, and its directors, officers and employees.***

In connection with the reorganization that we undertook in fiscal year 2008, we have agreed to indemnify our predecessor, Old Lorus, and its directors, officers and employees from and against all damages, losses, expenses (including fines and penalties), other third party costs and legal expenses, to which any of them may be subject arising out of any matter occurring:

- prior to, at or after the effective time of the arrangement transaction, and directly or indirectly relating to any of the assets of Old Lorus transferred to us pursuant to the arrangement transaction (including losses for income, sales, excise and other taxes arising in connection with the transfer of any such asset) or conduct of the business prior to the effective time of the arrangement;
- prior to, at or after the effective time as a result of any and all interests, rights, liabilities and other matters relating to the assets transferred by Old Lorus to us under the arrangement; and
- prior to or at the effective time and directly or indirectly relating to, with certain exceptions, any of the activities of Old Lorus or the arrangement.

This indemnification obligation could result in significant liability to us. To date no amount has been claimed on this indemnification obligation. Should a claim arise under this indemnification obligation it could result in significant liability to the Company which could have a negative impact on our liquidity, financial position, and ability to obtain future funding among other things.



***We may not achieve our projected development goals in the time frames we announce and expect.***

We set goals for, and make public statements regarding, the expected timing of the accomplishment of objectives material to our success, such as the commencement and completion of clinical trials, the partnership of our product candidates and our ability to secure the financing necessary to continue the development of our product candidates. The actual timing of these events can vary dramatically due to factors within and beyond our control, such as delays or failures in our clinical trials, the uncertainties inherent in the regulatory approval process, market conditions and interest by partners in our product candidates among other things. Our clinical trials may not be completed, and we may not make regulatory submissions or receive regulatory approvals as planned, or that we will secure partnerships for any of our product candidates. Any failure to achieve one or more of these milestones as planned would have a material adverse effect on our business, financial condition and results of operations.

***As a result of intense competition and technological change in the biotechnical and pharmaceutical industries, the marketplace may not accept our products or product candidates, and we may not be able to compete successfully against other companies in our industry and achieve profitability.***

Many of our competitors have:

- drug products that have already been approved or are in development, and operate large, well-funded research and development programs in the biotechnical and pharmaceutical fields;
- substantially greater financial, technical and management resources, stronger intellectual property positions and greater manufacturing, marketing and sales capabilities, areas in which we have limited or no experience; and
- significantly greater experience than we do in undertaking preclinical testing and clinical trials of new or improved pharmaceutical products and obtaining required regulatory approvals.

Consequently, our competitors may obtain Health Canada, FDA and other regulatory approvals for product candidates sooner and may be more successful in manufacturing and marketing their products than we or our collaborators are.

Our competitor's existing and future products, therapies and technological approaches will compete directly with the products we seek to develop. Current and prospective competing products may be more effective than our existing and future products insofar as they may provide greater therapeutic benefits for a specific problem or may offer easier delivery or comparable performance at a lower cost.

Any product candidate that we develop and that obtains regulatory approval must then compete for market acceptance and market share. Our products may not gain market acceptance among physicians, patients, healthcare payers, insurers, the medical community and other stakeholders. Further, any products we develop may become obsolete before we recover any expenses we incurred in connection with the development of these products. As a result, we may never achieve profitability.

***If we fail to attract and retain key employees, the development and commercialization of our products may be adversely affected.***

We depend on the principal members of our scientific and management staff. If we lose any of these persons, our ability to develop products and become profitable could suffer. The risk of being unable to retain key personnel may be increased by the fact that we have not executed long-term employment contracts with our employees, except for our senior executives. Our future success will also depend in large part on our ability to attract and retain other highly qualified scientific and management personnel. We face competition for personnel from other companies, academic institutions, government entities and other organizations.

***We may be unable to obtain patents to protect our technologies from other companies with competitive products, and patents of other companies could prevent us from manufacturing, developing or marketing our products.***

#### *Patent protection*

The patent positions of pharmaceutical and biotechnology companies are uncertain and involve complex legal and factual questions. The United States Patent and Trademark Office and many other patent offices in the world have not established a consistent policy regarding the breadth of claims that they will allow in biotechnology patents.

Allowable patentable subject matter and the scope of patent protection obtainable may differ between jurisdictions. If a patent office allows broad claims, the number and cost of patent interference proceedings in the United States, or analogous proceedings in other jurisdictions and the risk of infringement litigation may increase. If it allows narrow claims, the risk of infringement may decrease, but the value of our rights under our patents, licenses and patent applications may also decrease.

The scope of the claims in a patent application can be significantly modified during prosecution before the patent is issued. Consequently, we cannot know whether our pending applications will result in the issuance of patents or, if any patents are issued, whether they will provide us with significant proprietary protection or will be circumvented, invalidated or found to be unenforceable.

Publication of discoveries in scientific or patent literature often lags behind actual discoveries. Patent applications filed in the United States generally will be published 18 months after the filing date unless the applicant certifies that the invention will not be the subject of a foreign patent application. In many other jurisdictions, such as Canada, patent applications are published 18 months from the priority date. We may not be aware of such literature. Accordingly, we cannot be certain that the named inventors of our products and processes were the first to invent that product or process or that we were the first to pursue patent coverage for our inventions.

In addition, U.S. patent laws may change which could prevent or limit us from filing patent applications or patent claims in the United States to protect our products and/or technologies or limit the exclusivity periods that are available to patent holders for U.S. patents. For example, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law in 2011 and includes a number of significant changes to U.S. patent law. These include changes to transition from a "first-to-invent" system to a "first-to-file" system and to the way issued patents are challenged. These changes may favor larger and more established companies that have more resources to devote to patent application filing and prosecution. It is not clear what, if any, impact the Leahy-Smith Act will ultimately have on the cost of prosecuting our patent applications in the United States, our ability to obtain patents in the United States based on our discoveries and our ability to enforce or defend our U.S. issued patents.

#### *Enforcement of intellectual property rights*

Protection of the rights revealed in published patent applications can be complex, costly and uncertain. Our commercial success depends in part on our ability to maintain and enforce our proprietary rights. If third parties engage in activities that infringe our proprietary rights, our management's focus will be diverted and we may incur significant costs in asserting our rights. We may not be successful in asserting our proprietary rights, which could result in our patents being held invalid or a court holding that the third party is not infringing, either of which would harm our competitive position.

Others may design around our patented technology. We may have to participate in interference proceedings declared by the United States Patent and Trademark Office, European opposition proceedings, or other analogous proceedings in other parts of the world to determine priority of invention and the validity of patent rights granted or applied for, which could result in substantial cost and delay, even if the eventual outcome is favourable to us. Our pending patent applications, even if issued, may not be held valid or enforceable.

#### *Trade secrets*

We also rely on trade secrets, know-how and confidentiality provisions in our agreements with our collaborators, employees and consultants to protect our intellectual property. However, these and other parties may not comply with the terms of their agreements with us, and we might be unable to adequately enforce our rights or obtain adequate compensation for the damages caused by unauthorized disclosure or use of our trade secrets or know how. Our trade secrets or those of our collaborators also may be independently discovered by others.

***Our products and product candidates may infringe the intellectual property rights of others, or others may infringe on our intellectual property rights which could increase our costs.***

Our success also depends on avoiding infringement of the proprietary technologies of others. In particular, there may be certain issued patents and patent applications claiming subject matter which we or our collaborators may be required to license in order to research, develop or commercialize LOR-253, our lead product candidate. In addition, third parties may assert infringement or other intellectual property claims against us. An adverse outcome in these proceedings could subject us to significant liabilities to third-parties, require disputed rights to be licensed from third-parties or require us to cease or modify our use of the technology. If we are required to license third-party technology, a license under such patents and patent applications may not be available on acceptable terms or at all. Further, we may incur substantial costs defending ourselves in lawsuits against charges of patent infringement or other unlawful use of another's proprietary technology. We may also need to bring claims against others who we believe are infringing our rights in order to become or remain competitive and successful. Any such claims can be time consuming and expensive to pursue.

***If product liability, clinical trial liability or environmental liability claims are brought against us or we are unable to obtain or maintain product liability, clinical trial or environmental liability insurance, we may incur substantial liabilities that could reduce our financial resources.***

The clinical testing and commercial use of pharmaceutical products involves significant exposure to product liability, clinical trial liability, environmental liability and other risks that are inherent in the testing, manufacturing and marketing of our products. These liabilities, if realized, could have a material adverse effect on the Company's business, results of operations and financial condition.

We have obtained limited product liability insurance coverage for our clinical trials on humans; however, our insurance coverage may be insufficient to protect us against all product liability damages. Regardless of merit or eventual outcome, liability claims may result in decreased demand for a future product, injury to reputation, withdrawal of clinical trial volunteers, loss of revenue, costs of litigation, distraction of management and substantial monetary awards to plaintiffs. Additionally, if we are required to pay a product liability claim, we may not have sufficient financial resources to complete development or commercialization of any of our product candidates and our business and results of operations will be adversely affected. In general, insurance will not protect us against some of our own actions, such as negligence.

As the Company's development activities progress towards the commercialization of product candidates, our liability coverage may not be adequate, and the Company may not be able to obtain adequate product liability insurance coverage at a reasonable cost, if at all. Even if the Company obtains product liability insurance, its financial position may be materially adversely affected by a product liability claim. A product liability claim could also significantly harm the Company's reputation and delay market acceptance of its product candidates. Additionally, product recalls may be issued at the direction of the FDA, other government agencies or other companies having regulatory control for pharmaceutical sales. If a product recall occurs in the future, such a recall could adversely affect our business, financial condition or reputation.

***We have no manufacturing capabilities and face supply risks. We depend on third-parties, including a number of sole suppliers, for manufacturing and storage of our product candidates used in our clinical trials. Product introductions may be delayed or suspended if the manufacture of our products is interrupted or discontinued.***

Other than limited quantities for research purposes, we do not have manufacturing facilities to produce supplies of LOR-253 or any of our other product candidates to support clinical trials or commercial launch of these products, if they are approved. We are dependent on third parties for manufacturing and storage of our product candidates. If the supply of necessary components is interrupted, components from alternative suppliers may not be available in sufficient volumes or at acceptable quality levels within required timeframes, if at all, to meet the needs of the Company. An inability to contract for a sufficient supply of our product candidates on acceptable terms, or delays or difficulties in the manufacturing process or our relationships with our manufacturers, may lead to us not having sufficient product to conduct or complete our clinical trials or support preparations for the commercial launch of our product candidates, if approved. This may lead to substantial lost revenue opportunity and contract liability to third parties.

#### ***Reliance on Licensor(s) to Maintain Patent Rights***

The Company's commercial success depends, in part, on maintaining and defending patent rights related to products that the Company may market in the future. Since the Company may not fully control the patent prosecution of any licensed patent applications it is possible that the licensors will not devote the same resources or attention to the prosecution of the licensed patent applications as the Company would if it controlled the prosecution of the applications. The licensors may also not pursue and successfully prosecute, enforce or defend any potential patent infringement or invalidity claim, may fail to maintain their issued patents or prosecute or maintain their patent applications, or may pursue any litigation less aggressively than the Company would. Consequently, the resulting patent protection, if any, may not be as strong or comprehensive, which could have a material adverse effect on the Company.

#### ***Extensive Government Regulation***

Government regulation is a significant factor in the development, production and marketing of the Company's products. Research and development, testing, manufacture, marketing and sales of pharmaceutical products or related products are subject to extensive regulatory oversight, often in multiple jurisdictions, which may cause significant additional costs and/or delays in bringing products to market, and in turn, may cause significant losses to investors. The regulations applicable to the Company's product candidates may change. Even if granted, regulatory approvals may include significant limitations on the uses for which products can be marketed or may be conditioned on the conduct of post-marketing surveillance studies. Failure to comply with applicable regulatory requirements can, among other things, result in warning letters, the imposition of civil penalties or other monetary payments, delay in approving or refusal to approve a product candidate, suspension or withdrawal of regulatory approval, product recall or seizure, operating restrictions, interruptions of clinical trials or manufacturing, injunctions or criminal prosecution. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of the Company's product candidates.

Requirements for regulatory approval vary widely from country to country. Whether or not approved in Canada or the United States, regulatory authorities in other countries must approve a product prior to the commencement of marketing the product in those countries. The time required to obtain any such approval may be longer or shorter than in Canada or the United States. Approved drugs, as well as their manufacturers, are subject to continuing and ongoing review, and discovery of problems with these products or the failure to adhere to manufacturing or quality control requirements may result in regulatory restrictions being imposed.

## Risks Related to Our Common Shares

***Our share price has been and may continue to be volatile and an investment in our common shares could suffer a decline in value.***

You should consider an investment in our common shares as risky and invest only if you can withstand a significant loss and wide fluctuations in the market value of your investment. We receive only limited attention by securities analysts and frequently experience an imbalance between supply and demand for our common shares. The market price of our common shares has been highly volatile and is likely to continue to be volatile. This leads to a heightened risk of securities litigation pertaining to such volatility. Factors affecting our common share price include but are not limited to:

- our ability to raise additional capital;
- the progress of our clinical trials;
- our ability to obtain partners and collaborators to assist with the future development of our products;
- general market conditions;
- announcements of technological innovations or new product candidates by us, our collaborators or our competitors;
- published reports by securities analysts;
- developments in patent or other intellectual property rights;
- the cash and short term investments held by us and our ability to secure future financing;
- public concern as to the safety and efficacy of drugs that we and our competitors develop; and
- shareholder interest in our common shares.

***Future sales of our common shares by us or by our existing shareholders could cause our share price to fall.***

The issuance of common shares by us could result in significant dilution in the equity interest of existing shareholders and adversely affect the market price of our common shares. Sales by existing shareholders of a large number of our common shares in the public market and the issuance of shares issued in connection with strategic alliances, or the perception that such additional sales could occur, could cause the market price of our common shares to decline and have an undesirable impact on our ability to raise capital.

***We are susceptible to stress in the global economy and therefore, our business may be affected by the current and future global financial condition.***

If the increased level of volatility and market turmoil that have marked recent years continue, our operations, business, financial condition and the trading price of our common shares could be materially adversely affected. Furthermore, general economic conditions may have a great impact on us, including our ability to raise capital, our commercialization opportunities and our ability to establish and maintain arrangements with others for research, manufacturing, product development and sales.

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

Our common shares are listed for trading on the TSX. However, there can be no assurance that an active trading market in our common shares on the TSX will be sustained or that we will be able to maintain our listing.

## DIVIDENDS

Dividends on our common shares are declared at the discretion of our board of directors. To date, we have not paid any dividends and do not expect to do so in the foreseeable future.

## SHARE CAPITAL AND MARKET FOR SECURITIES

### Share Capital

We are authorized to issue an unlimited number of common shares. As of May 31, 2014, there were 124,657,327 common shares issued and outstanding. In addition, as of May 31, 2014, there were 9,883,946 common shares issuable upon the exercise of outstanding stock options and a total of 19,563,124 common shares issuable upon the exercise of common share purchase warrants. Of these warrants, 1,166,250 are priced at \$0.45 and expire in August 2016, 16,950,504 are priced at \$0.45 and expired in June 2014, 568,000 are priced at \$0.25 and expire in June 2015 and 878,370 are priced at \$0.55 and expire in December 2015. In addition the Company has issued \$600,000 in promissory notes which are outstanding and are convertible into 2,000,000 common shares. The holders of common shares are entitled to one vote per share at meetings of shareholders, to receive such dividends as declared by us and to receive our remaining property and assets upon our dissolution or winding up. Our common shares are not subject to any future call or assessment and there are no pre-emptive, conversion or redemption rights attached to such shares.

### Market for Securities

Our common shares are currently listed on the TSX under the symbol "LOR".

The following table sets out the price ranges and trading volumes of our common shares on the TSX for the periods indicated.

	High (\$)	Low (\$)	Volume (#)
<b>2014</b>			
May	0.57	0.43	8,602,872
April	0.59	0.48	11,561,372
March	0.77	0.48	7,918,615
February	0.88	0.48	10,606,906
January	0.70	0.49	12,050,223
<b>2013</b>			
December	0.65	0.52	6,101,021
November	1.04	0.50	13,184,589
October	0.55	0.23	2,035,176
September	0.34	0.18	678,201
August	0.21	0.18	65,278
July	0.23	0.17	492,365
June	0.24	0.20	208,554

### Principal Shareholders

To the knowledge of Lorus' directors and executive officers, no single person or entity beneficially owns, directly or indirectly, or exercises control or direction over more than 10% of the votes attached to all the outstanding common shares, other than Mr. Sheldon Inwentash who, according to publicly available information, holds, both personally and through Pinetree Capital Ltd., 14,555,000 common shares or approximately 10.44% of the issued and outstanding common shares, and Franklin Resources, Inc. who, according to publicly available information, holds 17,000,000 common shares or approximately 12.20% of the issued and outstanding common shares.

### DIRECTORS AND OFFICERS

The following table and notes thereto provide the name, province or state and country of residence, positions with the Company and term of office of each person who serves as a director or executive officer of Lorus as at the date hereof.

Each director has been elected or appointed to serve until the next annual meeting or until a successor is elected or appointed. We have an Audit Committee, Corporate Governance and Nominating Committee and a Compensation Committee. The members of each such committee are shown below. As at May 31, 2014, our directors and executive officers, as a group, beneficially owned, directly or indirectly, or exercised control over, approximately 316,387 common shares or approximately 0.25% of our outstanding common shares.

<u>Name and Province/State and Country of Residence</u>	<u>Position</u>	<u>Director or Officer Since</u>
<b>Directors:</b>		
Dr. Denis Burger <sup>(1)(2)</sup> Oregon, United States	Director	September 2007
Dr. Brad Thompson <sup>(3)</sup> Alberta, Canada	Director	June 2013
Dr. Brian Underdown <sup>(1)(2)</sup> Ontario, Canada	Director	December 2013
Dr. Mark Vincent <sup>(3)</sup> Ontario, Canada	Director	September 2007
Warren Whitehead <sup>(1)</sup> Ontario, Canada	Director	April 2011
Dr. Jim Wright <sup>(2)</sup> Ontario, Canada	Director	October 1999
Dr. William Rice California, USA	Chairman	October 2013
<b>Officers:</b>		
Dr. William Rice California, USA	President and Chief Executive Officer	October 2013
Gregory Chow California, USA	Senior Vice President and Chief Financial Officer	November 2013
Avanish Vellanki California, USA	Senior Vice President and Chief Business Officer	November 2013

(1) Member of Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Corporate Governance and Nominating Committee.

The principal occupation and employment of each of the foregoing persons for the past five years is set forth below:

*Dr. Denis Burger:* Dr. Burger currently is the Chairman of AMES Devices, a medical device company. Dr. Burger co-founded Trinity Biotech plc, based in Dublin, Ireland, in June 1992 and acted as Chairman from 1992 to 1995 and now serves on the board of directors of the Company. Dr. Burger was the past Chairman, Chief Executive Officer and a director of AVI Biopharma Inc., an Oregon based biotechnology company, from 1992 to March 2007. Dr. Burger is also a partner in Sovereign Ventures, a healthcare consulting and funding firm based in Portland, Oregon. Dr. Burger received his MSc and Ph.D. in Microbiology and Immunology from the University of Arizona. Dr. Burger also serves on the board of Biocurex Inc.

*Dr. William Rice:* Dr. Rice joined Lorus as Chairman and Chief Executive Officer in October 2013. Prior to joining Lorus, Dr. Rice served as the President, Chief Executive Officer and Chairman of the board of Cylene Pharmaceuticals, Inc., a private biotechnology company ("Cylene"). Prior to Cylene, Dr. Rice was the founder, President, Chief Executive Officer and Director of Achillion Pharmaceuticals, Inc. He also served as Senior Scientist and Head of the Drug Mechanism Laboratory at the National Cancer Institute-Frederick Cancer Research and Development Center, and served as a faculty member in the division of Pediatric Hematology and Oncology at Emory University School of Medicine. Dr. Rice received his Ph.D. from Emory University Department of Biochemistry. He also serves as the Chairman of the board of Cylene.

*Dr. Brad Thompson:* Dr. Thompson is an experienced biotechnology professional who has held the positions of Chairman of the Board and President and Chief Executive Officer of Oncolytics Biotech Inc. since April 1999. Prior to his role with Oncolytics Dr. Thompson was the Chief Executive Officer of Synsorb Biotech from 1994 to 1999. Dr. Thompson also currently is a board member of Immunovaccine Inc. He received his Ph.D. from the University of Western Ontario in the Department of Microbiology and Immunology.

*Dr. Brian Underdown:* Dr. Underdown is a Managing Director of Lumira Capital, Investment Management, one of Canada's leading venture capital firms with offices in Canada and the United States. Since joining Lumira and its preceding company, MDS Capital, in 1997, Dr. Underdown has focused on investments in North American therapeutics companies at all stages of development. With over 15 years of investment and operational experience in the biopharmaceutical sector, he has been a key player in the growth of over 10 life science companies in Canada and the U.S. Dr. Underdown also serves as a director of VistaGen Therapeutics Inc. and Argos Therapeutics Inc.

*Dr. Mark Vincent:* Dr. Mark Vincent is a Professor of Oncology at the University of Western Ontario and a staff medical oncologist at the London Regional Cancer Program, where he has been since 1990. Dr. Vincent is also the co-founder and Chief Executive Officer of Sarissa, Inc. since 2000.

*Dr. Jim Wright:* Dr. Wright is presently Chief Executive Officer of NuQuest Bio Inc., a position he has held since 2006. As of July 1, 2010, Dr. Wright accepted a position as an Adjunct Professor in the Department of Biochemistry and Biomedical sciences at McMaster University. Dr. Wright co-founded GeneSense Technologies Inc. in 1996, which merged with Lorus in October 1999, and previously served as Lorus' President and Chief Executive Officer from October 1999 to September 2006. Dr. Wright was Professor in the Faculties of Science and Medicine at the University of Manitoba and Professor in the Faculty of Medicine at the University of Toronto prior to 2005.

*Mr. Warren Whitehead:* Mr. Whitehead is a CPA (CMA) who has held senior financial management positions in several biotechnology and pharmaceutical companies. Currently he is the Chief Financial Officer of Amorfix Life Sciences Ltd. Prior to this, he served as Chief Financial Officer of ARIUS Research Inc., providing financial guidance and leadership during the acquisition of ARIUS by Roche in 2008. Prior to ARIUS, Mr. Whitehead was Chief Financial Officer at Labopharm Inc., where he completed a series of public equity financings and a listing on NASDAQ. He is currently the Chairman of the Board of Directors of PlantForm Corporation, a life sciences company that develops biosimilar antibody drugs for treatment of cancer and other critical illnesses.

*Gregory Chow:* Mr. Chow joined Lorus as Chief Financial Officer in December 2013. Previously, Mr. Chow served as Managing Director, Director of Private Placements at Wedbush Securities, where he led the private placement capital activities within the Life Sciences Investment Banking Group. Prior to joining Wedbush, he was a Director in the Private Placements / Equity Capital Markets Group at RBC Capital Markets, where he led life science private capital activities. Previously, he led the Private Capital Group at Wells Fargo Securities and was a Senior Auditor at BDO Seidman, LLP in their Century City, CA office. Mr. Chow is a Certified Public Accountant (inactive) in the State of California. Mr. Chow received his MBA in Finance from The Wharton School at the University of Pennsylvania, and his BA in Business Economics with an emphasis in Accounting from the University of California, Santa Barbara.



*Avanish Vellanki*: Mr. Vellanki became Lorus' Chief Business Officer in December 2013, having most recently served as Senior Vice President, Investment Banking at Wedbush Securities focusing on the biotechnology sector. Prior to Wedbush Securities, Mr. Vellanki held the position of Senior Director of Corporate Development at Proteolix, Inc. (acquired by Onyx Pharmaceuticals), a biotechnology company focused on the development of oncology therapeutics. Previously, Mr. Vellanki served as Vice President in the Global Healthcare Investment Banking team at Citigroup's Global Healthcare Investment Banking, where he focused on large cap global biopharma strategic and financial advisory. Mr. Vellanki began his career at Bear Stearns as an equity research analyst covering the small/mid-cap biotechnology sector, and held the title of Vice President as a publishing analyst. Mr. Vellanki holds a BA from Carleton College, an MBS in Biochemistry from the University of Minnesota and MBA from the Carlson School of Management at the University of Minnesota.

There are no family relationships among the persons named above and there are no arrangements or understanding with major shareholders, customers, suppliers or others pursuant to which any person was selected as a director or member of senior management.

## AUDIT COMMITTEE INFORMATION

### **Audit Committee**

The charter of our audit committee is attached as Schedule A to this annual information form. The current members of the Audit Committee are Brian Underdown, Denis Burger and Warren Whitehead. Mr. Warren Whitehead is the Chairman of the Audit Committee and has been appointed as the Financial Expert. Pursuant to Canadian securities laws, our board of directors has determined that Messrs. Underdown, Burger and Whitehead are financially literate as all have experience in reviewing and analysing the financial reports and ascertaining the financial position of a corporation. Mr. Burger, in his previous position as Chairman and Chief Executive Officer of AVI Biopharma, is educated and experienced in reading and analyzing financial statements. Mr. Burger has also served on the audit committee of three other publicly listed biotechnology companies. Mr. Underdown, in his position of Managing Director at Lumira Capital Investment Management, is educated and experienced in reading and analysing financial statements. Mr. Underdown also sits on the board of directors of several other publicly listed entities. Mr. Whitehead is a CPA (CMA) and has served as the Chief Financial Officer of Arius Research Inc. and Labopharm Inc. Additionally, we believe that Mr. Underdown, Mr. Whitehead and Mr. Burger qualify as "independent" as that term is defined in the relevant securities laws relating to the composition of the audit committee.

### **Independent Auditors**

#### *Auditor's Fees*

The total fees billed for professional services by KPMG LLP (our independent auditors) for the years ended May 31, 2014 and 2013 are as follows:

	<b>2014</b>	<b>2013</b>
Audit Fees	\$ 388,676	\$ 192,830
Audit related	\$ -	\$ -
Tax Fees	\$ -	\$ -*
Total	\$ 388,676	\$ 192,830

\*The classification of the 2013 numbers has been revised to reallocate \$17,530 in fees from 'All Other Fees' to 'Audit Fees'.

Audit fees consist of the fees paid with respect to the audit of our consolidated annual financial statements, quarterly reviews and 20F filing with the SEC and for any other professional services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements.

**Pre-Approval Policies and Procedures**

The audit committee of our board of directors has, pursuant to the audit committee charter, adopted specific responsibilities and duties regarding the provision of services by our external auditors, currently KPMG LLP. Our charter requires audit committee pre-approval of all permitted audit and audit-related services. Any non-audit services must be submitted to the audit committee for review and approval.

Subject to the charter, the audit committee may establish fee thresholds for a group of pre-approved services. The audit committee then recommends to the board of directors approval of the fees and other significant compensation to be paid to the independent auditors.

No services were provided by KPMG LLP under a *de minimus* exemption for our fiscal years ended May 31, 2014 and 2013.

**LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

We are not a party to, nor the subject of, any outstanding legal proceedings, nor are we aware of any contemplated proceedings.

**INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Other than as described herein, none of our directors, executive officers or to our knowledge, principal shareholders, or any associate or affiliate of the foregoing, has had any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year prior to the date of this annual information form that has materially affected or will materially affect us.

**TRANSFER AGENT AND REGISTRAR**

The transfer agent and registrar for our common shares is Computershare Investor Services Inc. at its principal office in the City of Toronto.

**MATERIAL CONTRACTS**

Other than the agreements described below and that have been filed on SEDAR, we have not, during our financial year ending May 31, 2014, entered into any material agreements other than contracts in the ordinary course of business.

1. Underwriting Agreement dated November 22, 2013 in connection with the December 2013 public offering.
2. Underwriting Agreement dated March 27, 2014 in connection with the April 2014 public offering.

**INTERESTS OF EXPERTS**

KPMG LLP, the Company's external auditor, has reported on the consolidated financial statements of the Company for each of the years in the three-year period ended May 31, 2014. KPMG LLP is independent of Lorus in accordance with the applicable Rules of Professional Conduct/Code of Ethics of the Institute of Chartered Accountants of Ontario.

## ADDITIONAL INFORMATION

Additional information relating to Lorus may be found on SEDAR at [www.sedar.com](http://www.sedar.com). Certain additional information, including directors' and officers' remuneration and indebtedness, principal holders of our securities, and securities authorized for issuance under our stock option plan, will be contained in the Company's management information circular which will be filed on SEDAR at [www.sedar.com](http://www.sedar.com) in respect of the Company's annual meeting of shareholders for the fiscal year ended May 31, 2014. Additional financial information is provided in our financial statements and management's discussion and analysis for the financial year ended May 31, 2014 (the "2014 Financial Statements"). Copies of:

- the 2014 Financial Statements and our most recent unaudited financial statements that have been filed, if any, for any period subsequent to the year ended May 31, 2014;
- this annual information form and any document or the pertinent pages of any document incorporated by reference in this annual information form; and
- any other documents that are incorporated by reference into a short form prospectus or preliminary short form prospectus otherwise not referred to therein when our securities are in the course of a distribution pursuant to a short form prospectus or a preliminary short form prospectus,

may be obtained upon request from our corporate secretary at our offices located at 2 Meridian Road, Toronto, Ontario, M9W 4Z7, Canada. If our securities are in the course of a distribution pursuant to a short form prospectus or a preliminary short form prospectus, copies of the foregoing documents are available free of charge to any securityholder of Lorus. At all other times, a reasonable fee may be charged if a person who is not a security holder of Lorus makes the request for copies.

## GLOSSARY

The following is a glossary of terms that are used in this annual information form:

apoptosis:	the process of programmed cell death. In the case of LOR-253 it is cell death of cancer cells.
cytokine:	a generic term for a non-antibody protein released by a cell population (e.g., activated macrophages) of the immune system on contact with chemical or biological stimuli
efficacy:	the ability of a drug to produce a desired result
epigenetically silencing:	suppressing gene expression via modification of gene expression rather than alteration of the genetic code itself
GMP or Good Manufacturing Practice:	practices and the systems required to be adapted in pharmaceutical manufacturing, quality control, quality system covering the manufacture and testing of pharmaceuticals or drugs including active pharmaceutical ingredients, diagnostics, foods, pharmaceutical products, and medical devices.
hematologic malignancies:	tumors of the blood
hematopoietic stem cells:	blood cells that give rise to all the other blood cells. They are located in the red bone marrow, which is contained in the core of most bones.
immune system:	the totality of organs and cells involved in the body's immunologic response to foreign antigens and malignant tissue
<i>in vitro</i> :	in the test tube; referring to chemical reactions, fermentation, etc., occurring therein e.g., in cell-free extracts
<i>in vivo</i> :	in the living body; referring to chemical processes occurring within cells, etc., as distinguished from those occurring in cell-free extracts ( <i>in vitro</i> )
leukemogenic:	induction or production of leukemia
malignant/ malignancy:	describes a tumor that is cancerous. Two important qualities of malignancies are the tendency to invade surrounding tissues and to break off and spread elsewhere (metastasis)
maximum tolerated dose (MTD):	refers to the highest dose of a pharmacological treatment that does not cause unacceptable side effects
MELK	maternal leucine zipper kinase (MELK) gene is a potential marker of certain cancer stem cells and is highly expressed in multiple human cancers
metabolism:	the overall biochemical reactions that take place in a living organism including the building up of complex molecules or breakdown of molecules to provide energy
metastasis:	the process by which tumor cells are spread to other parts of the body

nanomolar IC50 concentrations:	very low concentration of drug is required to kill 50% of cancer cells. IC50 is defined as the half maximal inhibitory concentration and is a measure of the effectiveness of a drug in killing cancer cells.
pharmacokinetics:	the action of drugs in the body over a period of time, including the process of absorption, distribution, localization in tissues, biotransformation and excretion
proliferation:	Cell growth
proteins:	large molecules composed of long chains of sub-units of amino acids
RECIST:	<b>Response Evaluation Criteria In Solid Tumors (RECIST)</b> is a set of published rules that define when cancer patients improve ("respond"), stay the same ("stabilize"), or worsen ("progression") during treatments.
THP1, HL-60 and Kasumi-1:	these three cell lines represent human cancer cells derived from AML patients and can be grown in suspension culture for laboratory research
toxicity:	a condition that results from exposure to a substance at levels causing deleterious side effects which may be harmful to an organism
tumor:	an abnormal swelling or lump in the body caused by the growth of new tissues which differ in structure from the part of the body in which they are growing. A tumor may be benign or malignant

## SCHEDULE A

### CHARTER OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS OF LORUS THERAPEUTICS INC. (the "Company")

#### I. PURPOSE

The Audit Committee is a committee of the board of directors of the Company (the "Board"). The primary function of the Audit Committee is to assist the Board in fulfilling its oversight responsibilities. The Audit Committee's primary duties and responsibilities are to:

1. Serve as an independent and objective party to oversee the integrity of the Company's financial reporting process, audits of the Company's financial statements and systems of internal controls regarding finance, accounting, and legal compliance;
2. Identify and monitor the management of the principal risks that could impact the financial reporting of the Company;
3. Monitor the independence and performance of the Company's independent auditors;
4. Provide an avenue of communication among the independent auditors, management, and the Board; and
5. Encourage continuous improvement of, and foster adherence to, the Company's policies, procedures and practices at all levels.

The Audit Committee has the authority to conduct any investigation appropriate to fulfilling its responsibilities, and it has direct access to the independent auditors as well as anyone in the Company. The Audit Committee has the ability to retain, at the Company's expense, special legal, accounting, or other consultants or experts it deems necessary in the performance of its duties. The Company shall also provide appropriate funding, as determined by the Audit Committee, for payment of compensation to any external auditor engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company, and ordinary administrative expenses of the Audit Committee that are necessary or appropriate in carrying out its duties.

#### II. COMPOSITION AND MEETINGS

Audit Committee members shall meet the requirements of the Canadian securities regulatory authorities, United States securities laws and applicable stock exchange requirements.

The Audit Committee shall be comprised of three or more directors as determined by the Board, each of whom shall be "independent" as defined by National Instrument 52-110-Audit Committees ("NI 52-110") and applicable stock exchange rules. All members of the Audit Committee shall have a basic understanding of finance and accounting and be able to read and understand fundamental financial statements, including a balance sheet, income statement and cash flows statement and at least one member of the Committee shall have accounting or related financial management expertise and be "financially literate" within the meaning of 52-110.

Audit Committee members shall be appointed by the Board. If an Audit Committee Chair is not designated or present, the members of the Audit Committee may designate a Chair by majority vote of the Audit Committee membership.

The Audit Committee shall meet at least four times annually, or more frequently as circumstances require. The Audit Committee Chair shall prepare and/or approve an agenda in advance of each meeting.

The Audit Committee may ask members of management or others to attend meetings and provide pertinent information as necessary. The Audit Committee should meet privately in executive session at least annually with management, the independent auditors, and as a committee to discuss any matters that the Audit Committee or each of these groups believes should be discussed. In addition, the Audit Committee should communicate with management and the external auditors at least quarterly to review the Company's financial statements.

### **III RESPONSIBILITIES AND DUTIES**

#### **A. Review Procedures**

The Audit Committee shall:

- 1) Maintain a Charter that sets out the Audit Committees mandate and responsibilities. Review and reassess the adequacy of this Charter at least annually.
- 2) Review and discuss with management and the external auditors the Company's financial statements, MD&A and annual and interim results press releases prior to filing or distribution. The Audit Committee must be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements (other than public disclosure of financial statements, MD&A and annual and interim results press releases), and must periodically assess the adequacy of those procedures. Consider the independent auditors' judgements about the quality and appropriateness, not just the acceptability, of the Company's accounting principles and financial disclosure practices, as applied in its financial reporting, particularly about the degree of aggressiveness or conservatism of its accounting principles and underlying estimates and whether those principles are common practices or minority practices.
- 3) Consider and approve, if appropriate, major changes to the Company's accounting principles and practices as suggested by the independent auditors or management and assure that the reasoning is described in determining the appropriateness of changes in accounting principles and disclosures.
- 4) In consultation with the management and the independent auditors, consider the integrity of the Company's financial reporting processes and controls. Discuss significant financial risk exposures and the steps management has taken to monitor, control, and report such exposures. Review significant findings prepared by the independent auditors together with management's responses.
- 5) Oversee the work of the independent auditors including the review of any disagreements among management and the independent auditors in connection with financial statements, and overseeing the resolution of any such disagreements.
- 6) Annually review policies and procedures as well as audit results associated with directors' and officers expense accounts and perquisites. Annually review a summary of director and officers' related party transactions and potential conflicts of interest.
- 7) Annually conduct self-assessment of Audit Committee performance including a review and discussion of the Audit Committee roles and responsibilities, seeking input from senior management, the full Board and others if needed.

## **B. Independent Auditors**

- 1) The independent auditors are accountable to the shareholders, Audit Committee and the Board and shall report directly to the Audit Committee. The Audit Committee shall review the independence and performance of the auditors and annually recommend to the Board:
  - 1) The external auditor to be nominated for the purpose of preparing or issuing an auditor's report and performing other audit, review and attest services for the Company as required;
  - 2) The compensation of such external auditor; and
  - 3) To approve any discharge of the external auditor when circumstances warrant.
- 2) The Audit Committee shall pre-approve all audit fees and terms and all permitted non-audit services (including the fees and terms thereof) to be provided by the external auditor, and consider whether these services are compatible with the auditors' independence. Any member of the Audit Committee may approve additional proposed non-audit services that arise between Audit Committee meetings provided that the decision to pre-approve the services is presented for approval at the next scheduled Audit Committee meeting. The approval of all non-audit services will be evidenced by the completion and approval of the Non-Audit Services Request Form.
- 3) On an annual basis, the Audit Committee should review and discuss with the external auditors all relationships they have with the Company that could impair the auditors' independence. In particular, the Audit Committee is responsible for ensuring its receipt from the external auditors of a formal written statement delineating all relationships between the external auditors and the Company, consistent with applicable regulations, actively engaging in a dialogue with the external auditors with respect to any disclosed relationships or services that may impact the objectivity and independence of the external auditors, and taking, or recommending that the full Board take, appropriate action to oversee the independence of the outside auditors.
- 4) The Audit Committee shall review the external auditors' audit plan – discuss scope, staffing, locations, reliance upon management and general audit approach.
- 5) The Audit Committee shall consider the external auditors' judgments about the quality and appropriateness of the Company's accounting principles as applied in its financial reporting.
- 6) The Audit Committee shall prior to releasing the year-end results, discuss the results of the audit with the external auditors. Discuss with management and the external auditors matters required to be communicated to audit committees in accordance with the standards established by the Canadian Institute of Chartered Accountants.
- 7) The Audit Committee shall review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former independent auditors of the Company.
- 8) The Audit Committee shall review and discuss quarterly reports from the external auditors on:
  - i. All critical accounting policies and practices to be used;
  - ii. All alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the external auditor; and
  - iii. Other material written communications between the external auditor and management, such as any management letter or schedule of unadjusted differences.



**C. Ethical and Legal Compliance**

The Audit Committee shall:

- 1) On at least an annual basis, review with the Company's counsel, any legal matters that could have a significant impact on the organization's financial statements, the Company's compliance with applicable laws and regulations, and inquiries received from regulators or governmental agencies.
- 2) Perform any other activities consistent with this Charter, the Company's by-laws, and governing law, as the Audit Committee or the Board deems necessary or appropriate.

**D. Whistle Blowing**

The Audit Committee shall put in place procedures for:

- 1) The receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and
- 2) The confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

**E. Other Audit Committee Responsibilities**

The Audit Committee shall:

- 1) Create an agenda for the ensuing year.
- 2) Describe in the Company's annual information form the Audit Committee's composition and responsibilities and how they were discharged in accordance with the requirements of MI 52-110.
- 3) Submit the minutes of all meetings of the Audit Committee to the Board.
- 4) Provide any other disclosure required to be included with respect to the Audit Committee or the Company's securities law filings.

**FORM 52-109F1**  
**CERTIFICATION OF ANNUAL FILINGS– FULL CERTIFICATE**

I, William G. Rice, Chairman, President and Chief Executive Officer of Lorus Therapeutics Inc. certify the following:

1. **Review:** I have reviewed the AIF, if any, annual financial statements and annual MD&A including, for greater certainty, all documents and information that are incorporated by reference in the AIF (together, the “annual filings”) of Lorus Therapeutics Inc. (the “issuer”) for the financial year ended May 31, 2014.
2. **No misrepresentations:** Based on my knowledge, having exercised reasonable diligence, the annual 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, for the period covered by the annual filings.
3. **Fair presentation:** Based on my knowledge, having exercised reasonable diligence, the annual financial statements together with the other financial information included in the annual 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 annual filings.
4. **Responsibility:** The issuer’s other certifying officer 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 and I have, as at the financial year end
  - (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 annual 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 and I used to design the issuer’s ICFR is Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.
- 5.2 **ICFR — material weakness relating to design:** N/A
- 5.3 **Limitation on scope of design:** N/A

6. **Evaluation:** The issuer's other certifying officer and I have
- A. evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's DC&P at the financial year end and the issuer has disclosed in its annual MD&A our conclusions about the effectiveness of DC&P at the financial year end based on that evaluation; and
  - B. evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's ICFR at the financial year end and the issuer has disclosed in its annual MD&A
    - I. our conclusions about the effectiveness of ICFR at the financial year end based on that evaluation; and
    - II. N/A
7. **Reporting changes in ICFR:** The issuer has disclosed in its annual MD&A any change in the issuer's ICFR that occurred during the period beginning on March 1, 2014 and ended on May 31, 2014 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.
8. **Reporting to the issuer's auditors and board of directors or audit committee:** The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of ICFR, to the issuer's auditors, and the board of directors or the audit committee of the board of directors any fraud that involves management or other employees who have a significant role in the issuer's ICFR.

Date: July 15, 2014

*/s/ William G. Rice*

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William G. Rice  
Chairman, President and Chief Executive  
Officer

**FORM 52-109F1**  
**CERTIFICATION OF ANNUAL FILINGS— FULL CERTIFICATE**

I, Gregory K. Chow, Senior Vice President and Chief Financial Officer of Lorus Therapeutics Inc. certify the following:

1. **Review:** I have reviewed the AIF, if any, annual financial statements and annual MD&A including, for greater certainty, all documents and information that are incorporated by reference in the AIF (together, the “annual filings”) of Lorus Therapeutics Inc. (the “issuer”) for the financial year ended May 31, 2014.
2. **No misrepresentations:** Based on my knowledge, having exercised reasonable diligence, the annual 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, for the period covered by the annual filings.
3. **Fair presentation:** Based on my knowledge, having exercised reasonable diligence, the annual financial statements together with the other financial information included in the annual 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 annual filings.
4. **Responsibility:** The issuer’s other certifying officer 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 and I have, as at the financial year end
  - (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 annual 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 and I used to design the issuer’s ICFR is Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.
- 5.2 **ICFR — material weakness relating to design:** N/A
- 5.3 **Limitation on scope of design:** N/A

6. **Evaluation:** The issuer's other certifying officer and I have
- A. evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's DC&P at the financial year end and the issuer has disclosed in its annual MD&A our conclusions about the effectiveness of DC&P at the financial year end based on that evaluation; and
  - B. evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's ICFR at the financial year end and the issuer has disclosed in its annual MD&A
    - I. our conclusions about the effectiveness of ICFR at the financial year end based on that evaluation; and
    - II. N/A
7. **Reporting changes in ICFR:** The issuer has disclosed in its annual MD&A any change in the issuer's ICFR that occurred during the period beginning on March 1, 2014 and ended on May 31, 2014 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.
8. **Reporting to the issuer's auditors and board of directors or audit committee:** The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of ICFR, to the issuer's auditors, and the board of directors or the audit committee of the board of directors any fraud that involves management or other employees who have a significant role in the issuer's ICFR.

Date: July 15, 2014

/s/ Gregory K. Chow

Gregory K. Chow  
Senior Vice President and Chief Financial  
Officer