UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

(Mark One)

☐ Registration statement pursuant to Section 12(b) or 12(g) of the Securities Exchange Act of 1934.

Or

☒ Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.
For the fiscal year ended May 31, 2012.

Or

☐ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. For the transition period from _____ to _____ .

Or

☐ Shell company report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.
Date of event requiring this shell company report _____.

Commission file number 001-32001

LORUS THERAPEUTICS INC.

(Exact Name of Registrant as Specified in Its Charter)

Canada
(Jurisdiction of Incorporation or Organization)

2 Meridian Road
Toronto, Ontario
M9W 4Z7
Canada
(Address of Principal Executive Offices)

Elizabeth Williams
Director of Finance
2 Meridian Road
Toronto, Ontario M9W 4Z7
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Telephone: (416) 798-1200
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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange On Which Registered

Securities registered or to be registered pursuant to Section 12(g) of the Act: **Common Shares**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

Common Shares, without par value, at May 31, 2012: 21,228,081

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

If this is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes o No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☐ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer o Non-accelerated filer ☒

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing.

U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board ☒ Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes o No ☒

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GENERAL

On July 10, 2007 (the "**Arrangement Date**"), Lorus Therapeutics Inc. completed a plan of arrangement and corporate reorganization with, among others, 4325231 Canada Inc. (now Global Summit Real Estate Inc.), formerly Lorus Therapeutics Inc. ("**Old Lorus**"), 6707157 Canada Inc. and Pinnacle International Lands, Inc. (the "**Arrangement**"). As a result of the plan of arrangement and reorganization, among other things, each common share of Old Lorus was exchanged for one of our common shares and the assets (excluding certain future tax assets and related valuation allowance) and liabilities of Old Lorus (including all of the shares of its subsidiaries) were transferred, directly or indirectly, to our corporation and/or our subsidiaries. We continued the business of Old Lorus after the Arrangement Date with the same officers and employees and continued to be governed by the same directors as Old Lorus prior to the Arrangement Date. In this Annual Report on Form 20-F, all references to "**Lorus**", the "**Corporation**", the "**Company**", "**we**", "**our**", "**us**" and similar expressions, unless otherwise stated, are references to Old Lorus prior to the Arrangement Date and Lorus after the Arrangement Date. References to this "**Form 20-F**" and this "**Annual Report**" mean references to this Annual Report on Form 20-F for the fiscal year ended May 31, 2012.

We use the Canadian dollar as our reporting currency. All references in this Annual Report to "dollars" or "$" are expressed in Canadian dollars, unless otherwise indicated. See also "Item 3. Key Information" for more detailed currency and conversion information. Our Consolidated Financial Statements, which form part of this Annual Report, are presented in Canadian dollars and are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"), which differ in certain respects from accounting principles generally accepted in the United States ("**U.S. GAAP**").

FORWARD-LOOKING STATEMENTS

This Annual Report contains 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 required 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 pre-clinical programs;*
- *our expectations regarding the progress and the successful and timely completion of the various stages of our drug discovery, pre-clinical and clinical studies and the regulatory approval process;*
- *our plans, objectives, expectations and intentions;*
- *annual sales potential of our clinical stage drugs; and*
- *other statements including words such as "anticipate", "contemplate", "continue", "believe", "plan", "estimate", "expect", "intend", "will", "should", "may", and other similar expressions.*

Such 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 lack of product revenues and history of operating losses;*
- *our ability to obtain the substantial capital required to fund research and operations;*
- *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 Old Lorus and its directors, officers and employees in respect of the arrangement;*
- *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;*
- *our business is subject to potential product liability and other claims;*
- *our ability to maintain adequate insurance at acceptable costs;*
- *further equity financing may substantially dilute the interests of our shareholders;*
- *changing market conditions; and*
- *other risks detailed from time-to-time in our ongoing 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".*

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 Report 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.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected Financial Data

The following tables present our selected consolidated financial data. You should read these tables in conjunction with our audited Consolidated Financial Statements and accompanying notes included in Item 18 of this Annual Report and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 5 of this Annual Report.

The selected consolidated financial information set forth below for each of the two years ended May 31, 2012 and 2011, has been derived from the Company's audited consolidated financial statements as at and for the financial years ended May 31, 2012 and 2011 filed as part of this Form 20-F under Item 18. These consolidated financial statements have been prepared in accordance with IFRS issued by the International Accounting Standards Board, which differ in certain respects from the principles the Company would have followed had its consolidated financial statements been prepared in accordance with U.S. GAAP. The selected consolidated financial information should be read in conjunction with the discussion in Item 5 of this Form 20-F and the consolidated financial statements and related notes thereto.

The following table presents a summary of our consolidated statement of operations derived from our audited Consolidated Financial Statements for the fiscal years ended May 31, 2012 and 2011.

Consolidated statements of operations data[1] [2]

(In thousands, except per share data)

	May 31, 2012	May 31, 2011
In accordance with IFRS		
Revenue	**$ —**	$ —
Research and development	$ 2,170	$ 2,518
General and administrative	$ 2,430	$ 2,420
Operating expenses	**$ 4,600**	$ 4,938
Finance expense	$ 20	$ 71
Finance income	$ (6)	(14)
Net loss	**$ (4,614)**	$ (4,995)
Basic and diluted loss per common share	$ (0.23)	$ (0.38)
Weighted average number of common shares outstanding	20,260	13,157

The selected consolidated financial information set forth in the first table below for each of the three years ended May 31, 2010, 2009 and 2008, has been derived from the Company's audited consolidated financial statements as at and for the financial years ended May 31, 2010, 2009 and 2008. These consolidated financial statements were prepared in accordance with generally accepted accounting principles in Canada ("Canadian GAAP"), which differ in certain respects from the principles the Company would have followed had its consolidated financial statements been prepared in accordance with United States GAAP.

The selected consolidated financial information in the IFRS chart above should not be compared to the information in the Canadian GAAP chart below as the information was prepared using different financial reporting standards:

(In thousands, except per share data)

	May 31, 2010	May 31, 2009	May 31, 2008
In accordance with Canadian GAAP			
Revenue	$ 131	$ 184	$ 43
Research and development [a]	$ 2,517	$ 3,757	$ 6,260
General and administrative [a]	$ 2,964	$ 2,958	$ 3,715
Loss from operations	$ (5,725)	$ (9,310)	$ (12,633)
Net earnings (loss)	$ 5,331	$ (8,860)	$ (6,334)
Basic and diluted earnings (loss) per common share	$ 0.57	$ (1.08)	$ (0.87)
Weighted average number of common shares outstanding	9,364	8,236	7,169
In accordance with U.S. GAAP			
Net earnings (loss)	$ 5,705	$ (7,735)	$ (5,526)
Basic and diluted earnings (loss) per share	$ 0.61	$ (0.94)	$ (0.77)

(a) Amounts in fiscal 2008 have been reclassified to conform to the financial statement presentation adopted in fiscal 2009.

The following table presents a summary of our consolidated balance sheet as at May 31, 2012 and 2011 in IFRS and May 31, 2010, 2009 and 2008 under Canadian GAAP.

Consolidated balance sheet data[1] [2]

(In thousands, except per share data)

	As at May 31, 2012	2011
In accordance with IFRS		
Cash and cash equivalents	**$ 320**	$ **911**
Marketable securities and other investments	**$—**	$—
Total assets	**$ 668**	$ **1,398**
Total debt	**$ 2,696**	$ **1,159**
Total shareholders' equity (deficit)	**$ (2,028)**	$ **239**
Number of common shares outstanding	**21,228**	**15,685**
Dividends paid on common shares	**—**	**—**

(In thousands, except per share data)	As at May 31,		
	2010	**2009**	**2008**
In accordance with Canadian GAAP			
Cash and cash equivalents	$ 667	$ 5,374	$ 2,652
Marketable securities and other investments	$ 247	$ 490	$ 6,784
Total assets	$ 2,303	$ 7,527	$ 11,607
Total debt	$ 2,845	$ 15,878	$ 15,459
Total shareholders' equity (deficit)	$ (542)	$ (8,351)	$ (3,852)
Number of common shares outstanding	9,933	8,560	7,255
Dividends paid on common shares	-	-	-
In accordance with U.S. GAAP			
Total assets	$ 2,303	$ 7,592	$ 11,911
Total debt	$ 2,845	$ 16,322	$ 17,314
Total shareholders' equity (deficit)	$ (542)	$ (8,729)	$ (5,403)

Footnotes to the prior tables:

(1) On July 10, 2007, the Company completed a plan of arrangement and corporate reorganization with Old Lorus, 6707157 Canada Inc. and Pinnacle International Lands Inc. As a result of the plan of arrangement and reorganization, among other things, each common share of Old Lorus was exchanged for one common share of the Company and the assets (excluding certain future tax assets and related valuation allowance) and liabilities of Old Lorus were transferred to the Company and/or its subsidiaries. The Company 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. Therefore, the Company's operations have been accounted for on a continuity of interest basis and accordingly, the consolidated financial statement information above reflects that of the Company as if it had always carried on the business formerly carried on by Old Lorus.

(2) At our annual and special meeting of shareholders held on November 30, 2009, our shareholders approved a special resolution permitting our board of directors, in its sole discretion, to file an amendment to our articles of incorporation to consolidate our issued and outstanding common shares. On May 12, 2010, our board approved the share consolidation on the basis of one post-consolidation common share for every 30 pre-consolidation common shares. The record date and effective date for the share consolidation was May 25, 2010. Our common shares began trading on the Toronto Stock Exchange (the "**TSX**") on a post-consolidation basis on May 31, 2010. The share consolidation resulted in an adjustment to the exercise price and number of common shares issuable upon exercise of outstanding stock options and warrants. In this Annual Report, all references to number of shares, stock options and warrants in the current and past periods have been adjusted to reflect the impact of the consolidation unless noted otherwise.

Changes in accounting policies:

As result of the Accounting Standards Board of Canada's decision to require the adoption of IFRS for publicly accountable entities for financial reporting periods beginning on or after January 1, 2011, the Company adopted IFRS for its first quarterly filing for the quarter ended August 31, 2011 and consequently for its audited financial statements for the year ended May 31, 2012. These are the first audited annual financial statements of the Company under IFRS. The Company previously applied the available standards under Canadian GAAP that were issued by the Accounting Standards Board of Canada. The effects of the conversion from Canadian GAAP to IFRS are identified in Note 16 "Transition To IFRS" of our consolidated financial statements for year ended May 31, 2012, included in as Item 18.

The significant differences between the line items under Canadian GAAP and those as determined under U.S. GAAP arise primarily from:

Fiscal 2008 to 2010

The following table reconciles the earnings (loss) per IFRS to the earnings (loss) per U.S. GAAP for the fiscal years ended May 31, 2010, 2009 and 2008:

(In thousands, except per share data)	Years Ended May 31,		
	2010	**2009**	**2008**
Net earnings (loss) per Canadian GAAP	$ 5,331	$ (8,860)	$ (6,334)
Gain on repurchase of convertible debenturesand transfer of assets (i)	328	-	-
Accretion of convertible debentures (i)	54	1,222	903
Amortization and write off of debt issue costs (i)	(4)	(48)	(40)
Stock compensation expense (gain) (ii)	4	(39)	(47)
Short-term investments (iii)	(8)	(10)	(7)
Earnings (loss) per U.S. GAAP	5,705	(7,735)	(5,526)
Other comprehensive gain (loss) (iii)	8	10	(20)
Earnings (loss) and comprehensive gain (loss) per U.S. GAAP	5,713	(7,725)	(5,546)
Basic and diluted earnings (loss) per common share per U.S. GAAP	$ 0.61	$ (0.94)	$ (0.77)

Under U.S. GAAP, the number of weighted average common shares outstanding for basic and diluted loss per share is the same as under Canadian GAAP.

(i) Convertible debentures

On October 6, 2004 the Company entered into a Subscription Agreement with The Erin Mills Investment Corporation ("TEMIC") to issue an aggregate of $15 million of secured convertible debentures issuable in three tranches of $5.0 million each, in each of, October 2004, January 2005 and April 2005. The convertible debentures were due on October 6, 2009.

On June 22, 2009, the Company reached a settlement with TEMIC with respect to the purchase and settlement of the convertible debentures. Under the agreement, Lorus purchased all of the convertible debentures from TEMIC for consideration that included a cash payment of $3.3 million, the assignment of the rights under the license agreement with ZOR Pharmaceuticals, LLC ("**ZOR**"), certain intellectual property associated with Virulizin® and all of Lorus' shares in its wholly owned subsidiary, Pharma Immune Inc., which held an equity interest in ZOR. As a result of the transaction, the Company recognized a gain on the repurchase of the debentures of $11.0 million reflecting the difference between the fair value of the debentures at the repurchase date, net of transaction costs of approximately $221 thousand, and the cash payment amount of $3.3 million. The gain on repurchase of the debentures did not result in income taxes payable as the Company has sufficient capital loss and non-capital loss carryforwards to shelter these gains. As the carrying value of the convertible debentures was different under U.S. GAAP, as explained below, the Company recognized an additional gain of $328 thousand on the repurchase of the convertible debentures and transfer of assets including the write-down of the deferred financing charges compared to under Canadian GAAP in the year ended May 31, 2010.

Under Canadian GAAP, the conversion option embedded in the convertible debentures is presented separately as a component of shareholders' equity. Under U.S. GAAP, the embedded conversion option is not subject to bifurcation and is thus presented as a liability along with the balance of the convertible debentures. Measurement differences from the accretion of the value attributed to the conversion option on the convertible debentures and amortization of debt issue costs are further explained in the Supplementary Information entitled "Reconciliation of Canadian and United States Generally Accepted Accounting Principles" included in Item 18 of this Annual Report.

(ii) Stock options

Effective June 1, 2006, the Company adopted the fair value-based method of accounting for stock options granted to employees and directors as required by FASB Statement of Financial Accounting Standards No. 123R, Share-Based Payment ("**SFAS 123R**"), in accordance with the modified prospective method. Accordingly the Company has applied the fair value-based method to all employee stock options granted after June 1, 2006. Additionally, compensation costs for awards granted in prior periods for which the requisite service period has not been rendered as of June 1, 2006 will be recognized in the consolidated statement of operations and deficit as the requisite service is rendered.

During fiscal 2007, the Company recorded stock compensation expense of $503 thousand in accordance with Canadian GAAP in the consolidated statement of operations, representing the amortization applicable to the current year at the estimated fair value of options granted since June 1, 2002, and an offsetting adjustment to stock options of $503 thousand in the consolidated balance sheets. Under U.S. GAAP, the Company recognized $697 thousand in expense during the same period as a result of adopting SFAS 123R.

The primary reason for the difference between U.S. GAAP and Canadian GAAP relating to fiscal years 2008, 2009 and 2010 is due to estimation of forfeitures in the determination of the stock-based compensation expense under U.S. GAAP and accounting for forfeitures as they occur under Canadian GAAP.

(iii) Financial instruments

Effective June 1, 2007, the Company adopted the recommendations of The Canadian Institute of Chartered Accountants' Handbook Section 3855, Financial Instruments - Recognition and Measurement, retroactively without restatement of prior periods. This section provides standards for recognition and measurement, of financial assets, financial liabilities and non-financial derivatives.

As part of the adoption of the new standards on June 1, 2007, the Company designated certain short-term investments consisting of corporate instruments as "held-for-trading". This change in accounting policy for Canadian GAAP resulted in a decrease in the carrying amount of these investments of $27 thousand and an increase in the fiscal 2008 opening deficit accumulated during the development stage of $27 thousand. Further, the Company recognized a net unrealized gain in the consolidated statements of operations for the fiscal year ended May 31, 2010 of $8 thousand (2009 - $10 thousand, 2008 - $7 thousand).

Under U.S. GAAP, the Company previously accounted for these investments as "held-to-maturity" in accordance with SFAS 115, now Accounting Standards (ASC) 320, Investments in Debt and Equity Securities. Because the Company did not have the ability or intent to hold these investments until their stated maturity date, the Company made a reassessment of the appropriateness of the previous classification and reallocated these investments as "available-for-sale" as of May 31, 2008, in accordance with ASC 320. Consequently, an unrealized holding gain in the amount of $8 thousand for the year ended May 31, 2010 (2009 - $10 thousand gain, 2008 - loss of $20 thousand) was recorded in other comprehensive income.

We publish our Consolidated Financial Statements in Canadian ("**CDN**") dollars. In this Annual Report, except where otherwise indicated, all amounts are stated in CDN dollars.

The following table sets out the exchange rates of CDN$ for U.S$1.00 for the following periods as taken from the Bank of Canada's website:

Period	Average Close	High	Low
August , 2012	1.0073	$ 1.0160	$ 0.9916
July, 2012	0.9866	$ 0.9992	$ 0.9755
June, 2012	0.9732	$ 0.9837	$ 0.9576
May, 2012	0.9898	$ 1.0173	$ 0.9647
April, 2012	1.0074	$ 1.0204	$ 0.9950
March, 2012	1.0065	$ 1.0161	$ 0.9965
Fiscal Year Ended May 31, 2012	1.0005	$ 1.0204	$ 0.9576
Fiscal Year Ended May 31, 2011	1.0066	1.0660	0.9486
Fiscal Year Ended May 31, 2010	1.0635	1.1676	0.9988
Fiscal Year Ended May 31, 2009	1.1567	1.2991	1.0012
Fiscal Year Ended May 31, 2008	1.0140	1.0750	0.9170

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. 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 in this Annual Report. Additional risks not currently known by us or that we consider immaterial at the present time may also impair our business, financial condition, prospects or results of operations. If any of the following risks occur, our business, financial condition, prospects or results of operations would likely be affected. 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. The risks set out below are not the only we currently face; other risks may arise in the future.

RISKS RELATED TO OUR BUSINESS

We might not be able to continue as a going concern.

We have forecasted that our level of cash and cash equivalents and short-term investments including the proceeds from the Private Placement completed in June 2012 will be sufficient to execute our current planned expenditures for the next 9-12 months without further investment. We intend to continue to pursue additional funding and partnership opportunities to execute our planned expenditures in the future, but there can be no assurance that sufficient capital will be available to enable us to meet these continuing expenditures, or if the capital is available, that it will be available on terms acceptable to us. If we are unable to obtain sufficient financing on acceptable terms in order to meet our future operational needs, there is substantial doubt as to whether we will be able to continue as a going concern and realize our assets and pay our liabilities as they fall due, in which case investors may lose their investment.

We are an early stage development company.

We are at an early stage of development. Since our incorporation, none of our products has obtained regulatory approval for commercial use and sale in any country, except for Virulizin in very limited circumstances in Mexico. As such, significant revenues have not resulted from product sales. Significant additional investment will be necessary to complete the development of any of our product candidates. Pre-clinical and clinical trial work must be completed before our 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 several years and we may encounter unforeseen difficulties or delays in commercializing our product candidates. In addition, our products 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 is currently in a Phase I clinical trial. Should this trial be successful significant additional funding or a partnership would be necessary to complete the necessary Phase II and Phase III clinical trials. Such funding will be very difficult, or impossible to raise in the public markets or through partnerships. If such funding or partnerships are not attainable, the development of these product candidates maybe significantly delayed or stopped altogether. The announcement of such delay or discontinuation of development may 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. We cannot assure you that additional funding will 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 International Financial Reporting Standards, we reported net losses of $4.6 million, and $5.0 million for the years ended May 31, 2012 and 2011, respectively, and as of May 31, 2012, we had an accumulated deficit of $194 million.

We have not generated any significant revenue from product sales 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 candidates LOR-253 and IL17E 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 significant 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 one or more of 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, licensers, 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. We cannot assure you that such parties will perform their obligations as expected. We also cannot assure you that our collaborators will 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, or assure you that our current or future collaborative arrangements will be successful.

If we cannot negotiate collaboration, licence or partnering agreements, we may never achieve profitability.

Clinical trials are long, expensive and uncertain processes and Health Canada or the FDA may ultimately not approve any of our product candidates. We may never develop any commercial drugs or other products that generate revenues.

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 early Phase I or Phase II clinical trials may not be repeated in larger Phase II or Phase III clinical trials. We cannot assure you that our preclinical studies and clinical trials will 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 candidates LOR-253 is in the Phase I stage of development and our product candidate IL-17E is in the pre-clinical stage of development and 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 will be required if we are to complete development of our products.

Clinical trials of our products require that we identify and enrol a large number of patients with the illness under investigation. We may not be able to enrol 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 that could affect the price of our Common Shares. Delays in planned patient enrolment or lower than anticipated event rates in our current clinical trials or future clinical trials 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 such 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 may never achieve profitability.

We have indemnified our predecessor, Old Lorus, and its directors, officers and employees.

In connection with the reorganization that we undertook in fiscal 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 could result in significant liability to us. To date no amount has been claimed on this indemnification. Should a claim arise under this indemnification 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. We cannot assure you that our clinical trials will be completed, that we will 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 pharmaceutical industry, 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 these fields;
- substantially greater financial 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 product candidates 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 cannot assure you that, even if published, we will be aware of all 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.

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. We cannot assure you that our pending patent applications, if issued, would 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 against these people or obtain adequate compensation for the damages caused by their unauthorized disclosure or use of our trade secrets or know how. Our trade secrets or those of our collaborators may become known or may be independently discovered by others.

Our products and product candidates may infringe the intellectual property rights of others, or others many 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 at least some of our product candidates, including LOR-253 and IL17E. In addition, third parties may assert infringement or other intellectual property claims against us based on our patents or other intellectual property rights. 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 such technology, we cannot assure you that a license under such patents and patent applications will 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.

If product liability claims are brought against us or we are unable to obtain or maintain product 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 claims. 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.

We are subject to privacy laws. Violations of these laws may result in significant liability and the incurring of substantial costs to achieve compliance.

Our business is focused on the development of biopharmaceutical products. As a result, we are subject to some privacy laws in Canada and several other jurisdictions which control the use, disclosure, transmission and retention of confidential personal information. Our insurance coverage and/or diligence may not protect us from all liability and regulatory action arising from non-compliance with these laws, particularly if our non-compliance is the result of our own negligent actions or misconduct. If we have to respond to regulatory action, pay damages, or incur expenses defending any claims, we may be materially and adversely affected.

We have no manufacturing capabilities. 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, IL17E 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 we are unable to contract for a sufficient supply of our product candidates on acceptable terms, or if we encounter delays or difficulties in the manufacturing process or our relationships with our manufacturers, we may not have sufficient product to conduct or complete our clinical trials or support preparations for the commercial launch of our product candidates, if approved.

Our business depends on licensing agreements, which may require us to meet obligations that are not favourable for our business.

Our business depends on arrangements with third parties such as licensors and licensees. Our license agreements may require us to diligently bring our products to market, make milestone payments and royalties that may be significant, and incur expenses associated with filing and prosecuting patent applications. We cannot assure you that we will be able to establish and maintain license agreements that are favourable for our business, if at all.

Our operations involve hazardous materials and we must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our research and development activities involve the controlled use of hazardous materials, radioactive compounds and other potentially dangerous chemicals and biological agents. Although we believe our safety procedures for these materials comply with governmental standards, we cannot entirely eliminate the risk of accidental contamination or injury from these materials. We currently have insurance, in amounts and on terms typical for companies in businesses that are similarly situated that could cover all or a portion of a damage claim arising from our use of hazardous and other materials. However, if an accident or environmental discharge occurs, and we are held liable for any resulting damages, the associated liability could exceed our insurance coverage and our financial resources.

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 financial position and doubt as to whether we will be able to continue as a going concern;
- 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 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.

Our outstanding common shares could be subject to dilution.

The exercise of stock options and warrants already issued by us, and the issuance of other additional securities in the future, could result in dilution in the value of our common shares and the voting power represented by the common shares. Furthermore, to the extent holders of our stock options or other securities exercise their securities and then sell the common shares they receive, our share price may decrease due to the additional amount of our common shares available in the market.

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 Toronto Stock Exchange. However, there can be no assurance that an active trading market in our common shares on the stock exchange will be sustained or that we will be able to maintain our listing.

There is a limited market for our common shares in the United States.

There is currently a limited market for our common shares in the United States. If a shareholder in the United States is unable to sell their common shares in the United States, they will be forced to sell their common shares over the TSX, which may expose the selling shareholder to currency exchange risk. In addition, because we are not listed on any United States stock exchange, resales of our common shares to United States residents under state securities or "blue sky" laws are likely to be limited to unsolicited transactions.

It may be difficult for non-Canadian investors to obtain and enforce judgments against us because of our Canadian incorporation and presence.

We are a corporation existing under the laws of Canada. Most of our directors and officers, and all of the experts named in this prospectus and the documents incorporated by reference into this prospectus, are residents of Canada, and all or a substantial portion of their assets, and a substantial portion of our assets, are located outside the United States. Consequently, although we have appointed an agent for service of process in the United States, it may be difficult for holders of these securities who reside in the United States to effect service within the United States upon those directors and officers, and the experts who are not residents of the United States. It may also be difficult for holders of these securities who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon our civil liability and the civil liability of our directors, officers and experts under the United States federal securities laws. Investors should not assume that Canadian courts (i) would enforce judgments of United States courts obtained in actions against us or such directors, officers or experts predicated upon the civil liability provisions of the United States federal securities laws or the securities or "blue sky" laws of any state within the United States or (ii) would enforce, in original actions, liabilities against us or such directors, officers or experts predicated upon the United States federal securities laws or any such state securities or "blue sky" laws. In addition, we have been advised by our Canadian counsel that in normal circumstances, only civil judgments and not other rights arising from United States securities legislation are enforceable in Canada and that the protections afforded by Canadian securities laws may not be available to investors in the United States.

We are likely a "passive foreign investment company" which may likely have adverse U.S. federal income tax consequences for U.S. shareholders.

U.S. investors in our common shares should be aware that the Company believes it was classified as a passive foreign investment company (**PFIC**") during the tax year ended May 31, 2012, and based on current business plans and financial expectations, the Company believes that it will be a PFIC for the current tax year. If the Company is a PFIC for any year during a U.S. shareholder's holding period, then such U.S. shareholder generally will be required to treat any gain realized upon a disposition of common shares, or any so-called "excess distribution" received on its common shares, as ordinary income, and to pay an interest charge on a portion of such gain or distributions, unless the shareholder makes a timely and effective "qualified electing fund" election ("**QEF Election**") or a "mark-to-market" election with respect to the common shares. A U.S. shareholder who makes a QEF Election generally must report on a current basis its share of the Company's net capital gain and ordinary earnings for any year in which the Company is a PFIC, whether or not the Company distributes any amounts to its shareholders. However, U.S. shareholders should be aware that there can be no assurance that we will satisfy record keeping requirements that apply to a qualified electing fund, or that we will supply U.S. shareholders with information that such U.S. shareholders require to report under the QEF Election rules, in the event that we are a PFIC and a U.S. shareholder wishes to make a QEF Election. Thus, U.S. shareholders may not be able to make a QEF Election with respect to their common shares. A U.S. shareholder who makes the mark-to-market election generally must include as ordinary income each year the excess of the fair market value of the common shares over the taxpayer's basis therein. This paragraph is qualified in its entirety by the discussion below under the heading "Certain United States Federal Income Tax Considerations." Each U.S. shareholder should consult its own tax advisor regarding the U.S. federal, U.S. local, and foreign tax consequences of the PFIC rules and the acquisition, ownership, and disposition of our common shares.

Item 4. Information on the Company

A. History and Development of the Company

Old Lorus was incorporated under the *Business Corporations Act* (Ontario) on September 5, 1986 under the name RML Medical Laboratories Inc. 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 the Arrangement Date, Old Lorus completed a plan of arrangement and corporate reorganization with, among others, 6650309 Canada Inc., a corporation incorporated under the *Canada Business Corporations Act* ("**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.

Lorus is a biopharmaceutical company focused on the discovery, research and development of novel anticancer therapies with a high safety profile. Lorus has worked to establish a diverse, marketable anticancer product pipeline, with products in various stages of development ranging from discovery and pre-clinical to a product available to start a Phase III clinical trial. A growing intellectual property portfolio supports our diverse product pipeline.

Our success is dependent upon several factors, including maintaining sufficient levels of funding through public and/or private financing, establishing the efficacy and safety of our product candidates in clinical trials, securing strategic partnerships and obtaining the necessary regulatory approvals to market our products.

We believe that the future of cancer treatment and management lies in drugs that are effective, have minimal side effects, and therefore improve a patient's quality of life. Many of the cancer drugs currently approved for the treatment and management of cancer are toxic with severe side effects, and we believe that a product development plan based on effective and safe drugs could have broad applications in cancer treatment. Lorus' strategy is to continue the development of our product pipeline using several therapeutic approaches. Each therapeutic approach is dependent on different technologies, which we believe mitigates the development risks associated with a single technology platform. We evaluate the merits of each product candidate throughout the clinical trial process and consider partnership when appropriate.

Over the past three years, we have focused on advancing our product candidates through pre-clinical and clinical testing. It costs millions of dollars and takes many years before a product candidate may be approved for therapeutic use in humans and the risk exists that a product candidate may not meet the end points of any Phase I, Phase II or Phase III clinical trial. See "Risk Factors".

Lorus currently has one subsidiary, NuChem Pharmaceuticals Inc., a corporation incorporated under the laws of Ontario ("**NuChem**"), of which Lorus owns 80% of the issued and outstanding voting share capital and 100% of the issued and outstanding non-voting preference share capital. On May 31, 2009, GeneSense Technologies Inc. ("**GeneSense**"), of which Lorus owned 100% of the issued and outstanding share capital, was wound up into Lorus and subsequently dissolved. Until June 22, 2009, Lorus owned 100% of the issued and outstanding share capital of Pharma Immune Inc., a corporation incorporated under the laws of Delaware ("**Pharma Immune**"), at which time it disposed of these shares. See "Business Overview - Financial Strategy - Secured Convertible Debentures."

Lorus' common shares are listed on the TSX under the symbol "LOR".

The address of the Company's head and registered office is 2 Meridian Road, Toronto, Ontario, Canada, M9W 4Z7, and our phone number is (416) 798-1200. Our corporate website is www.lorusthera.com. The contents of the website, and items accessible through the website, are specifically not included in this Annual Report by reference.

Small Molecules

We have small molecule drug discovery capability and preclinical scientific expertise, which we are using to create a drug candidate pipeline. Our proprietary group of small molecule compounds include the lead compound LOR-253. LOR-253 is currently in a Phase I clinical trial and has unique structures and modes of action that represents a promising targeted anticancer agent with, we believe, a high safety profile. LOR-264 represents a second generation structural derivative of LOR-253 that has been optimized for oral absorption. Structural diversification and lead optimization of LOR-264 is currently underway.

Another small molecule program in active development is LOR-500, currently in the lead optimization stage of development.

Immunotherapy

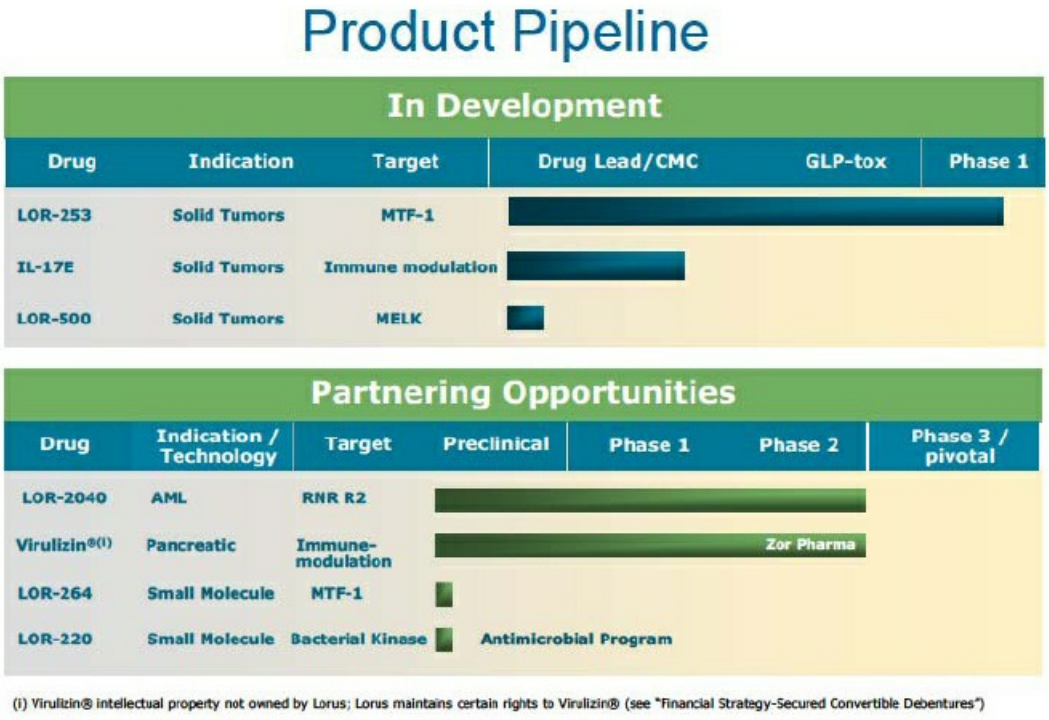
IL-17E is a novel immunotherapy based on stimulating anticancer properties of the immune system and by direct tumor cell killing. It has an excellent therapeutic index and is currently in preclinical development. Lorus owns the patents for the anti-cancer use of IL-17E.

Other Technologies

In addition to its active pipeline programs (LOR-253, LOR-500, IL-17E), Lorus has rights to two late-stage compounds, LOR-2040 and Virulizin. The intellectual property rights to Virulizin were sold in 2009 (see "Financial Strategy - Secured Convertible Debentures") however Lorus retains certain rights to Virulizin which is partnered with Zor Pharma. Lorus is seeking potential partners for LOR-2040. In addition Lorus has discovered LOR-220, a novel small molecule with antimicrobial properties in the preclinical stage. We are not currently developing these product candidates in house and are seeking partnership for further development. See "Business overview - Other Technologies".

Clinical Development

The chart below illustrates our current view of the clinical and preclinical development stage of each of our products. This chart reflects the current regulatory approval process for biopharmaceuticals in Canada and the United States. See "Regulatory Requirements" for a description of the regulatory approval process in Canada and the United States. These qualitative estimates of the progress of our products are intended solely for illustrative purposes and this information is qualified in its entirety by the information appearing elsewhere or incorporated by reference in this Annual Report.



Capital Expenditures and Divestitures

Not applicable.

B. Business Overview

Overview

Lorus is a discovery, research and clinical development stage company with a focus on novel cancer drugs. We have a diversified active portfolio including small molecules (LOR-253/LOR-500) and an immunotherapy (IL-17E), all of which represent first in class compounds with unique validated targets and distinct mechanisms of action. Our mandate is to discover and develop drugs up to an including the Phase I or Phase II clinical stage, and then out-license to pharmaceutical partners to fund the large and expensive registration clinical trials and if the clinical trials are successful, subsequent commercialization.

Our business strategy is based on the identification and development of novel therapies that are effective but with fewer side effects. In order to minimize single technology-related risks, we have adopted the following technology approaches:

- Development of small molecules that recognize specific targets in cancer cells;
- Immunotherapy using safe and efficacious products to stimulate the natural anticancer properties of the immune system.

In our efforts to obtain the greatest return on our investment in each drug candidate, we separately evaluate the merits of each drug candidate throughout the pre-clinical and clinical development process and consider commercialization opportunities when appropriate.

Our business model is to take our product candidates through pre-clinical testing and into Phase I and Phase II clinical trials. It is our intention to then partner or co-develop these drug candidates after successful completion of Phase I or II clinical trials. Lorus will give careful consideration in the selection of partners that can best advance its drug candidates into a pivotal Phase III clinical trial and, upon successful results, commercialization. Our objective is to receive upfront and milestone payments as well as royalties from such partnerships, which will support continued development of our other product candidates.

In the next fiscal year, we intend to pursue partnerships and collaborations for our compounds and further the development of our promising pipeline. More specifically, our main objectives are (i) to complete the Phase I clinical trial of our lead small molecule drug, LOR-253, and prepare for initiation of a Phase II clinical trial; (ii) to advance our pre-clinical product candidates IL-17E and LOR-500 derivative; and (iii) to secure partnership and financing alternatives in order to successfully continue our operations.

Small Molecule Therapies

Most anticancer chemotherapeutic treatments are DNA damaging, cytotoxic agents, designed to act on rapidly dividing cells. Treatment with these drugs is typically associated with unpleasant or even serious side effects due to the inability of these drugs to differentiate between normal and cancer cells and/or due to a lack of high specificity for the targeted protein. In addition, these drugs often lead to the development of tumor-acquired drug resistance. As a result of these limitations, a need exists for more effective anticancer drugs. One approach is to develop small molecules that have greater target specificity and are more selective against cancer cells. Chemical compounds weighing less than 1000 daltons (a unit of molecular weight) are designated as small or low molecular weight molecules. These molecules can be designed to target specific proteins or receptors that are known to be involved with disease.

LOR-253: is a proprietary, first-in-class, small molecule that stimulates Krüppel-like factor 4 (KLF4) to suppress tumor growth. This compound, which is unique to Lorus, exhibits potent anti-proliferative and anti-metastatic properties and is currently in a Phase I trial for solid tumors. The Phase I dose-escalation study is in patients with advanced or metastatic solid tumors who are unresponsive to conventional therapy or for which no effective therapy is available. The study, which is currently enrolling patients, is being conducted at Memorial Sloan-Kettering Cancer Center in New York and MD Anderson Cancer Center in Houston. Objectives of the study include 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 September, 2011, Lorus announced the allowance of an Australian patent for LOR-253, which covers LOR-253 composition of matter and methods of treating cancer with LOR-253.

In November, 2011, Lorus announced the presentation of positive nonclinical toxicity data for LOR-253 at the Annual Meeting of the American College of Toxicology (ACT). The presentation details the results of nonclinical toxicity and toxicokinetics studies conducted with LOR-253. The studies were part of the formal safety evaluation of LOR-253 to support first-in-man clinical trials in cancer, and to determine the starting dose of LOR-253 in patients. The studies, which took place over one year, examined a wide range of toxicity parameters in rat and dog species, as well as safety pharmacology and blood toxicity. Overall, LOR-253 had a favorable nonclinical toxicology profile in both animal species and was well tolerated at doses higher than efficacious dose levels established in animal models of human cancers. Of significance, the data show that the effective dose could be increased by a factor of eight to fifteen before seeing levels of toxicity in the animal studies. Additional data in the poster include the results of preclinical anticancer studies on LOR-253 in mouse models of human non-small cell lung cancer (NSCLC). The data show that LOR-253 has significant anticancer activity against NSCLC, particularly in tumors with low expression levels of the tumor suppressor KLF4. Lorus is currently examining the role of KLF4 as a potential biomarker for LOR-253 anticancer activity.

In March, 2012, Lorus announced that the Canadian Patent Office has issued a patent for LOR-253. The patent provides Lorus with exclusive rights to LOR-253 in Canada until it expires in 2026. The Canadian patent covers LOR-253 composition of matter and its use in the treatment of a wide range of cancers.

In April, 2012, Lorus announced the presentation of new preclinical data for LOR-253, at the AACR annual meeting. The data supports the treatment of lung and colon cancers with LOR-253 in combination with a variety of chemotherapy agents. The studies examined the anticancer activities of LOR-253, given in combination with approved anticancer agents, at different doses and schedules. The preclinical data showed that initial treatment of non-small cell lung cancer (NSCLC) cells with chemotherapy drugs docetaxel, paclitaxel, or cisplatin, followed by treatment with LOR-253, had significant and synergistic anticancer activity compared to either drug given alone. In animal studies, LOR-253 plus docetaxel showed significant efficacy against human NSCLC tumors when both drugs were administered at efficacious doses sequentially, compared to treatment with either agent alone at the same dose levels. Similar anticancer synergy was also seen in colon cancer cells when LOR-253 was combined with the chemotherapeutics oxaliplatin, CPT-11, or fluorouracil. Each of these drugs are currently used for the treatment of colon cancer. In animal studies, LOR-253 plus oxaliplatin showed significant efficacy against human colon tumors when both drugs were administered sequentially, compared to either agent alone at the same dose levels.

In April, 2012, Lorus announced that the United States Patent and Trademark Office has allowed Lorus' patent for LOR-253. The patent, which was originally set to expire in May 2026, was granted a patent term adjustment that extends the patent expiry date to February 2028.

In June, 2012 Lorus announced the addition of MD Anderson Cancer Center as a second site in the ongoing LOR 253 Phase I clinical trial, under the direction of Dr. Jennifer Wheler 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 expands patient availability for enrollment as the study is now in Stage 2. Upon completion of the final dose of this stage, the study will be further expanded to include biopsy-suitable patients for evaluating direct drug effects in the tumors.

LOR-500 program: potent and first-in-class small molecule anticancer agents with a novel target, MELK. Lorus' research suggests that the MELK target is highly expressed in multiple cancers.

Immunotherapy

Immunotherapy is a form of treatment that stimulates the body's immune system to fight diseases including cancer. Lorus' research suggests that immunotherapy may help the immune system to fight cancer by improving recognition of differences between healthy cells and cancer cells. Alternatively, it may stimulate the production of specific cancer fighting cells.

IL-17E: a novel immunotherapy based on stimulating anticancer properties of the immune system and by direct tumor cell killing. It has an excellent therapeutic index and is currently in preclinical development. Lorus owns the patents for the anti-cancer use of IL-17E.

In February 2010, we announced the publication of an article entitled "IL-17E, a proinflammatory cytokine, has antitumor efficacy against several tumor types in vivo", in the peer-reviewed journal Cancer Immunology Immunotherapy. In this article, we demonstrated the antitumor effects of IL-17E alone and in combination with a number of approved anticancer agents in preclinical models. The studies showed that IL-17E alone had potent antitumor activity in a number of solid tumors, including melanoma, breast, colon, pancreatic, and non-small cell lung cancers. In combination studies, IL-17E was compatible with a wide variety of approved anticancer drugs, including Avastin, Tarceva, Taxol, Cisplatin, Dacarbazine, Irinotecan, and Gemzar. Furthermore, the combination of IL-17E with each of these anticancer agents showed greater anticancer efficacy than either agent alone without additional toxicity. The article also provided data on the mechanism of anticancer activity for IL-17E, showing that IL-17E activated the immune system, specifically acting on eosinophils and B cells.

In May, 2012, Lorus announced that it had entered into a global license with Genentech, a member of the Roche Group, in respect of the in-licensing of certain patents owned by Genentech for IL-17E. Lorus believes that the Genentech license will enable Lorus to develop this program as a novel and exciting treatment for a large number of cancers. See "License Agreement - Genentech".

Other Technologies

In addition to its active pipeline programs, Lorus has two late-stage compounds, LOR-2040 and Virulizin. The intellectual property rights to Virulizin were sold in 2009 (see "Financial Strategy - Secured Convertible Debentures") however Lorus retains certain rights to Virulizin which is partnered with Zor Pharma. Lorus is seeking a potential partner for the further development of LOR-2040.

Lorus also has LOR-220, a novel small molecule with antimicrobial properties in the preclinical stage. LOR-220 has demonstrated antimicrobial activity with growth inhibition of Gram-positive bacteria including strains of methicillin-resistant S. aureus (MRSA), vancomycin-resistant E. faecalis (VRE), and Streptococcus pneumoniae, with minimal inhibitory concentration (MIC) values comparable to the newly introduced oxazolidinone & Linezolid, and potent in vitro and in vivo bactericidal activity.

Lorus does not plan to develop any of these other technologies using its own resources and as such these programs will only advance in the event Lorus is able to secure a partnership.

Agreements

Manufacturing Agreements

We currently rely upon subcontractors for the manufacture of our drug candidates. The subcontractors manufacture clinical material according to current GMP at contract manufacturing organizations that have been approved by our quality assurance department, following audits in relation to the appropriate regulations.

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

License Agreements

Genentech

The Company holds a non-exclusive license from Genentech to certain patent rights to develop and sub-license a certain polypeptide. In consideration of the license the Company paid an upfront amount and could be required to pay additional milestones and royalties on sales. The Company does not expect to make any milestone or royalty payments under this agreement in fiscal years ended May 31, 2013 or 2014, and cannot reasonably predict when such royalties will become payable, if at all.

University of Manitoba

The Company holds an exclusive worldwide license to certain patent rights relates specifically to antisense and related technologies described in patent applications that were pending at the time of the agreement with The University of Manitoba. Subsequent patent amendments or advancements to these patents remain as the property of Lorus, without license rights accruing back to the University of Manitoba. In consideration for the exclusive license the University of Manitoba is entitled to an aggregate of 1.67% of the net sales received by Lorus from the sale of products or processes derived from the patent rights and 1.67% of all monies received by Lorus from sub-licenses of the patent rights. We do not expect to make any royalty payments under this agreement in fiscal years ended May 31, 2013 or 2014 if at all.

Collaboration Agreements

Zoticon Bioventures Inc.

In April 2008, Lorus signed an exclusive multinational license agreement with ZOR, a subsidiary of Zoticon Bioventures Inc. ("Zoticon"), a research-driven biopharmaceutical group, to further develop and commercialize Virulizin® for human therapeutic applications. In June 2009, Lorus assigned these rights to TEMIC in settlement of outstanding convertible debentures. Lorus retained rights to 50% of royalties received by TEMIC as well as a right to 50% of consideration received in territories not covered by the Zor license agreement.

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.

Business Strategy

Our business strategy is based on the identification and development of novel therapies that are effective but with fewer side effects. In order to minimize single technology-related risks, we have adopted the following technology approaches:

- Development of small molecules that recognize specific targets in cancer cells;
- Immunotherapy using safe and efficacious products to stimulate the natural anticancer properties of the immune system.

In our efforts to obtain the greatest return on our investment in each drug candidate, we separately evaluate the merits of each drug candidate throughout the pre-clinical and clinical development process and consider commercialization opportunities when appropriate.

Our business model is to take our product candidates through pre-clinical testing and into Phase I and Phase II clinical trials. It is our intention to then partner or co-develop these drug candidates after successful completion of Phase I or II clinical trials. Lorus will give careful consideration in the selection of partners that can best advance its drug candidates into a pivotal Phase III clinical trial and, upon successful results, commercialization. Our objective is to receive upfront and milestone payments as well as royalties from such partnerships, which will support continued development of our other product candidates.

In the next fiscal year, we intend to pursue partnerships and collaborations for our compounds and further the development of our promising pipeline. More specifically, our main objectives are (i) to complete the Phase I clinical trial of our lead small molecule drug, LOR-253, and prepare for initiation of a Phase II clinical trial; (ii) to advance our pre-clinical product candidates IL-17E and LOR-500 derivative; and (iii) to secure partnership and financing alternatives in order to successfully continue our operations.

Financial Strategy

To meet 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.

June 2012 Private Placement

Subsequent to our fiscal year end of May 31, 2012, in June 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 (in this section a "**Unit**") consisting of one common share and one common share purchase warrant for gross proceeds to Lorus of $6,600,000.

Each warrant is exercisable for a period of 24 months from the date of issuance at an exercise price of $0.45 (in this section, the "**Warrants**"). If after one year (in this section the **"Accelerated Exercise Date**") the closing price of the common shares on the Toronto Stock Exchange equals or exceeds $0.90 for twenty consecutive days, then upon the Company sending the holders of Warrants written notice of such Accelerated Exercise Date 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 on which such written notice is sent to holders of Warrants.

PowerOne Capital Markets Limited acted as a finder in the financing and was paid a cash finder's fee equal to 6% of the gross proceeds of the Private Placement and was issued 1,237,500 finder's warrants at an exercise price of $0.32 each. Each finder's warrant is exercisable into Units consisting of 1,237,500 common shares and 1,237,500 Warrants.

August 2011 Unit Offering

On July 22, 2011, the Company filed a final short-form prospectus in connection with a best efforts offering (the "Offering") of a minimum of 5,000,000 units of the Company (in this section the "**Units**") at a price of $0.40 per Unit for gross proceeds of $2,000,000 and a maximum of 10,000,000 Units for gross proceeds of $4,000,000. Each Unit consisted of one common share of Lorus (a "Common Share") and one common share purchase warrant of Lorus (in this section a "**Warrant**"). 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 per Common Share (in this section the "**Exercise Price**"). If on any date (in this section the "**Accelerated Exercise Date**") the 10-day volume weighted average trading price of the Common Shares on the Toronto Stock Exchange equals or exceeds 200% of the Exercise Price, then upon the Company sending the holders of Warrants written notice of such Accelerated Exercise Date 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 on which such written notice is sent to holders of Warrants.

In connection with the Offering, Herbert Abramson, a director of the Company, entered into an irrevocable commitment letter on June 20, 2011, and amended July 11, 2011, to purchase, directly or indirectly, common shares and common share purchase warrants (or as may otherwise be agreed) in the capital of Lorus (collectively the "Securities") having an aggregate subscription price equal to the difference (the "Commitment Amount"), if any, between (a) the sum of (i) the gross proceeds realized by Lorus in the Offering and (ii) the gross proceeds received by Lorus in respect of all financings completed by Lorus from the date of the final short-form prospectus to November 30, 2011 and (b) $4.0 million.

The Offering closed on August 15, 2011 for total gross proceeds of $2.2 million. In connection with the Offering, Lorus has issued 5.484 million Common Shares and 5.678 million Warrants including the broker warrants. Mr. Abramson purchased 2.4 million Units as part of the Offering.

The total costs associated with the transaction were approximately $395 thousand which included the $25 thousand which represented the fair value of the brokers' services provided as part of the Offering. Each such broker warrant is exercisable for one Unit at a price of $0.40 per Unit for a period of 24 months following the closing of the Offering. The Company has 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, $1.2 million of the net proceeds were allocated to the common shares and $609 thousand to the common share purchase warrants.

Deferred Share Unit Plan

As at May 31, 2012, 780 thousand deferred share units have been issued (May 31, 2011 - nil, June 1, 2010 - nil), with a cash value of $304 thousand representing the fair market value of the units as of May 31, 2012 (May 31, 2011 - nil, June 1, 2010 - nil) recorded in accrued liabilities.

Warrant Repricing

On November 29, 2011, shareholders of the Company (excluding insiders who also held warrants) approved a resolution to amend the exercise price of certain outstanding warrants from $1.33 to the 5 day volume weighted average trading price on the Toronto Stock Exchange five days prior to approval plus a 10% premium. The revised warrant exercise price is $0.28. The Company calculated an increased value attributed to the warrants of $239 thousand related to the amendment. This increase was calculated by taking the Black Scholes value of the warrants immediately before the amendment and immediately after the amendment. There were 4.2 million warrants which were amended and of those 3.6 million are held by Mr. Abramson, a director of the Company

December 2010 Private Placement

On December 1, 2010, pursuant to a private placement, the Company issued 1.6 million common shares in exchange for cash consideration of $1.66 million. The total costs associated with the transaction were approximately $20 thousand. The Company has allocated the net proceeds of the private placement to common shares. Mr. Herbert Abramson, a director of the Corporation, subscribed for 1,410,000 common shares, representing approximately 89% of the total number of common shares issued through the private placement. No commission was paid in connection with the private placement.

November 2010 Rights Offering

On August 27, 2010, the Company announced a proposed rights offering as described below including a $4 million standby purchase agreement from a director of the Company, Mr. Herbert Abramson. Mr. Abramson also provided the Company with interim financing by way of three $500 thousand monthly loans, advanced in August, September and October 2010. The loans were unsecured, had six-month terms (or the earlier of the closing of the rights issue) and bore interest at an annual rate of 10%. All three notes were repaid upon the close of the rights offering described below.

On September 27, 2010, Lorus filed a final short form prospectus in each of the provinces of Canada in connection with a distribution to its shareholders in eligible jurisdictions outside the United States of rights exercisable for units of the Company (the "**Rights Offering**").

Under the Rights Offering, holders of common shares of the Company as of October 12, 2010, the record date, received one right for each common share held as of the record date. Each two rights entitled the holder thereof to purchase a unit of the Company at a price of $1.11 per unit. Each unit consisted of one common share of the Company and one warrant to purchase an additional common share of the Company at a price of $1.33 until May 2012.

A total of 4.2 million units of the Company at a price of $1.11 per unit were issued in connection with the Rights Offering. As a result of the rights offering Lorus issued 4.2 million common shares and 4.2 million common share purchase warrants.

In connection with the Rights Offering, the Company secured a standby purchase arrangement of $4 million by Herbert Abramson, one of Lorus' directors. Mr. Abramson agreed to make an investment such that the minimum gross proceeds of the proposed rights offering would be $4 million. No fee was payable to Mr. Abramson for this commitment. In accordance with the terms of the stand-by purchase agreement, Mr. Abramson subscribed for 3.6 million of the 4.2 million units of the offering for $4.0 million.

The total costs associated with the transaction were approximately $370 thousand. The Company has allocated the net proceeds of the Rights Offering to the common shares and the common share purchase warrants based on their relative fair values. Based on relative fair values, $3.2 million of the net proceeds were allocated to the common shares and $1.0 million to the common share purchase warrants.

Share Consolidation

At our annual and special meeting of shareholders held on November 30, 2009, our shareholders approved a special resolution permitting our board of directors, in its sole discretion, to file an amendment to our articles of incorporation to consolidate our issued and outstanding common shares.

On May 12, 2010, our board approved the share consolidation on the basis of one post-consolidation common share for every 30 pre-consolidation common shares. The record date and effective date for the share consolidation was May 25, 2010. Our common shares began trading on the TSX on a post-consolidation basis on May 31, 2010. The share consolidation resulted in an adjustment to the exercise price and number of common shares issuable upon exercise of outstanding stock options and warrants.

In this Annual Report, all references to number of shares, stock options and warrants in the current and past periods have been adjusted to reflect the impact of the consolidation unless noted otherwise.

Promissory Notes

Pursuant to the commitment letter (described under 'August 2011 Unit Offering' above) provided by Mr. Abramson, the Company has issued a grid promissory note to Mr. Abramson that allows us to borrow funds up to $1.8 million. The funds may be borrowed at a rate of up to $300 thousand per month, incur interest at a rate of 10% per year and are due and payable in full on November 28, 2012. The promissory note is subject to certain covenants which, if breached, could result in the promissory note becoming payable on demand. Lorus has not breached these covenants as of May 31, 2012 and has not received notice of any breach of these covenants by Mr. Abramson. At May 31, 2012 $900 thousand has been drawn under the promissory note and on June 27, 2012, the note and all accrued interest was repaid.

In April 2010, the Company entered into a loan agreement with Trapeze Capital Corp., a corporation affiliated with Mr. Abramson, to borrow $1 million. The loan amount, which was received on April 14, 2010, is unsecured, evidenced by a promissory note and bears interest at an annual rate of 10%. The principal and interest amount were due on October 14, 2010, and were fully repaid by the Company in November 2010.

In October 2009, the Company entered into a loan agreement with Mr. Abramson to borrow $1 million. The loan amount, which was received on October 6, 2009, was unsecured, evidenced by a promissory note and bears interest at an annual rate of 10%. The principal and interest was due in six months. The principal amount of $1.0 million was applied to subscribe for units as part of the November 27, 2009 private placement described below and therefore the liability was discharged at that time.

November 2009 Private Placement

On November 27, 2009, pursuant to a private placement, the Company issued 41.0 million (pre-consolidation) common shares and 20.5 million (pre-consolidation) common share purchase warrants in exchange for cash consideration of $2.5 million. This amount includes the principal amount of $1.0 million originally received by way of a loan from a director, Mr. Abramson, on October 6, 2009, which was applied to subscribe for units as part of the private placement. In addition, the Company issued 2.2 million (pre-consolidation) brokers' warrants to purchase an equivalent number of common shares at $0.08 (pre-consolidation) until May 27, 2011. The warrants expired unexercised on May 27, 2011.

Secured Convertible Debentures

On October 6, 2004, we entered into a subscription agreement with TEMIC to issue an aggregate of $15.0 million of secured convertible debentures issuable in three tranches of $5.0 million each, in each of October 2004, January 2005 and April 2005. The debentures were due on October 6, 2009. On June 22, 2009, we reached a settlement with TEMIC with respect to the $15.0 million of debentures.

Under the settlement agreement, we purchased all of the debentures from TEMIC for a cash payment of $3.3 million, the assignment of the rights under the license agreement with ZOR, sale of intellectual property associated with Virulizin® and sale of the shares in our wholly owned subsidiary, Pharma Immune Inc., which holds an equity interest in ZOR. Under the agreement, we are entitled to 50% of any royalties received under the ZOR license agreement and 50% of the deal value of any transaction completed in territories not covered by the ZOR license agreement. We also retain a perpetual, royalty free license for the animal use of Virulizin®. TEMIC will be fully responsible for all clinical and regulatory costs associated with commercialization of Virulizin® in territories not covered by the ZOR license agreement. We will assist TEMIC with certain agreed upon services.

For receipt of the intellectual property associated with Virulizin® and all of our shares in Pharma Immune, TEMIC has released all security interests in the assets of Lorus.

August 2008 Rights Offering

On June 25, 2008, the Company filed a short-form prospectus for a rights offering to its shareholders.

Under the rights offering, holders of the Company's common shares as of the July 9, 2008 record date received one right for each common share held as of this record date. Each four rights entitled the holder thereof to purchase a unit of Lorus. Each unit consisted of one common share of Lorus at $3.90 and a one-half common share purchase warrant to purchase additional common shares of Lorus at $4.53 per common share until August 7, 2010.

Pursuant to the rights offering the Company issued 951 thousand common shares and 571 thousand common share purchase warrants in exchange for cash consideration of $3.7 million. The total costs associated with the transaction were $500 thousand. The Company allocated the net proceeds of $3.2 million received from the issuance of the units to the common shares and the common share purchase warrants based on their relative fair values. The fair value of the common share purchase warrants has been determined based on an option pricing model. The allocation based on relative fair values resulted in the allocation of $2.8 million to the common shares and $417 thousand to the common share purchase warrants.

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. As of May 31, 2012, we owned or had rights to 31 issued patents and 19 pending patent applications worldwide.

Small Molecule

We have been issued ten patents and have fourteen pending patents worldwide for our in-house small molecules. These patents cover composition of matter and method claims.

Immunotherapy

We have one issued and two pending patents for our IL-17E immunotherapy program.

Other Therapies

We have 19 issued patents and three pending patents worldwide for our DNA-based therapeutics. These patents include composition of matter and method claims.

Risks Relating to Intellectual Property

We either own the issued patents discussed above or have the exclusive right to make, use, market, sell or otherwise commercialize products using these patents to diagnose and treat cancer. We cannot assure you that we will continue to have exclusive rights to these patents.

We cannot assure you that pending applications will result in issued patents, or that issued patents will be held valid and enforceable if challenged, or that a competitor will not be able to circumvent any such issued patents by adoption of a competitive, though non-infringing product or process. Interpretation and evaluation of pharmaceutical or biotechnology patent claims present complex and often novel legal and factual questions. Our business could be adversely affected by increased competition in the event that any patent granted to it is held to be invalid or unenforceable or is inadequate in scope to protect our operations.

While we believe that our products and technology do not infringe proprietary rights of others, we cannot assure you that third parties will not assert infringement claims in the future or that such claims will not be successful. Furthermore, we could incur substantial costs in defending ourselves against patent infringement claims brought by others or in prosecuting suits against others.

In addition, we cannot assure you that others will not obtain patents that we would need to license, or that if a license is required that it would be available to us on reasonable terms, or that if a license is not obtained that we would be able to circumvent, through a reasonable investment of time and expense, such outside patents. Whether we obtain a license would depend on the terms offered, the degree of risk of infringement, the vulnerability of the patent to invalidation and the ease of circumventing the patent.

Until such time, if ever, that further patents are issued to us, we will rely upon the law of trade secrets to the extent possible given the publication requirements under international patent treaty laws and/or requirements under foreign patent laws to protect our technology and our products incorporating the technology. In this regard, we have adopted certain confidentiality procedures. These include: limiting access to confidential information to certain key personnel; requiring all directors, officers, employees and consultants and others who may have access to our intellectual property to enter into confidentiality agreements which prohibit the use of or disclosure of confidential information to third parties; and implementing physical security measures designed to restrict access to such confidential information and products. Our ability to maintain the confidentiality of our technology is crucial to our ultimate possible commercial success. We cannot assure you that the procedures adopted by us to protect the confidentiality of our technology will be effective, that third parties will not gain access to our trade secrets or disclose the technology, or that we can meaningfully protect our rights to our technology. Further, by seeking the aforementioned patent protection in various countries, it is inevitable that a substantial portion of our technology will become available to our competitors, through publication of such patent applications.

Regulatory Strategy

Our overall regulatory strategy is to work with Health Canada, the federal government department which, among other responsibilities, regulates the use and sale of therapeutic drug products in Canada and the FDA in the United States, the European Medicines Agency in Europe, and any other local regulatory agencies to have drug applications approved for the use of LOR-253 in clinical trials (alone and/or in combination with chemotherapeutic compounds) and subsequently for sale in international markets. Where possible, we intend to take advantage of opportunities for accelerated consideration 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 cannot assure you that we will be able to pursue these opportunities successfully.

Revenues

The Company has not earned substantial revenues from its drug candidates and is therefore considered to be in the development stage.

Employees

As at May 31, 2012, we employed 12 full-time persons and four part-time people in research and drug development and administration activities. Of our employees, four hold Ph.Ds. 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 and employees can participate in the employee share purchase plan. See Item 6.B - Compensation.

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

Office Facilities

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, 2013.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly evolving technology and intense competition. There are numerous players in both of 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 us. In addition, we may face competition from other companies for opportunities to enter into partnerships with biotechnology and pharmaceutical companies and academic institutions. Many of these other companies however are not solely focused on cancer, as is the mission of our drug development strategy to specialize in the development of drugs for the treatment and management of cancer.

Competition with our products may include chemotherapeutic agents, monoclonal antibodies, antisense therapies, small molecules, vaccines and other biologics, and immunotherapies 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 may 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 drugs have specific targets for attacking the disease; targets which are not necessarily the same as ours. These competitive drugs therefore could potentially also be used together in combination therapies with our drugs to manage the disease. Other factors that could render our products less competitive may include the stage of development, where competitors' products may achieve earlier commercialization, as well as superior patent protection, better safety profile, or a preferred cost-benefit profile.

Government Regulation

Overview

Regulation by government authorities in Canada, the United States, and the European Union is a significant factor in our current research and drug development activities. To clinically test, manufacture and market drug products for therapeutic use, we must satisfy the rigorous mandatory procedures and standards established by the regulatory agencies in the countries in which we currently operate or intend to operate.

The laws of most of these countries require the licensing of manufacturing facilities, carefully controlled research and the extensive testing of products. Biotechnology companies must establish the safety and efficacy of their new products in clinical trials, they must establish current Good Manufacturing Practice(s) and control over marketing activities before being allowed to market their products. The safety and efficacy of a new drug must be shown through clinical trials of the drug carried out in accordance with the mandatory procedures and standards established by regulatory agencies.

The process of completing clinical trials and obtaining regulatory approval for a new drug takes a number of years and requires the expenditure of substantial resources. Once a new drug or product license application is submitted, we cannot assure you that a regulatory agency will review and approve the application in a timely manner. Even after initial approval has been obtained, further studies, including post-marketing studies, may be required to provide additional data on efficacy and safety necessary to confirm the approved indication or to gain approval for the use of the new drug as a treatment for clinical indications other than those for which the new drug was initially tested. Also, regulatory agencies require post-marketing surveillance programs to monitor a new drug's side effects. Results of post-marketing programs may limit or expand the further marketing of new drugs. A serious safety or effectiveness problem involving an approved new drug may result in a regulatory agency requiring withdrawal of the new drug from the market and possible civil action. We cannot assure you that we will not encounter such difficulties or excessive costs in our efforts to secure necessary approvals, which could delay or prevent us from manufacturing or marketing our products.

In addition to the regulatory product approval framework, biotechnology companies, including Lorus, are subject to regulation under local, provincial, state and federal law, including requirements regarding occupational safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other present and future local, provincial, state, federal and foreign regulation, including possible future regulation of the biotechnology industry.

Regulation in Canada

In Canada, the manufacture and sale of new drugs are controlled by Health Canada. New drugs must pass through a number of testing stages, including pre-clinical testing and clinical trials. Pre-clinical testing involves testing the new drug's chemistry, pharmacology and toxicology *in vitro* and *in vivo*. Successful results (that is, potentially valuable pharmacological activity combined with an acceptable low level of toxicity) enable the developer of the new drug to file a clinical trial application to begin clinical trials involving humans.

To study a drug in Canadian patients, a clinical trial application submission must be filed with Health Canada. The clinical trial application submission must contain specified information, including the results of the pre-clinical tests completed at the time of the submission and any available information regarding use of the drug in humans. In addition, since the method of manufacture may affect the efficacy and safety of a new drug, information on manufacturing methods and standards and the stability of the drug substance and dosage form must be presented. Production methods and quality control procedures must be in place to ensure an acceptably pure product, essentially free of contamination, and to ensure uniformity with respect to all quality aspects.

In addition, all federally regulated trials must be approved and monitored by an independent committee of doctors, scientists, advocates and others to ensure safety and ethical standards. These committees are called Institutional Review Boards (IRBs) or Ethics Review Boards (ERBs). The review boards study and approve all study-related documents before a clinical trial begins and also carefully monitor data to detect benefit or harm, and validity of results.

Provided Health Canada does not reject a clinical trial application submission and IRB or ERB approval has been obtained, clinical trials can begin. Clinical trials for product candidates to treat cancer are generally carried out in three phases. Phase I involves studies to evaluate toxicity and ideal dose levels in humans. The new drug is administered to human patients who have met the clinical trial entry criteria to determine pharmacokinetics, human tolerance and prevalence of adverse side effects. Phases II and III involve therapeutic studies. In Phase II, efficacy, dosage, side effects and safety are established in a small number of patients who have the disease or disorder that the new drug is intended to treat. In Phase III, there are controlled clinical trials in which the new drug is administered to a large number of patients who are likely to receive benefit from the new drug. In Phase III, the effectiveness of the new drug is compared to that of standard accepted methods of treatment in order to provide sufficient data for the statistical proof of safety and efficacy for the new drug.

If clinical studies establish that a new drug has value, the manufacturer submits a new drug submission application to Health Canada for marketing approval. The new drug submission contains all information known about the new drug, including the results of pre-clinical testing and clinical trials. Information about a substance contained in new drug submission includes its proper name, its chemical name, and details on its method of manufacturing and purification, and its biological, pharmacological and toxicological properties. The new drug submission also provides information about the dosage form of the new drug, including a quantitative listing of all ingredients used in its formulation, its method of manufacture, manufacturing facility information, packaging and labelling, the results of stability tests, and its diagnostic or therapeutic claims and side effects, as well as details of the clinical trials to support the safety and efficacy of the new drug. Furthermore, for biological products, an on-site evaluation is completed to assess the production process and manufacturing facility. It is required prior to the issuance of a notice of compliance. All aspects of the new drug submission are critically reviewed by Health Canada. If a new drug submission is found satisfactory, a notice of compliance is issued permitting the new drug to be sold. In Canada an Establishment license must be obtained prior to marketing the product.

Health Canada has a policy of priority evaluation of new drug submissions for all drugs intended for serious or life-threatening diseases for which no drug product has received regulatory approval in Canada and for which there is reasonable scientific evidence to indicate that the proposed new drug is safe and may provide effective treatment.

The monitoring of a new drug does not cease once it is on the market. For example, a manufacturer of a new drug must report any new information received concerning serious side effects, as well as the failure of the new drug to produce desired effects. As well, if Health Canada determines it to be in the interest of public health, a notice of compliance for a new drug may be suspended and the new drug may be removed from the market.

A post surveillance program involves clinical trials conducted after a drug is marketed (referred to as Phase 4 studies in the United States) and is an important source of information on as yet undetected adverse outcomes, especially in populations that may not have been involved in the premarketing trials (e.g., children, the elderly, pregnant women) and the drug's long-term morbidity and mortality profile. Regulatory authorities may require companies to conduct Phase 4 studies as a condition of market approval. Companies often conduct post-marketing studies in the absence of a regulatory mandate.

An exception to the foregoing requirements relating to the manufacture and sale of a new drug is the limited authorization that may be available in respect of the sale of new drugs for emergency treatment. Under the special access program, Health Canada may authorize the sale of a quantity of a new drug for human use to a specific practitioner for the emergency treatment of a patient under the practitioner's care. Prior to authorization, the practitioner must supply Health Canada with information concerning the medical emergency for which the new drug is required, such data as is in the possession of the practitioner with respect to the use, safety and efficacy of the new drug, the names of the institutions at which the new drug is to be used and such other information as may be requested by Health Canada. In addition, the practitioner must agree to report to both the drug manufacturer and Health Canada the results of the new drug's use in the medical emergency, including information concerning adverse reactions, and must account to Health Canada for all quantities of the new drug made available.

The Canadian regulatory approval requirements for new drugs outlined above are similar to those of other major pharmaceutical markets. While the testing carried out in Canada is often acceptable for the purposes of regulatory submissions in other countries, individual regulatory authorities may request supplementary testing during their assessment of any submission. We cannot assure you that the clinical testing conducted under Health Canada authorization or the approval of regulatory authorities of other countries will be accepted by regulatory authorities outside Canada or such other countries.

Regulation in the United States

In the United States, the FDA controls the manufacture and sale of new drugs. New drugs require FDA approval of a New Drug Application prior to commercial sale. In the case of certain biological products, a Biological License Application must be obtained prior to marketing and batch releasing. To obtain marketing approval, data from adequate and well-controlled clinical investigations, demonstrating to the FDA's satisfaction a new drug's safety and effectiveness for its intended use, are required. Such data are generated in studies conducted pursuant to an IND submission, similar to that required for a clinical trial application in Canada. As in Canada, clinical studies are characterized as Phase I, Phase II and Phase III trials or a combination thereof. In a marketing application, the manufacturer must also demonstrate the identity, potency, quality and purity of the active ingredients of the new drug involved, and the stability of those ingredients. Further, the manufacturing facilities, equipment, processes and quality controls for the new drug must comply with the FDA's current Good Manufacturing Practice regulations for drugs or biological products both in a pre-licensing inspection before product licensing and in subsequent periodic inspections after licensing. An establishment license grants the sponsor permission to fabricate, package, label, distribute, import, wholesale or test of the newly approved drug. A five-year period of market exclusivity for a drug comprising a new chemical entity is available to an applicant that succeeds in obtaining FDA approval of a new chemical entity, provided the active ingredient of the new chemical entity has never before been approved in an New Drug Application. During this exclusivity period, the FDA may not approve any abbreviated application filed by another sponsor for a generic version of the new chemical entity. To extend this market protection, especially important when the original patent may be close to expiration, new indications or dosage forms of previously approved drugs can receive new use or new clinical study exclusivity- up to a three-year period of market exclusivity. During this time, the FDA may not approve an abbreviated application filed by another sponsor for a generic version of the product for that use or indication. For orphan drugs or biologics, a seven-year period exclusivity is granted to benefit the marketing of a drug, which treats rare diseases or conditions with less than 200,000 patients.

The FDA has "fast track" regulations intended to accelerate the approval process for the development, evaluation and marketing of new drugs used to diagnose or treat life-threatening and severely debilitating illnesses for which no satisfactory alternative therapies exist. "Fast track" designation affords early interaction with the FDA in terms of protocol design and eligibility for expedited review of New Drug Application. It also permits, although it does not require, the FDA to issue marketing approval based on a surrogate endpoint (a measurement intended to substitute for the clinical measurement of interest, usually prolongation of survival) although the FDA will often require subsequent clinical trials or even post-approval efficacy studies).

The above describes briefly what is necessary for a new drug to be approved for marketing in North America. The European Medicines Agency and Japanese Pharmaceuticals and Medical Devices Agency are also important regulatory authorities in drug development. Together with the FDA, they are the three International Conference on Harmonization parties which oversee the three largest markets for drug sales.

C. Organizational Structure

Old Lorus was incorporated under the *Business Corporations Act* (Ontario) on September 5, 1986 under the name RML Medical Laboratories Inc. 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 Canadian 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 Old Lorus changed its name from Lorus Therapeutics Inc. to 4325231 Canada Inc. and on October 17, 2007 changed its name to Global Summit Real Estate Inc. As of the Arrangement Date, Old Lorus is not related to New Lorus.

New Lorus was incorporated on November 1, 2006 as 6650309 Canada Inc. under the *Canada Business Corporations Act*.

On the Arrangement Date, Old Lorus completed a plan of arrangement and corporate reorganization with, among others, 6650309 Canada Inc., subsequently renamed Lorus Therapeutics Inc. ("**New Lorus**"), 6707157 Canada Inc. and Pinnacle International Lands, Inc. As a result of the plan of arrangement and reorganization, among other things, each common share of Old Lorus was exchanged for one common share of New Lorus and the assets (excluding certain future tax attributes and related valuation allowance) and liabilities of Old Lorus (including all of the shares of its subsidiaries held by it) were transferred, directly or indirectly, to the Company and/or its subsidiaries. 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 directors as Old Lorus prior to the Arrangement Date. At the Arrangement Date, New Lorus' articles of incorporation were amended to change the name of the Company from 6650309 Canada Inc. to Lorus Therapeutics Inc.

Lorus currently has one subsidiary, NuChem, of which Lorus owns 80% of the issued and outstanding voting share capital and 100% of the issued and outstanding non-voting preference share capital. On May 31, 2009, GeneSense, of which Lorus owned 100% of the issued and outstanding share capital, was wound up into Lorus and subsequently dissolved. Until June 22, 2009, Lorus owned 100% of the issued and outstanding share capital of Pharma Immune, at which time it disposed of these shares. See "Business Overview - Financial Strategy - Secured Convertible Debentures."

Lorus' common shares are listed on the TSX under the symbol "LOR".

The address of the Company's head and registered office is 2 Meridian Road, Toronto, Ontario, Canada, M9W 4Z7, and our phone number is (416) 798-1200. Our corporate website is www.lorusthera.com. The contents of the website, and items accessible through the website, are specifically not included in this Annual Report by reference.

D. Property, Plant and Equipment

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, 2013.

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

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

A. Operating Results

The following discussion should be read in conjunction with the audited Consolidated Financial Statements of the Company for the year ended May 31, 2012 and the accompanying notes (the "**Consolidated Financial Statements**") set forth elsewhere in this Annual Report. The Consolidated Financial Statements, and all financial information discussed below, have been prepared in accordance with IFRS as published by the International Accounting Standards Board (IASB). All amounts are expressed in Canadian dollars unless otherwise noted. In this Management's Discussion and Analysis, "**Lorus**", the "**Company**", "**we**", "**us**" and "**our**" each refers to Lorus Therapeutics Inc. both before and after the Arrangement Date.

Overview

Lorus is a life sciences company focused on the discovery, research and development of effective anticancer therapies with a high safety profile. Lorus has worked to establish a diverse anticancer product pipeline, with products in various stages of development ranging from pre-clinical to a completed Phase II clinical trial. A growing intellectual property portfolio supports our diverse product pipeline.

We believe that the future of cancer treatment and improved patient quality of life lies in drugs that are not only effective with minimal side effects, but also approach the treatment of cancer in novel ways through drugs that offer a unique mechanism of action. Many drugs currently approved for the treatment and management of cancer are toxic with often limiting side effects, especially when used in combination. We therefore believe that a product development plan based on novel, effective drugs with minimal potential for toxicity alone or in combination will have broad applications in cancer treatment.

Lorus' strategy is to continue the development of our product pipeline using several therapeutic approaches. Each therapeutic approach is dependent on different technologies, which we believe mitigates the development risks associated with a single technology platform. We evaluate the merits of each product throughout the clinical trial process and consider commercial viability as appropriate. The most advanced anticancer drugs in our pipeline, each of which flow from different platform technologies, are small molecules, immunotherapeutics, and antisense.

Our business model is to take our product candidates through pre-clinical testing and into Phase I and Phase II clinical trials. It is our intention to partner or co-develop these drug candidates after successful completion of Phase I or II clinical trials. Lorus will give careful consideration in the selection of partners that can best advance its drug candidates into a pivotal Phase III clinical trial and, upon positive results, successfully commercialize our products on a global or regional basis. Our objective is to receive upfront and milestone payments as well as sales royalties from such partnerships, which will support continued development of our other product candidates.

Our success is dependent upon several factors, including, maintaining sufficient levels of funding through public and/or private financing, establishing the efficacy and safety of our products in clinical trials and securing strategic partnerships.

Our net loss and comprehensive loss for the year ended May 31, 2012 decreased to $4.6 million ($0.23 per share) compared to $5.0 million ($0.38 per share) for the year ended May 31, 2011. The decrease in net loss and other comprehensive loss for the year ended May 31, 2012 compared with the prior year is due primarily to lower research and development costs of $348 thousand resulting from no further spending on the LOR-2040 development plan in the current year.

We utilized cash of $2.4 million in our operating activities in the year ended May 31, 2012 compared with $5.8 million in the prior year. The decrease in the current year is the result of lower spending combined with higher accounts payable, accrued liabilities and promissory note payable balances in the current year.

At May 31, 2012, we had cash and cash equivalents of $320 thousand compared to $911 thousand at May 31, 2011 and $667 thousand at June 1, 2010. Subsequent to year end we completed a private placement raising $6.6 million in gross proceeds which will be available for use in Fiscal 2013. In connection with the private placement the Company paid a cash finders fee equal to 6% of the gross proceeds of the private placement and issued 1,237,500 finder's warrants (exercisable into units) at an exercise price of $0.32 each. Following the offering the Company repaid all outstanding promissory notes and no longer has any liabilities outside of accounts payable and accruals.

The Company invests in highly rated and liquid debt instruments. Investment decisions are made in accordance with an established investment policy administered by senior management and overseen by the board of directors. Working capital (representing primarily cash, cash equivalents, and other current assets less current liabilities) at May 31, 2012 was a deficiency of $2.1 million as compared to $140 thousand at May 31, 2011.

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, 2012, 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)*	**2012**	2011
REVENUE	**$ -**	$ -
EXPENSES		
Research and development	**2,170**	2,518
General and administrative	**2,430**	2,420
Operating expenses	**4,600**	4,938
Finance expense	**20**	71
Finance income	**(6)**	(14)
Net finance expense (income)	**14**	57
Net loss and total comprehensive loss for the year	**4,614**	4,995
Basic and diluted loss per common share	**$ 0.23**	$ 0.38
Weighted average number of common shares outstanding used in the calculation of:		
Basic and diluted loss per share	**20,260**	13,157
Total Assets	**$ 668**	$ 1,398
Total Long-term liabilities	**$ -**	$ -

Recent Accounting Pronouncements Adopted - IFRS

2012

Effective June 1, 2011 the Company adopted International Financial Reporting Standards (IFRS) as issued by the IASB. The effects of the conversion from Canadian GAAP to IFRS are identified in Note 16 "Transition To IFRS" of our consolidated financial statements for year ended May 31, 2012 included in Item 18.

2011

There were no new accounting policies adopted in the fiscal year ended May 31, 2011 under Canadian GAAP.

Critical Accounting Policies

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 in accordance with the transition to IFRS. 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 Annual Report. Other important accounting polices are described in note 3 to the Consolidated Financial Statements included in Item18 of this Annual Report.

Determination of impairment of goodwill and equipment

Under IAS 36, Impairment of Assets ("IAS 36"), the Company is required to make a formal estimate of the recoverable amount and the carrying amount of a cash-generating unit ("CGU") that is subject to impairment testing. The recoverable amount under IAS 36 is the higher of fair value less costs to sell or value in use. The carrying amounts of the Company's non-financial assets including equipment are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In estimating value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In assessing carrying values and impairment of non-financial assets, including goodwill and equipment, management makes judgments in determining recoverable amounts. Due to the development stage of the Company there is a significant amount of subjectivity when estimating future cash flows and applying a discount to any cash flow model. Changes in these estimates could have a significant impact on the valuation of these non-financial assets.

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.

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 is accumulating tax loss carryforward balances creating a deferred tax asset. Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses 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, prior year research and development expenses, and investment tax credits. 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.

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 behaviors 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 Yet To Be Adopted - IFRS

Please refer to note 3 (n) of the Company’s financial statements located at Item 18 for details related to accounting pronouncements not yet adopted.

Recent Accounting Pronouncements Yet To Be Adopted - U.S. GAAP

The Company no longer prepares reports under U.S. GAAP following the adoption of IFRS.

Operating Results

Research and Development

Research and development expenses totaled $2.2 million in the year ended May 31, 2012 compared to $2.5 million during the prior year. Research and development expenses consist of the following:

		2012	2011
Program costs (see below)	$	**1,900**	2,298
Deferred share unit costs		**91**	—
Stock-based compensation		**146**	146
Depreciation of equipment		**33**	39
	$	**2,170**	2,518

Program costs by program:

		2012	2011
Small molecule program	**$**	**1,900**	1,672
Immunotherapy		**—**	—
RNA-targeted therapies		**—**	626
	$	**1,900**	2,298

The decrease in research and development expenses is attributable to a reduction in program spending to $1.9 million compared with $2.3 million in the prior year. The decrease from the prior year is due to no further spending on our RNA-targeted therapies, compared with $626 thousand in the prior year. This reduction is offset by higher resources allocated to the development of our small molecule program, in particular the ongoing Phase I clinical trial for LOR-253 and the LOR-500 discovery program. The reduction in program expenditures is offset by higher deferred share unit costs which represent the fair value of units allocated to research and development expense issued in March 2012. No deferred share units were issued or outstanding in the year ended May 31, 2011.

General and Administrative

General and administrative expenses totaled $2.4 million for the year ended May 31, 2012 compared to $2.4 million in the prior year. General and administrative expenses consisted of the following:

		2012	2011
General and administrative excluding salaries	$	**1,240**	1,354
Salaries		**605**	747
Deferred share unit costs		**213**	—
Stock-based compensation		**361**	302
Depreciation of equipment		**11**	17
	$	**2,430**	2,420

General and administrative expenses excluding salaries decreased during the year ended May 31, 2012 compared with the prior year. This decrease is mainly attributable to expenses related to a terminated financing incurred during the year ended May 31, 2011 offset by higher legal costs during the current year associated with corporate and licensing activities. Salary expenses decreased in the year ended May 31, 2012 compared with the prior year due to headcount reductions in the current year. Deferred share unit costs incurred in the current year relate to the fair value of units allocated to general and administrative expense issued in March 2012. No deferred share units were issued or outstanding in the year ended May 31, 2011.

Finance Expense

Finance expense totaled $20 thousand for the year ended May 31, 2012 compared with $71 thousand for the prior year. Finance expense incurred in the current year relates to amounts drawn on the $1.8 million related party promissory note at a rate of 10% described below. The balance at May 31, 2012 of $900 thousand was repaid subsequent to year end. Finance expense in the prior year relates to interest accrued at a rate of 10% on the related party promissory notes repaid in November 2010 (described under 'Promissory Notes' and 'Rights Offering').

Finance Income

Finance income totaled $6 thousand in the year ended May 31, 2012, compared to $14 thousand in the same period in the prior year. Finance income represents interest earned on our cash and cash equivalent balances and the decrease in finance income during the current year is the result of a lower average cash and cash equivalents balance throughout the year ended May 31, 2012 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, 2012 was $4.6 million ($0.23 per share) compared to $5.0 million ($0.38 per share) in the year ended May 31, 2011. The decrease in net loss and total comprehensive loss of $381 thousand in the year ended May 31, 2012 compared with the prior year is due primarily to a reduction in research and development expenses of $348 thousand in the current year. The decrease in research and development costs is due to reduced program expenditures relating to no further spending on our RNA-Targeted Therapies. In the prior year we incurred costs related to the development of a Phase III clinical trial protocol. The spending on our RNA-Targeted Therapies was partially redirected by higher resources allocated to the development of our small molecule program, including the LOR-253 Phase 1 clinical trial currently underway as well as the LOR-500 discovery program.

Share Consolidation

In accordance the authority granted by shareholders at the Company's annual and special meeting on November 30, 2009 to permit it to implement a consolidation of the Company's outstanding common shares, the Company's board of directors approved a 1-for-30 share consolidation which became effective May 25, 2010. The share consolidation affected all of Lorus' common shares, stock options and warrants outstanding at the effective time. Fractional shares were not issued. Prior to consolidation the Company had approximately 298 million shares outstanding. Following the share consolidation, Lorus has approximately 9.9 million common shares outstanding. Similarly, prior to consolidation, the Company had approximately 20.2 million stock options and 36.9 million warrants to purchase common shares outstanding. Following the share consolidation, the Company had approximately 673 thousand stock options and 1.3 million warrants to purchase common shares outstanding.

In this Annual Report, all references to number of shares, stock options and warrants in the current and past periods, unless otherwise specified, have been adjusted to reflect the impact of the consolidation. All amounts based on the number of shares, stock options or warrants, such as earnings (loss) per share and weighted average issuance price in the case of stock options have been adjusted to reflect the impact of the 1-for-30 share consolidation.

Corporate Changes

As discussed above, on July 10, 2007, the Company and Old Lorus completed a plan of arrangement and corporate reorganization with, among others, 6707157 Canada Inc. and Pinnacle International Lands, Inc. As part of the Arrangement, all of the assets and liabilities of Old Lorus (including all of the shares of its subsidiaries held by it), with the exception of certain future tax assets were transferred, directly or indirectly, from Old Lorus to the Company. Securityholders in Old Lorus exchanged their securities in Old Lorus for equivalent securities in New Lorus and the board of directors and management of Old Lorus continued as the board of directors and management of New Lorus. New Lorus obtained substitutional listings of its common shares on both the TSX and the NSYE Amex (formerly, the American Stock Exchange). As discussed under the heading "Regulatory Matters" below, the Company voluntarily delisted from the NYSE Amex effective October 31, 2008.

As part of the Arrangement, the Company changed its name to Lorus Therapeutics Inc. and continued as a biopharmaceutical company, specializing in the research and development of pharmaceutical products and technologies for the management of cancer as a continuation of the business of Old Lorus. In October 2007, Old Lorus changed its name from 4325231 Canada Inc. to Global Summit Real Estate Inc.

Quarterly Results of Operations

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 have been consistent over the past eight quarters with increased activity in the quarter ended February 28, 2011 resulting from the initiation of the Phase I clinical trial for LOR-253 and associated activities. Expenditures were lower in the quarter ended May 31, 2012 due to income tax credits earned.

The increased general and administrative costs in the quarter ended November 30, 2011 is due to one time stock option grants and cancellations during the quarter which resulted in higher than normal options expense. Increased expense in the quarter February 28, 2011 was due to one time stock option expense related to a large tranche of options with partially immediate vesting.

Cash used in operating activities fluctuates significantly due primarily to increases and decreases in the accounts payables, accrued liabilities and promissory notes payable balances. The positive amount of cash used in operating activities during the quarter ended May 31, 2012 was due to cash provided from short-term promissory notes advanced during the quarter in excess of cash outflows during the quarter.

(Amounts in 000's except for per common share data)	**Q4 May 31, 2012**	**Q3 Feb 29, 2012**	**Q2 Nov 30, 2011**	**Q1 Aug 31, 2011**	**Q4 May 31, 2011**	**Q3 Feb 28, 2011**	**Q2 Nov. 30, 2010**	**Q1 Aug. 31, 2010**
Revenue	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Research and development expense	391	543	648	588	536	847	621	514
General and administrative expense	605	479	811	535	545	701	556	618
Net (loss)	(1,013)	(1,023)	(1,457)	(1,121)	(1,077)	(1,542)	(1,220)	(1,156)
Basic and diluted net (loss) per share	$ (0.05)	$ (0.05)	$ (0.07)	$ (0.06)	$ (0.07)	$ (0.10)	$ (0.11)	$ (0.12)
Cash used in operating activities	$ 217	$ (740)	$ (811)	$ (1,077)	$ (926)	$ (1,676)	$ (2,560)	$ (661)

Earnings per share ("**EPS**") are shown as reported as per the quarterly published Consolidated Financial Statements. Share issuances during the second quarter result in different weighted average share numbers each quarter and as such the quarterly EPS will not total the annual EPS.

Outstanding Share Data

As at September 26, 2012, the Company had 42.3 million common shares issued and outstanding. In addition, as of September 26, 2012, there were 3.4 million common shares issuable upon the exercise of outstanding stock options and 27 million common shares issuable upon the exercise of common share purchase warrants priced at $0.45 and expiring June 2014 and August 2016.

B. Liquidity and Capital Resources

The Company's objectives when managing capital are to:

- Maintain its ability to continue as a going concern in order to provide returns to shareholders and benefits to other stakeholders;

- 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 cash and cash equivalents and 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.

Pursuant to the commitment letter (described under Promissory Notes Payable) the Company has issued a grid promissory note to Mr. Herbert Abramson ("Mr. Abramson") a director of the Company that allows Lorus to borrow funds up to $1.8 million. The funds may be borrowed at a rate of up to $300 thousand per month, incur interest at a rate of 10% per year and are due and payable on November 28, 2012. As at May 31, 2012, the Company had borrowed $900 thousand under the promissory note.

The loan and all accrued interest was repaid by the Company on June 27, 2012.

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, 2011.

Deferred Share Unit Plan

As at May 31, 2012, 780 thousand deferred share units have been issued (May 31, 2011 - nil, June 1, 2010 - nil), with a cash value of $304 thousand representing the fair market value of the units as of May 31, 2012 (May 31, 2011 - nil, June 1, 2010 - nil) recorded in accrued liabilities.

Unit Financing

On July 22, 2011, Lorus filed a final short-form prospectus in connection with a best efforts offering (the "Offering") of a minimum of 5,000,000 units of the Company (the "Units") at a price of $0.40 per Unit for gross proceeds of $2,000,000 and a maximum of 10,000,000 Units for gross proceeds of $4,000,000. Each Unit consisted of one common share of Lorus (a "Common Share") and one common share purchase warrant of Lorus (a "Warrant"). 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 per Common Share (the "Exercise Price"). If on any date (the "Accelerated Exercise Date") the 10-day volume weighted average trading price of the Common Shares on the Toronto Stock Exchange equals or exceeds 200% of the Exercise Price, then upon the Company sending the holders of Warrants written notice of such Accelerated Exercise Date 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 on which such written notice is sent to holders of Warrants.

In connection with the Offering, Mr. Abramson, a director of Lorus, entered into an irrevocable commitment letter on June 20, 2011, and amended July 11, 2011, to purchase, directly or indirectly, common shares and common share purchase warrants (or as may otherwise be agreed) in the capital of Lorus (collectively the "Securities") having an aggregate subscription price equal to the difference (the "Commitment Amount"), if any, between (a) the sum of (i) the gross proceeds realized by Lorus in the Offering and (ii) the gross proceeds received by Lorus in respect of all financings completed by Lorus from the date of the final short-form prospectus to November 30, 2011 and (b) $4.0 million.

The Offering closed on August 15, 2011 for total gross proceeds of $2.2 million. In connection with the Offering, Lorus has issued 5.5 million Common Shares and 5.5 million Warrants. Mr. Abramson purchased 2.4 million Units as part of the Offering.

The total costs associated with the transaction were approximately $395 thousand which included the $25 thousand which represented the fair value of the brokers' services provided as part of the Offering. Each broker warrant is exercisable for one Unit at a price of $0.40 per Unit for a period of 24 months following the closing of the Offering. The Company has 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, $1.2 million of the net proceeds were allocated to the common shares and $609 thousand to the common share purchase warrants.

Warrant Repricing

On November 29, 2011, shareholders of the Company (excluding insiders who also held warrants) approved a resolution to amend the exercise price of certain outstanding warrants from $1.33 to the 5 day volume weighted average trading price on the Toronto Stock Exchange five days prior to approval plus a 10% premium. The revised warrant exercise price is $0.28. The Company calculated an increased value attributed to the warrants of $239 thousand related to the amendment. This increase was calculated by taking the Black Scholes value of the warrants immediately before the amendment and immediately after the amendment. There were 4.2 million warrants which were amended and of those 3.6 million are held by Mr. Abramson, a director of the Company

December 2010 Private Placement

On December 1, 2010, pursuant to a private placement, the Company issued 1.6 million common shares in exchange for cash consideration of $1.66 million. The total costs associated with the transaction were approximately $20 thousand. The Company has allocated the net proceeds of the private placement to common shares. Mr. Herbert Abramson, a director of the Corporation, subscribed for 1,410,000 common shares, representing approximately 89% of the total number of common shares issued through the private placement. No commission was paid in connection with the private placement.

November 2010 Rights Offering

On September 27, 2010, Lorus filed a final short form prospectus in each of the provinces of Canada in connection with a distribution to its shareholders in eligible jurisdictions outside the United States of the Rights Offering, under which holders of common shares of the Company as of the October 12, 2010 record date received one right for each common share held as of such date. Each two rights entitled the holder thereof to purchase a unit of the Company at a price of $1.11 per unit. Each unit consisted of one common share of the Company and one warrant to purchase an additional common share of the Company at a price of $1.33 until May 2012.

A total of 4.2 million units of the Company at a price of $1.11 per unit were issued in connection with the Rights Offering. As a result of the Rights Offering, Lorus issued 4.2 million common shares and 4.2 million common share purchase warrants.

Additionally, the Company secured a standby purchase arrangement of $4 million by Herbert Abramson, one of Lorus' directors. Mr. Abramson agreed to make an investment such that the minimum gross proceeds of the proposed rights offering would be $4 million. No fee was payable to Mr. Abramson for this commitment. In accordance with the terms of the stand-by purchase agreement, Mr. Abramson subscribed for 3.6 million of the 4.2 million units of the offering for $4.0 million. Mr. Abramson also provided the Company with interim financing by way of three $500 thousand monthly loans, advanced in August, September and October 2010. The loans were unsecured, had six-month terms (or the earlier of the closing of the rights issue) and bore interest at an annual rate of 10%. All three notes were repaid upon the close of the Rights Offering.

The total costs associated with the transaction were approximately $370 thousand. The Company has allocated the net proceeds of the rights offering to the common shares and the common share purchase warrants based on their relative fair values. Based on relative fair values, $3.2 million of the net proceeds were allocated to the common shares and $1.0 million to the common share purchase warrants.

Promissory Notes

Pursuant to the commitment letter (described under 'Unit Offering' above) provided by Mr. Abramson, the Company has issued a grid promissory note to Mr. Abramson that allows us to borrow funds up to $1.8 million. The funds may be borrowed at a rate of up to $300 thousand per month, incur interest at a rate of 10% per year and are due and payable in full on November 28, 2012. The promissory note is subject to certain covenants which, if breached, could result in the promissory note becoming payable on demand. Lorus has not breached these covenants as of May 31, 2012 and has not received notice of any breach of these covenants by Mr. Abramson. At May 31, 2012 $900 thousand has been drawn under the promissory note and on June 27, 2012, the note and all accrued interest was repaid.

In April 2010, the Company entered into a loan agreement with Trapeze Capital Corp., a corporation affiliated with Mr. Abramson, to borrow $1 million. The loan amount, which was received on April 14, 2010, was unsecured, evidenced by a promissory note and bore interest at an annual rate of 10%. The principal and interest amount were due on October 14, 2010 and in August 2010 the due date was extended a further three months. This note was repaid at November 30, 2010.

In October 2009, the Company entered into a loan agreement with Mr. Abramson to borrow $1 million. The loan amount, which was received on October 6, 2009, was unsecured, evidenced by a promissory note and bore interest at an annual rate of 10%. The principal and interest were due in six months. The principal amount of $1.0 million was applied to subscribe for units as part of the November 27, 2009 private placement described below. This note was repaid at November 30, 2009.

November 2009 Private Placement

On November 27, 2009, pursuant to a private placement, the Company issued 1.366 million (post-consolidation) common shares and 683 thousand (post-consolidation) common share purchase warrants in exchange for cash consideration of $2.5 million. This amount includes the principal amount of $1.0 million originally received by way of a loan from a director, Mr. Abramson, on October 6, 2009, which was applied to subscribe for units as part of the private placement. In addition, the Company issued 72 thousand (post-consolidation) brokers' warrants to purchase an equivalent number of common shares at $2.40 (post-consolidation) until May 27, 2011. These warrants expired unexercised on May 27, 2011. The total costs associated with the transaction were approximately $250 thousand, which included the $77 thousand that represented the fair value of the brokers' warrants. The Company has allocated the net proceeds of the private placement to the common shares and the common share purchase warrants based on their relative fair values. Based on relative fair values, $1.7 million of the net proceeds were allocated to the common shares and $622 thousand to the common share purchase warrants.

August 2008 Rights Offering

On June 25, 2008, the Company filed a short-form prospectus for a rights offering to its shareholders.

Under the rights offering, holders of the Company's common shares as of the July 9, 2008 record date received one right for each common share held as of this record date. Each four rights entitled the holder thereof to purchase a unit of Lorus. Each unit consisted of one common share of Lorus at $3.90 and a one-half common share purchase warrant to purchase additional common shares of Lorus at $4.53 per common share until August 7, 2010.

Pursuant to the rights offering, the Company issued 951 thousand common shares and 571 thousand common share purchase warrants in exchange for cash consideration of $3.7 million. The total costs associated with the transaction were $500 thousand. The Company allocated the net proceeds of $3.2 million received from the issuance of the units to the common shares and the common share purchase warrants based on their relative fair values. The fair value of the common share purchase warrants has been determined based on an option pricing model. The allocation based on relative fair values resulted in the allocation of $2.8 million to the common shares and $417 thousand to the common share purchase warrants.

Cash Position

At May 31, 2012, we had cash and cash equivalents and short-term investments totaling $320 thousand compared to $911 thousand at May 31, 2011. Subsequent to year end we completed an equity offering of 20,625,000 units, each unit consisting of one common share and one common share purchase warrant, (described below under "Subsequent Events") which will provided us with $6.6 million in gross proceeds. Subsequent to the equity offering, 396,500 common share purchase warrants related to the August 2011 public offering were exercised for gross proceeds of $178 thousand. We invest in highly rated and liquid debt instruments. Investment decisions are made in accordance with an established investment policy administered by senior management and overseen by the board of directors. Working capital (representing primarily cash, cash equivalents, short-term investments and other current assets less current liabilities) at May 31, 2012 was a deficiency of $2.1 million as compared to $140 thousand at May 31, 2011.

We do not expect to generate positive cash flow from operations in the next several years 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. Negative cash flow will continue until such time, if ever, that we receive regulatory approval to commercialize any of our products under development and revenue from any such products exceeds expenses.

If we are able to secure additional financing, we intend to use these resources to fund our existing drug development programs and develop new programs from our portfolio of preclinical research technologies. The amounts actually expended for research and drug development activities and the timing of such expenditures will depend on many factors, including our ability to raise additional capital, the progress of the Company's research and drug development programs, the results of preclinical and clinical trials, the timing of regulatory submissions and approvals, the impact of any internally developed, licensed or acquired technologies, our ability to find suitable partnership agreements to assist financially with future development, the impact from technological advances, determinations as to the commercial potential of our compounds and the timing and development status of competitive products.

As discussed above, management has forecast that our current level of cash, cash equivalents, including the proceeds described under "Subsequent Events" will be sufficient to execute its current planned expenditures for the next nine to twelve months without further investment. We intend to continue to pursue additional funding and partnership opportunities to execute our planned expenditures in the future, but there can be no assurance that sufficient capital will be available to enable us to meet these continuing expenditures, or if the capital is available, that it will be available on terms acceptable to us. If we are unable to obtain sufficient financing on acceptable terms in order to meet our future operational needs, there is substantial doubt as to whether we will be able to continue as a going concern and realize our assets and pay our liabilities as they fall due, in which case investors may lose their investment.

Terminated U.S. Financing

In April 2010, the Company filed a registration statement on Form F-1 with the SEC for an offering of up to US$17.5 million of units in the United States.

In August 2010, the Company announced that, due to unfavorable market conditions, the registration statement would be withdrawn and the public financing would not proceed. The Company incurred fees of approximately $569 thousand related to this filing which were included in general and administrative expenses for the year ended May 31, 2010. An additional $156 thousand in fees were incurred in the year ended May 31, 2011 and included in general and administrative expenditures.

Subsequent Events

On June 8, 2012, the Company completed a private placement whereby we issued 20,625,000 units consisting of one common share and one common share purchase warrant at a price of $0.32 for gross proceeds of $6.6 million. Each common share purchase warrant is exercisable for a period of 24 months from the date of issuance. If after one year the closing price of the common shares on the Toronto Stock Exchange equals or exceeds $0.90 for twenty consecutive days, then the Warrants shall only be exercisable for a period of 30 days following the date on which such written notice is sent to holders of the common share purchase warrants. In connection with the private placement the Company paid a cash finder's fee equal to 6% of the gross proceeds of the private placement and issued 1,237,500 finder's warrants (exercisable into units) at an exercise price of $0.32 each.

On June 27, 2012, the Company repaid the $900 thousand principal and all accrued interest on the outstanding promissory note (discussed below).

In June 2012, 396,500 common share purchase warrants related to the August 2011 public offering (discussed below) were exercised for gross proceeds of $178 thousand.

On August 3, 2012, the Board of Directors issued 1.8 million stock options to Directors, officers and employees at an exercise price of $0.48 which was the closing price of the Companys stock on the Toronto Stock Exchange on August 2, 2012. These options will be accounted for in the first quarter of fiscal 2013.

C. Research and development, patents and licenses, etc.

Certain information concerning research and development and intellectual property is set forth in Item 4, "Information on the Company".

D. Trend information

We have a history of operating losses and have not been profitable since our inception in 1986. We expect to continue to incur losses for at least the next several years as we and our collaborators and licensees pursue clinical trials and research and development efforts. See "Risk Factors" above.

E. Off-balance sheet arrangements

As at May 31, 2012, we have not entered into any off-balance sheet arrangements.

F. Tabular disclosure of contractual obligations

(In thousands)

Contractual Obligations	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**	**Total**
Operating leases	$127	$13	$5	$ -	$145

In addition, the Company is party to certain licensing agreements that require it to pay a proportion of any fees that it may receive from future revenues or milestone payments. As of May 31, 2012 no amounts have been received by the Company relating to these licensing agreements and therefore, no amounts are owing and the amount of future fees is not determinable.

The Company has entered into various consulting agreements that upon execution of a partnership agreement could result in liabilities owing to such consultants. The amounts payable in these agreements are contingent on the amounts receivable by Lorus under such partnership agreements. As of May 31, 2012, no amounts were owing and the amounts of future fees payable to the consultants are not determinable.

The Company has entered into various contracts with service providers with respect to the LOR-253 phase I clinical trial. These contracts could result in future payment commitments of approximately $1.4 million. Of this amount $439 thousand has been paid and $70 thousand has been accrued as at May 31, 2012 (May 31, 2011 - $165 thousand paid and $83 thousand accrued). The payments will be based on services performed and amounts maybe higher or lower based on actual services performed.

As at May 31, 2012, we have not entered into any off- balance sheet arrangements.

Indemnification

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 ("Old Lorus") into a new corporate entity which continued to operate as Lorus Therapeutics Inc. Under the arrangement, the Company agreed to indemnify 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:

i. prior to, at or after the effective time of the arrangement ("Effective Time") and directly or indirectly relating to any of the assets of Old Lorus 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 by Old Lorus 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 Old Lorus or the arrangement.

The Company recorded a liability of $100 thousand, which it believes to be a reasonable estimate of the fair value of the obligation for the indemnifications provided as at May 31, 2012. There have been no claims on this indemnification to date.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

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, a Corporate Governance and Nominating Committee and a Compensation Committee the members of each such committee are shown below. As at May 31, 2012, our directors and executive officers, as a group, beneficially owned, directly or indirectly, or exercised control over approximately 9.4 million common shares or approximately 44% of our outstanding common shares.

Name and Province/State and Country of Residence	Position	Director or Officer Since
Herbert Abramson[1][3] Ontario, Canada	Director	July 2007
Dr. Denis Burger[1][2] Oregon, United States	Director	September 2007
Dr. Mark Vincent[3] Ontario, Canada	Director	September 2007
Warren Whitehead[1] Ontario, Canada	Director	April 2011
Dr. Jim A. Wright[2] Ontario, Canada	Chairman, Director, former President and Chief Executive Officer	October 1999
Dr. Aiping H. Young Ontario, Canada	President and Chief Executive Officer, Director	October 1999[4]
Elizabeth Williams Ontario, Canada	Acting Chief Financial Officer and Director of Finance	November 2005
Dr. Yoon Lee Ontario, Canada	Vice President Research	May 2008

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

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

(4) Dr. Young has been with the Company since October 1999. She became President, Chief Executive Officer and director in October 2006.

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

Mr. Herbert Abramson: Mr. Abramson has been in the investment industry for 29 years managing portfolios for high net worth individuals. He is a co-founder, Chairman and Portfolio Manager of Trapeze Capital Corp., an investment dealer and portfolio management company and is also Chairman and Portfolio Manager of Trapeze Asset Management Inc., an affiliated investment counseling company. Mr. Abramson is a member of the Law Society of Upper Canada and practiced corporate/securities law for 12 years before going into the investment business. He is also currently a director of St Andrew Goldfields Ltd.

Dr. Denis Burger: Dr. Burger is currently the executive Chairman of BioCurex, Inc. 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 PhD in Microbiology and Immunology from the University of Arizona. Dr. Burger is also currently on the Board of Trinity Biotech plc. and BioCurex, 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. 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. since 2006 and until 2005 was Professor in the Faculties of Science and Medicine at the University of Manitoba. 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, and served as Lorus' President, Chief Scientific Officer and a member of the Board of Directors in October 1999 on a merger with GeneSense. In September 2006, he stepped down as the President and Chief Executive Officer of Lorus.

Mr. Warren Whitehead: Mr. Whitehead is a Certified Management Accountant who has held senior financial management positions in several biotechnology and pharmaceutical companies. Most recently 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 that Mr. Whitehead was CFO at Labopharm Inc., where he completed a series of public equity financings and a NASDAQ IPO. He is currently a member 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.

Dr. Aiping Young: Dr. Young has been our President and Chief Executive Officer since September 21, 2006 and was a cofounder with Dr. Wright of GeneSense Technologies Inc. Dr. Young previously held the position of Chief Operating Officer, Senior Vice President, Research and Development and Chief Technology Officer at Lorus.

Elizabeth Williams: Prior to joining Lorus in July 2004, Ms. Williams was an Audit Manager with Ernst & Young LLP. Ms. Williams is a chartered accountant and has received a bachelor's degree in business administration.

Dr. Yoon Lee: Dr. Lee is currently Vice President of Research. Dr. Lee has been with Lorus for ten years, most recently serving as the Director of Research. He joined Lorus in 1999 through the merger with GeneSense Technologies Inc., where he was a Research Scientist integrally involved in the development of GeneSense oligonucleotide therapeutics program.

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.

B. Compensation

Summary of Executive Compensation

The following table details the compensation information for the most recent fiscal year of the Corporation, for the President and Chief Executive Officer, the Director of Finance and Acting Chief Financial Officer and the Vice President of Research ("**Named Executive Officers**"). The figures are in Canadian dollars.

Summary Compensation Table

Name and Principal Position	Fiscal Year	Salary ($)	Share-based awards[2] ($)	Option-based awards[1] ($)	Non-equity incentive plan compensation		Total Compensation ($)
					Annual incentive plans ($)	Long-term incentive plans	
Dr. Aiping Young	2012	337,334	304,200	49,500	Nil	Nil	691,034
President and Chief Executive Officer	2011	342,819	N/A	644,711	127,845	Nil	1,115,375
Ms. Elizabeth Williams	2012	68,923	N/A	27,238	Nil	Nil	96,161
Director of Finance, Acting Chief Financial Officer	2011	66,322	N/A	54,385	808	Nil	120,707
Dr. Yoon Lee	2012	138,071	N/A	27,983	Nil	Nil	166,054
Vice President Research	2011	135,405	N/A	61,183	25,599	Nil	221,187

(1) In determining the fair value of these option awards, the Black-Scholes valuation methodology was used with the following assumptions: (i) expected life of five years; (ii) volatility of 123-125%; (iii) risk-free interest rate of 1.5%; and (iv) no dividend yield.

(2) During the year 780,000 Deferred Share Units were issued to Dr. Aiping Young. The fair value of these DSUs was $304,200 at May 31, 2012.

Name and Principal Position	Fiscal Year	Salary ($)	Bonus ($)	Other Annual Compensation ($)	Securities Under Options/SARs Granted (#)[1]	All Other Compensation ($)
Dr. Aiping Young	2012	337,334	Nil	Nil	275,000	304,200
President and Chief Executive Officer	2011	342,819	127,845	Nil	784,400	Nil
Ms. Elizabeth Williams	2012	68,923	Nil	Nil	162,000	Nil
Director of Finance, Acting Chief Financial Officer	2011	66,322	808	Nil	62,015	Nil
Dr. Yoon Lee	2012	138,071	Nil	Nil	167,000	Nil
Vice President, Research	2011	135,405	25,599	Nil	66,725	Nil

(1) Number of stock options granted during fiscal 2012. These options were granted on November 29, 2011 and March 29, 2012 at a price of $0.215 and $0.18 respectively and have a ten-year life.

Directors' Compensation

The following table details the compensation received by each director for the fiscal year ended May 31, 2012:

Name	Fees earned ($)	Share-based awards ($)	Option-based awards ($)[1]	All Other Compensation ($)	Total Compensation ($)
Mr. Herbert Abramson	34,500	Nil	6,425	Nil	40,925
Dr. Denis Burger	38,500	Nil	19,150	Nil	57,650
Dr. Mark Vincent	27,500	Nil	6,425	Nil	33,925
Mr. Warren Whitehead	32,500	Nil	3,594	Nil	36,094
Dr. Jim Wright	53,500	Nil	99,125	Nil	152,625

(1) In determining the fair value of these option awards, the Black-Scholes valuation methodology was used with the following assumptions: (i) expected life of five years; (ii) volatility of 123-125%; (iii) risk free interest rate of 1.5%; and (iv) no dividend yield.

During the fiscal year ended May 31, 2012, each director who was not an officer of the Corporation was entitled to receive 15,000 stock options (the Chair received 30,000) and, at his election, common shares, deferred share units and/or cash compensation for attendance at the board of directors of the Corporation committee meetings. During the year ended May 31, 2012 the Chair was granted an additional 525,000 options and the directors, in aggregate, an additional 156,000 options. These grants were one time option grants. Compensation consisted of an annual fee of $15,000 (the Chair received $35,000) and $1,500 per Board meeting attended ($4,500 to the Chair of a Board meeting). Members of the Audit Committee received an annual fee of $8,000 (the Chair received $10,000). Each member of the Compensation Committee and Corporate Governance and Nominating Committee received an annual fee of $5,000 per committee. Board members (including the Chair) receive $500 for meetings held via conference call. There have not been any changes to the fees from the prior year. Non-executive directors are reimbursed for any out-of pocket travel expenses incurred in order to attend meetings. Executive directors are not entitled to directors' compensation or reimbursement of travel expenses.

Directors are entitled to participate in our Deferred Share Unit Plan. See "Equity Compensation Plans - Directors' and Officers' Deferred Share Unit Plan". None of our directors participated in this plan in the years ended May 31, 2012 or 2011.

Management Contracts

Under the employment agreement with President and Chief Executive Officer of the Corporation, Dr. Aiping Young, dated September 21, 2006, Dr. Young's salary for fiscal 2012 was $330,000. This agreement provides for a notice period equal to 18 months plus one additional month for each year of employment under the agreement in the event of termination without cause or a resignation. If within 36 months of a change of control of Lorus, Dr. Young's employment is terminated without cause or if she terminates the agreement with good reason as defined in the agreement, then she is entitled to receive the equivalent of two years of her basic salary plus one month's salary for each year under the agreement, plus an annual bonus prorated over the severance period (based on the bonus paid in respect of the last completed fiscal year).

Dr. Young will also be entitled to benefits coverage for the severance period or a cash payment in lieu thereof. The employment agreement provides that the Corporation may at any time assign Dr. Young to perform other functions that are consistent with her skills, experience and position within the Corporation. Dr. Young reports directly to the Board. The bonus and options allocation of the President and Chief Executive Officer is determined by the Board and is awarded based 100% on achievement of corporate objectives. Dr. Young is entitled to five weeks' annual vacation prorated to reflect a period of employment less than a full calendar year.

Under the employment agreement with Director of Finance of the Corporation, Ms. Elizabeth Williams, dated May 31, 2004, Ms. Williams' salary for fiscal 2012 was $67,000. Ms. Williams currently provides services on a part-time basis. This agreement provides for a notice period equal to the greater of one month and the applicable notice entitlement under employment legislation in the event of termination. Ms. Williams reports to the Chief Executive Officer. The bonus and options allocation of the Director of Finance is as recommended to the Board by the Chief Executive Officer. Ms. Williams is entitled to four weeks of paid vacation, prorated to reflect a period of employment less than a full calendar year.

Under the employment agreement with Vice President of Research of the Corporation, Dr. Yoon Lee, dated May 5, 2008, Dr. Lee's salary of for fiscal 2012 was $135,000. This agreement provides for a notice period equal to 4 months plus one additional month for each year of employment, to a maximum of 12 months. Dr. Lee reports to the Chief Executive Officer. The bonus and options allocation of the Vice President of Research is as recommended to the Board by the Chief Executive Officer. Dr. Lee is entitled to five weeks of paid vacation, prorated to reflect a period of employment less than a full calendar year.

Salary and bonus amounts for each of the Named Executive Officers paid during the fiscal year 2012 were as set out in the Summary Compensation Table above.

Equity Compensation Plans

The following table sets forth certain details as at the end of the fiscal year ended May 31, 2012 with respect to compensation plans pursuant to which equity securities of the Company are authorized for issuance.

	Number of Shares to be issued upon exercise of outstanding options (a)		Weighted-average exercise price of outstanding options (b)	Number of Common shares remaining available for future issuance under the equity compensation plans (Excluding Securities reflected in Column (a)) (c)		Total Stock Options outstanding and available for Grant (a) + (c)	
Plan Category	**Number**	**% of Common shares outstanding**		**Number**	**% of Common shares outstanding**	**Number**	**% of Common shares outstanding**
Equity compensation plans approved by Shareholders	1,611,835	7.6%	$0.44	1,572,377	7.4%	3,184,212	15%

Stock Option Plans

The stock option plans were established to advance the interests of Lorus by:

- Providing Eligible Persons (as defined below) with additional incentives;
- Encouraging stock ownership by Eligible Persons;
- Increasing the interest of Eligible Persons in the success of Lorus;
- Encouraging Eligible Persons to remain loyal to Lorus; and
- Attracting new Eligible Persons to Lorus.

Our original stock option plan was established in 1993 pursuant to our 1993 Stock Option Plan (the "**1993 Plan**"); however, due to significant developments in the laws relating to share option plans and our then-future objectives, in November 2003 we created the 2003 Stock Option Plan (the "**2003 Plan**"), ratified by our shareholders, pursuant to which all future grants of stock options would be made.

The Compensation Committee, as authorized by the Board, administers our stock option plans (collectively, the "**Stock Option Plans**").

The 1993 Plan

Under the 1993 Plan, options were granted to directors, officers, consultants and employees of the Corporation or its subsidiaries ("**Eligible Persons**"). The total number of options issued under the 1993 Plan is 2,749. This represents 0.00% of the Company's issued and outstanding capital as at October 28, 2011. There were no further option grants made under the 1993 Plan after November 2003. Therefore, no further options are issuable under the 1993 Plan. The total number of common shares issuable under actual grants pursuant to the 1993 Plan is 2,749, being 0.00% of the Company's issued and outstanding capital as at May 31, 2012.

The number of common shares issuable to insiders, at any time, under the 1993 Plan and any other compensation arrangement of the Corporation cannot exceed 10% of the issued and outstanding common shares of the Corporation. The number of shares issued to insiders, within any one-year period, under the 1993 Plan and any other compensation arrangement of the Corporation cannot exceed 10% of the issued and outstanding common shares of the Corporation. The maximum percentage of common shares reserved for issuance to any one person is 5% of the issued and outstanding common shares of the Corporation. The exercise price of options granted under the 1993 Plan was established by the Board on the basis of the closing market price of common shares of the Corporation on the TSX on the last trading day preceding the date of grant. If such a price was not available, the exercise price was to be determined on the basis of the average of the bid and ask for the common shares on the TSX on the date preceding the date of grant. The Board determined the vesting period of options at the time of granting the option. The term of options granted under the 1993 Plan and outstanding as of October 7, 2004 is 10 years from the date of grant.

If an option holder ceases to be an officer, director, continuing consultant or employee of the Corporation or a subsidiary, each unexpired, vested option may be exercised within three months of the date of cessation. In the event of the death of an optionee, each unexpired, vested option may be exercised within nine months of the option holder's date of death.

Options granted under the 1993 Plan are not transferable. Currently, the 1993 Plan may be amended by the Board subject to regulatory approval in certain circumstances.

The 2003 Plan

Under the 2003 Plan, options may be granted to Eligible Persons. At May 31, 2012, the total number of options outstanding under the 2003 Plan is 1,609,086, representing 7.6% of the Corporation's issued and outstanding capital. Options to purchase up to an additional 1,572,377 common shares, being 7.4% of common shares issued and outstanding, remain available for grant under the 2003 Plan. The total number of common shares issuable under the 2003 Plan is 3,184,212. This represents 15% of the Corporation's issued and outstanding capital as at May 31, 2012. The total number of options issued under the 2003 Plan combined with those issued under the 1993 Plan and shares issued under the Alternative Compensation Plan (discussed below) will not exceed 15% of the common shares issued and outstanding at any time.

The maximum number of common shares reserved for issuance to insiders, at any time, under the 2003 Plan and any other compensation arrangement of the Corporation is 10% of the issued and outstanding common shares of the Corporation. The maximum number of common shares that may be issued to insiders, at any time, under the 2003 Plan and any other compensation arrangement of the Corporation within a 12 month period is 10% of the issued and outstanding common shares of the Corporation. The maximum number of common shares reserved for issuance to any one person is 5% of the issued and outstanding common shares of the Corporation. The exercise price of options granted under the 2003 Plan is established by the Board and will be equal to the closing market price of the common shares on the TSX on the last trading day preceding the date of grant. If there is no trading on that date, the exercise price will be the average of the bid and ask on the TSX on the last trading date preceding the date of grant. If not otherwise determined by the Board, an option granted under the 2003 Plan will vest as to 50% on the first anniversary of the date of grant of the option and an additional 25% on the second and third anniversaries after the date of grant. The Board fixes the term of each option when granted, but such term may not be greater than 10 years from the date of grant.

If an option holder is terminated without cause, resigns or retires, each option that has vested will cease to be exercisable three months after the option holder's termination date. Any portion of an option that has not vested on or prior to the termination date will expire immediately. If an option holder is terminated for cause, each option that has vested will cease to be exercisable immediately upon the Corporation's notice of termination. Any portion of an option that has not vested on or prior to the termination date will expire immediately.

Options granted under the 2003 Plan are not assignable.

Currently, the Board may amend the 2003 Plan subject to regulatory approval, provided that the Board may not make the following amendments without the approval of Shareholders:

- an amendment to the maximum number of common shares reserved for issuance under the 2003 Plan and under any other security based compensation arrangement of the Corporation;
- a reduction in the exercise price for options held by insiders;

- an extension to the term of options held by insiders; and
- an increase in the 10% limits on grants to insiders.

During the period June 1, 2011 to May 31, 2012, options to purchase 1,538,000 common shares were granted under the 2003 Plan at exercise prices between $0.185 and $0.21 per common share. During the year ended May 31, 2012, we granted options to employees, other than executive officers of the Corporation, to purchase 163,000 common shares, being 10.5% of the total incentive stock options granted during the year to employees, executive officers and directors.

Alternative Compensation Plan

In November 2009, after receiving shareholder approval, the Company adopted an alternate compensation plan (the "**ACP**"), which enables Lorus to meet its obligations to pay directors' fees, salary and performance bonuses to certain employees in the form of common shares. The ACP permits the Corporation to, in circumstances considered appropriate by the board of directors (the "**Board**"), encourage the ownership of equity of the Corporation by its directors and senior employees ("**Participants**"), enhance the Corporation's ability to retain key personnel and reward significant performance achievements while preserving the cash resources of the Corporation.

Under the ACP, Participants have the option of receiving director's fees, salary, bonuses or other remuneration, as applicable ("**Remuneration**"), by the allotment and issuance from treasury of such number of common 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 (5) trading days prior to payment date (the "**5-day VWAP**"). The issue price of common shares issued under the ACP is the 5-day VWAP.

The maximum number of common shares reserved for issuance under the ACP, when combined with the Stock Option Plans described under "Equity Compensation Plan Information" section, will not exceed 15% of the Corporation's issued and outstanding common shares at any given time.

There have been no shares issued under the ACP.

Employee Share Purchase Plan

We have an Employee Share Purchase Plan (the "**ESPP**"), with the purpose of the ESPP to assist the Corporation to retain the services of its employees, to secure and retain the services of new employees and to provide incentives for such persons to exert maximum efforts for the success of the Corporation. The ESPP provides a means by which employees of the Corporation and its affiliates may purchase common shares at a 15% discount through accumulated payroll deductions. Eligible participants in the ESPP include all employees, including executive officers, who work at least 20 hours per week and are customarily employed by the Corporation or an affiliate of the Corporation for at least six months per calendar year. Generally, each offering is of three months' duration with purchases occurring every quarter. Participants may authorize payroll deductions of up to 15% of their base compensation for the purchase of common shares under the ESPP.

For the year fiscal ended May 31, 2012, a total of 14,120 common shares had been purchased by employees under the ESPP at prices per share between $0.26 and $0.15 per common share and a weighted average purchase price of $0.20. During the year ended May 31, 2012, under the ESPP, Named Executive Officers, as a group, did not purchase any shares pursuant to the ESPP.

Directors' and Officers' Deferred Share Unit Plan

We have a deferred share unit plan for directors and officers (the "**Deferred Share Unit Plan**"). Under the Deferred Share Unit Plan, participating directors ("**Participating Directors**") may elect to receive either a portion or all of their annual fees for acting as a director ("**Annual Fees**") from us in deferred share units. Under the Deferred Share Unit Plan, the Compensation Committee may at any time during the period between the annual meetings of our Shareholders, in its discretion recommend the Corporation credit to each participating director who has elected under the terms of the Deferred Share Unit Plan, the number of units equal to the gross amount of the Annual Fees to be deferred divided by the fair market value of the common shares. The fair market value of the common shares is determined as the closing price of the common shares on the TSX on the day immediately preceding such recommendation by the Compensation Committee or such other amount as determined by the Board and permitted by the stock exchanges or other market(s) upon which the common shares are from time to time listed for trading and by any other applicable regulatory authority (collectively, the "**Regulatory Authorities**").

In addition, the Participating Directors may elect under the Deferred Share Unit Plan to receive deferred share units in satisfaction for meeting fees earned by the Participating Directors as a result of attendance at meetings of the Board held between the annual meetings of our Shareholders by the credit to each Participating Director of the number of units equal to the gross amount of the meeting fees to be deferred divided by the fair market value of the common shares, being the closing price of the common shares on the TSX on the day immediately preceding the recommendation by the Compensation Committee or such other amount as determined by the Board and permitted by the Regulatory Authorities.

The Deferred Share Unit Plan is administered by the Board (in consultation with the Compensation Committee) and, subject to regulatory requirements, may be amended by the Board without Shareholder approval. When a Participating Director ceases to hold the position of director and is no longer otherwise employed by us, the Participating Director receives either (a) a lump sum cash payment equal to the number of deferred share units held multiplied by the then fair market value of the common shares on the date of termination, or (b) the number of common shares that can be acquired in the open market with the amount described in (a), either case being subject to withholding for income tax. The Board may terminate the Deferred Share Unit Plan any time before or after any allotment or accrediting of deferred share units thereunder.

As at May 31, 2012, 780,000 deferred share units have been issued with a cash value of $304 thousand representing the fair market value of the units as of May 31, 2012.

Option Grants During Fiscal Year 2012

The following tables set forth the options granted to and exercised by each of the Named Executive Officers during the fiscal year ended May 31, 2012:

Option/SAR Grants During the Most Recently Completed Financial Year

Name and Principal Position	Securities Under Options/SARs Granted (#)	% of Total Options/SARs Granted to Employees in Financial Year (%)	Exercise or Base Price ($/Security)	Market Value of Securities Underlying Options/SARs on the Date of Grant ($/Security)	Expiration Date
Dr. Aiping Young President and Chief Executive Officer	275,000	18%	$0.215	$0.215	November 28, 2021
Ms. Elizabeth Williams	100,000(1)	7%	$0.215	$0.215	November 28, 2021
Director of Finance, Acting Chief Financial Officer	62,000	4%	$0.18	$0.18	March 8, 2022
Dr. Yoon Lee	100,000(1)	7%	$0.215	$0.215	November 28, 2021
Vice President, Research	62,000	4%	$0.18	$0.18	March 8, 2022

(1) These options to purchase common shares are incentive options. The options only vest upon the attainment of specific undertakings based on certain corporate performance objectives; failing to achieve the undertakings will result in forfeiture on the specified deadline. Upon achieving the specific undertakings, 50% of the options vest followed by 25% on the first anniversary and 25% on the second anniversary of the date of granting.

Incentive Compensation Plans

Outstanding Share-Based Awards and Option-Based Awards

The following table shows all awards outstanding to each Named Executive Officer as at May 31, 2012:

Option-based Awards

Name	Number of securities underlying unexercised options (#)	Option exercise price ($)	Option expiration date	Value of unexercised in-the-money options ($) [1]
Dr. Aiping Young	275,000	0.215	November 28, 2021	48,125
Ms. Elizabeth Williams	100,000[2]	0.215	November 28, 2021	17,500
	62,000	0.18	March 8, 2022	13,020
Dr. Yoon Lee	100,000[2]	0.215	November 28, 2021	17,500
	67,000	0.18	March 8, 2022	14,070l

(1) These amounts are calculated based on the difference between the market value of the securities underlying the options at the end of the fiscal year ($0.39), and the exercise price of the options.

(2) These options granted to the Named Executive Officers during the year ended May 31, 2012 vest contingently upon the achievement of corporate objectives that the Compensation Committee has deemed to be the value drivers of shareholder value. These stock options vest 50% upon the achievement of the stated objectives, 25% on the next anniversary and 25% on the second anniversary.

Aggregated Option/SAR Exercises During the Most Recently Completed Financial Year and Financial Year-End Option/SAR Values

Name	Securities Acquired on Exercise (#)	Aggregate Value Realized ($)	Unexercised Options/SARs at May 31, 2012 (#) Exercisable/Unexercisable	Value of Unexercised in-the-Money Options/SARs at May 31, 2012 ($) Exercisable/Unexercisable
Dr. Aiping Young President and Chief Executive Officer Former Chief Operating Officer	Nil	Nil	137,500/137,500	24,063/24,063
Ms. Elizabeth Williams Director of Finance, Acting Chief Financial Officer	Nil	Nil	50,000/112,000	8,750/21,770
Dr. Yoon Lee Vice President, Research	Nil	Nil	50,000/117,000	8,750/22,820

C. Board Practices

Lorus is authorized to have a board of at least one director and no more than ten. Lorus currently has six directors. Directors are elected for a term of approximately one year, from annual meeting to annual meeting, or until an earlier resignation, death or removal. For the dates our current directors assumed their directorships, see Item 6.A. - "Directors and Senior Management" above.

Each officer serves at the discretion of the Board or until an earlier resignation or death. There are no family relationships among any of our directors or officers.

Our non-management directors have no service contracts with us or our subsidiaries that provide for benefits upon termination of employment. See "-- Management Contracts" above for a summary of Dr. Young's employment agreement.

Committees of the Board of Directors

The Company has an Audit Committee, a Nominating and Corporate Governance Committee and a Compensation Committee.

The members of these committees currently and during the 2012 fiscal year are as follows:

Audit Committee:	Denis Burger, Herbert Abramson, Warren Whitehead
Nominating and Corporate Governance Committee:	Herbert Abramson, Mark Vincent
Compensation Committee:	Denis Burger, Jim Wright

Compensation Committee

Composition of the Compensation Committee

The Board, upon the advice of the Compensation Committee, determines executive compensation. From October 2, 2008 to present, the Compensation Committee is comprised of Mr. Burger and Mr. Wright. Mr. Burger is chair of the Compensation Committee. The Compensation Committee met four times during the fiscal year ended May 31, 2012.

Compensation Objectives and Philosophy

The Compensation Committee's mandate is to review and advise the Board on the recruitment, appointment, performance, compensation, benefits and termination of executive officers. The Compensation Committee also administers and reviews procedures and policies with respect to our 1993 Plan and 2003 Plan, employee benefit programs, pay equity and employment equity and reviews executive compensation disclosure where it is publicly disclosed.

The market for biotechnology companies in the development phase has been extremely challenging throughout fiscal 2012 and it has been negatively impacted further by the deterioration of the capital markets late in calendar 2008 and continuing to the present. The Compensation Committee has taken these factors into consideration when recommending the compensation for Named Executive Officers and focuses the assessment on achievement of the corporate objectives described below as being the key value drivers of the Corporation.

Lorus' executive compensation program is designed to:

- attract and retain qualified, motivated and achievement-oriented individuals by offering compensation that is competitive in the industry and marketplace;
- align executive interests with the interests of shareholders; and

- ensure that individuals continue to be compensated in accord with their personal performance and responsibilities and their contribution to the overall objectives of the Company.

These objectives are achieved by offering executives and employees a compensation package that is competitive and rewards the achievement of both short-term and long-term objectives of the Company. As such, our compensation package consists of three key elements:

- base salary and initial stock options;
- short-term compensation incentives to reward corporate and personal performance through potential annual cash bonuses;
- long-term compensation incentives related to long-term increase in share value through participation in the 2003 Plan.

Base Salary - Initial Stock Options

In establishing base salaries, the objective of the Compensation Committee is to establish levels that will enable Lorus to attract and retain executive officers who can effectively contribute to the long-term success of Lorus. Base salary for each executive officer is a function of the individual's skills, abilities, experience, past performance and anticipated future contribution to the success of Lorus. The Compensation Committee uses private and public compensation surveys and their knowledge of industry trends to assist with the determination of an appropriate compensation package for each executive officer. In certain cases, the Compensation Committee may recommend inclusion of automobile allowances, fitness allowances and the payment of certain professional dues as a component of an overall remuneration package for executives.

In certain cases, executive officers may be granted stock options on the commencement of employment with Lorus in accordance with the responsibility delegated to each executive officer for achieving corporate objectives and enhancing shareholder value in accordance with those objectives.

Short-Term Compensation Incentives

The role of short-term compensation incentives at Lorus is to reward corporate and personal performance. Each year, the Board approves the annual corporate objectives encompassing scientific, clinical, regulatory, business and corporate development and financial criteria. The annual cash bonus for the President and Chief Executive Officer and the other executive offices is based, at least in part, on the level of achievement of these annual objectives. One hundred percent of the President and Chief Executive Officer's and seventy-five percent of the other executive officers' cash bonus is based on the level of achievement of corporate objectives. The balance of the other executive officers' bonus is based on achievement of individual/departmental objectives.

All corporate and executive officer objectives are reviewed by the Compensation Committee and approved by the Board. The Compensation Committee recommends to the Board the awarding of bonuses, payable in cash, stock or stock options, to reward extraordinary individual performance.

For each executive officer, during the fiscal year ended May 31, 2012, the potential annual cash bonuses range from 15% to 40% of base salary when all corporate and individual executive officer objectives were achieved. There was no bonus paid during the fiscal year ended May 31, 2012.

Cash bonuses are determined as soon as practicable after the end of the fiscal year and, for the Named Executive Officers, are included in the Summary Compensation Table in the year in respect of which they are earned.

Long-Term Incentive Plan

The role of long-term compensation incentives at Lorus is to reward an executive's contribution to the attainment of Lorus' long-term objectives, align an executive's performance with the long-term performance of Lorus and to provide an additional incentive for an executive to enhance shareholder value. Long-term incentive compensation for directors, officers, employees and consultants is reviewed annually and is accomplished through the grant of stock options under our 2003 Plan.

The number options granted for executives of Lorus for the[2012 fiscal year was based on achievement of both corporate and executive officer objectives. The Compensation Committee approves the allocation of options and options are priced using the closing market price of the common shares on the TSX on the last trading day prior to the date of grant. Options to purchase common shares expire ten years from the date of grant and vest over a term determined by the Compensation Committee. The granting of options to purchase common shares for Named Executive Officers is included in the Summary Compensation Table in the year that they are earned.

Performance Metrics

The performance of the President and Chief Executive Officer and other Named Executive Officers for the 2012 financial year was measured in the following areas:

1. Maximizing the value of LOR-253;
2. Maximizing the value of LOR-500;
3. Establishing at least one corporate partnership; and
4. Equity financing to establish at least one year of cash.

Each of the above is weighted at 30%, 15%, 30% and 25% respectively in relation to assessment of satisfaction of overall corporate objective and determination of any general corporate bonuses. Based on these criteria the Board assigned an achievement of 97%. Incentive compensation related to the attainment of these objectives will be paid in fiscal 2013. Similar performance metrics were established for the year ending May 31, 2013 based on the approved business plan for the current year.

Audit Committee

The current members of the Audit Committee are Herb Abramson, 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. Abramson, 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. Abramson is the chairman and portfolio manager of two investment management companies and is educated and experienced in reading and analyzing financial statements. Mr. Burger, in his previous position as Chairman and CEO of AVI Biopharma, is educated and experienced in reading and analyzing financial statements. Mr. Abramson sits on the Audit Committee of a publicly listed mining company. Mr. Burger has also served on the audit committee of three other publicly listed biotechnology companies. Mr. Whitehead is a Certified Management Accountant and has served as the Chief Financial Officer of Arius Research Inc. and Labopharm Inc. Additionally, we believe that 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.

Audit Committee Mandate

The Audit Committee’s mandate is to assist the board of directors in fulfilling its oversight responsibilities. In particular, the Audit Committee:

(a) serves as an independent and objective party to monitor the integrity of our financial reporting process and systems of internal controls regarding finance, accounting, and legal compliance, including the review of our Consolidated Financial Statements, MD&A and annual and interim results;

(b) identifies and monitors the management of the principal risks that could impact our financial reporting;

(c) monitors the independence and performance of our independent auditors, including the pre-approval of all audit fees and all permitted non-audit services;

(d) provides an avenue of communication among the independent auditors, management, and our board of directors; and

(e) encourages continuous improvement of, and foster adherence to, our policies, procedures and practices at all levels.

The Audit Committee is also responsible for implementing and overseeing our whistle-blowing procedures.

D. Employees

As at May 31, 2012, we employed 12 full-time persons and four part-time people in research and drug development and administration activities. Of our employees, six hold Ph.Ds. All employees work at the Company's primary location. 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 and employees can participate in the employee share purchase plan.

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 skills are in short supply 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.

E. Share Ownership

The following table sets forth information regarding beneficial ownership of our common shares as of May 31, 2012, by our executive officers and directors individually and as a group.

					Options to Purchase Shares		
	Number of Shares	Warrants[1]	Total Number of Shares Beneficially Owned	Percentage of Shares Outstanding (+)	Number of Underlying Shares (#)	Exercise Price (Range) ($)	Expiry Date (Range-Year)
Dr. Aiping H. Young	221,584	125,000	346,584	1.61%	275,000	$0.215	2021
Ms. Elizabeth Williams	427	Nil	427	0.00%	162,000	$0.18-0.215	2021-2022
Dr. Yoon Lee	Nil	Nil	Nil	Nil	167,000	$0.18-0.215	2021-2022
Dr. Jim A. Wright[3]	214,300		214,300	1.0%	555,000	$0.18-0.215	2021-2022
Mr. Herbert Abramson[2]	8,938,041	2,444,500	11,382,541	48.1%	40,000	$0.18-0.215	2021-2022
Dr. Denis Burger	51,987	Nil	51,987	0.2%	115,000	$0.18-0.215	2021-2022
Dr. Mark Vincent	Nil	Nil	Nil	Nil	40,000	$0.18-0.215	2021-2022
Mr. Warren Whitehead	Nil	Nil	Nil	Nil	21,000	$0.18-0.215	2021-2022
All directors and executive officers as a group	9,426,439	2,569,500	11,995,939	50.9%	1,375,000	$0.18-0.215	2021-2022

(1) Warrants to purchase common shares were acquired pursuant to a unit offering completed in August 2011. Each warrant represents the right to acquire a common share at an exercise price of $0.45. These warrants will expire in August 2016.

[+] Calculated on a partially diluted basis excluding stock options.

(2) In addition to shares held personally, Mr. Abramson is deemed to control the shares held by Technifund Inc. in his capacity as sole owner of Technifund.
(3) Of the shares owned by Dr. Wright 56,141 are registered in the name of Calliope Investments Limited.

See Item 6.B for a description of arrangements pursuant to which employees may become involved in the capital of Lorus.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

To the knowledge of our directors and officers, as of the date hereof, no person or company beneficially owns, directly or indirectly, or exercises control or direction over, 5% or more of the outstanding common shares, other than those discussed below.

Approximately 90% of our ordinary shares are held in Canada, and there are 67 record holders of our common shares in Canada. All of our shareholders have equal voting rights.

Name of Beneficial Owner(s)	Amount and Nature of Beneficial Ownership	Percent of Class [1]
Herbert Abramson	11,382,541 [2]	48.1%
Susan Sweeney Hermon	878,199[3]	4.1%
High Tech Beteiligungen GmbH & Co. KG High Tech Private Equity GmbH ConPharm Anstalt Georg Ludwig	1,212,083 [4] [5]	5.7%
The Erin Mills Investment Corporation	720,932 [4] [6]	3.4%
1346049 Ontario Limited	1,304,486[7]	6.1%

(1) Based on 21,228,081 common shares outstanding as of May 31, 2012 and assuming exercise of owners warrants only.

(2) As reported in a Schedule 13D, dated December 19, 2011, filed jointly by Herbert Abramson and Technifund Inc., Mr. Abramson, a director of the Company, may be deemed to beneficially own 14,997,800 common shares, of which 13,638,602 common shares (including warrants exercisable into 5,718,892 common shares and options exercisable into 15,000 common shares) were held by Mr. Abramson directly and 1,359,198 common shares (including warrants exercisable into 325,867 common shares) were held by Technifund Inc. directly. According to the Schedule 13D, Mr. Abramson exercises sole voting and dispositive power over the shares held by him and Technifund Inc., and Technifund Inc. exercises sole voting and dispositive power over the shares held by it. For a further discussion of transactions involving Mr. Abramson and his affiliated group, see Item 7.B - "Related Party Transactions" below.

In May 2012, 3,600,258 of the warrants reported above expired unexercised. The Company has removed the expired warrants for disclosure purposes.

(3) As reported in a Schedule 13G, dated February 7, 2011, filed by William Richard Hermon, Mr. Hermon may be deemed to beneficially own 1,388,644 common shares (including an aggregate of 478,704 common shares issuable upon the exercise of common share purchase warrants), of which 699,966 ordinary shares were held by Mr. Hermon directly; 24,185 ordinary shares were held by Mr. Hermon's father, John Herman; 50,250 ordinary shares were held by Gullrock Investments Inc. ("**Gullrock**") directly; 6,000 ordinary shares were held by Globus Precision Inc. ("**Globus**") directly; and 607,973 ordinary shares were held by Ficor Resources Inc. ("**Ficor**") directly. According to the Schedule 13G, Mr. Hermon exercises sole voting and dispositive power over shares held by each of himself, his father, Gullrock, Globus and Ficor.

As reported on Schedule 13G, dated November 25, 2011, the common shares reported above were previously reported by William Richard Hermon, who passed away on November 25, 2011, at which time Susan Sweeney Hermon acquired beneficial ownership or voting or dispositive power over the common shares. As of November 25, 2011, the Susan Sweeney Hermon's aggregate beneficial ownership of common shares, including an aggregate of 375,510 common shares issuable upon the exercise of common stock warrants, was 1,078,709 shares. Of this amount, 201,454 common shares were held by William Richard Hermon directly; 720,735 common shares were held by the Estate of William Richard Hermon (the "Estate") directly; 150,520 common shares were held by Gullrock Investments Inc. ("Gullrock") directly; and 6,000 common shares were held by 3780694 Canada Inc. ("3780694") directly. The foregoing amounts include: 87,863, 223,517, 62,630, and 1,500 shares issuable upon the exercise of common stock warrants owned by Susan Sweeney Hermon, the Estate, Gullrock, and 3780694, respectively.

In May 2012, 200,510 warrants expired unexercised. The Company has removed the expired warrants for disclosure purposes.

(4) Share figure derived from publicly available sources has been adjusted in this table to reflect the impact of the 1-for-30 share consolidation.

(5) As reported in a Schedule 13D, dated July 13, 2006 and amended August 30, 2006, May 4, 2007, July 10, 2007, August 8, 2008 and March 3, 2010 (the "**High Tech 13D**"), filed jointly by High Tech Beteiligungen GmbH & Co. KG ("**High Tech**"), High Tech Private Equity Group GmbH ("**HTPE**"), ConPharm Anstalt ("**ConPharm**") and Georg Ludwig, each of High Tech, HTPE, ConPharm, Mr. Ludwig may be deemed to beneficially own 39,998,750 ordinary shares (or, after the 1-for-30 share consolidation, approximately, 1,333,291 shares). According to the High Tech 13D, DEWB AG ("**DEWB**") and Triginta Capital GmbH ("**Triginta**"), through their control of HTPE, may be deemed to control such ordinary shares. The High Tech 13D states that (i) each of High Tech, HTPE, ConPharm and Mr. Ludwig has shared voting and dispositive power over such ordinary shares, and none of them has sole voting or dispositive power over the ordinary shares; and (ii) each of DEWB and Triginta may be deemed to have shared voting and dispositive power over such ordinary shares.

In July 2006, Lorus entered into a share purchase agreement with High Tech to issue 28.8 million common shares at $0.36 per share for gross proceeds of $10.4 million. Subsequent to that transaction, High Tech indirectly acquired an additional 290,000 common shares. High Tech also acquired 7.3 million common shares and 3.6 million warrants to purchase common shares at an exercise price of $0.18 pursuant to the August 2008 rights offering; the warrants expired on August 7, 2010.

For disclosure purposes the Company has removed the expired 3.6 million warrants from the holdings of High Tech.

(6) As reported in a Schedule 13G, dated March 3, 2009, filed by The Erin Mills Investment Corporation, such corporation may be deemed to beneficially own 21,627,978 ordinary shares (or, after the 1-for-30 share consolidation, approximately, 720,932 shares) over which it exercises sole voting and dispositive power.

(7) As reported in a Schedule 13G, dated January 23, 2012, the joint filing statement on behalf of 1346049 Ontario Limited ("Holdco"); Trapeze Asset Management Inc. ("TAMI"); Trapeze Capital Corp. ("TCC"); Randall Abramson ("Abramson"); Tamasa Inc. ("Tamasa"); and the group the above-named persons comprise. Holdco is a parent holding company for its operating subsidiaries, TCC and TAMI. TAMI is a Canadian investment adviser and is also registered as an investment adviser under the Investment Advisers Act of 1940, as amended. TCC is a Canadian investment dealer. Abramson serves as Director, Chief Executive Officer, President, Secretary and Treasurer of Holdco; Director, Chief Executive Officer, President, Secretary, Treasurer and Portfolio Manager of TAMI; and Director, Chief Executive Officer, President, and Portfolio Manager of TCC. Holdco owns 100% of the outstanding voting stock of each of TCC and TAMI. Abramson owns 82% of the outstanding capital stock of Holdco. Tamasa is an investment holding company, of which Abramson owns 100% of the outstanding capital stock and is President and sole Director. Abramson, Tamasa, Holdco, TAMI and TCC comprise a "group" within the meaning of Section 13(d)(3) of the Exchange Act of 1934, as amended, and each is reporting beneficial ownership in accordance with Exchange Act Rule 13d-5(a). As of the close of business on January 23, 2012, the beneficial ownership of common shares, including an aggregate of 267,623 common shares issuable upon the exercise of common stock warrants, was 1,304,486 shares. Of this amount, 116,666 common shares were held by Abramson directly, 442,865 common shares were held by Tamasa; nil common shares were held by Holdco; 744,272 common shares were owned by advisory clients of TCC and held in accounts managed by TCC; and 683 common shares were owned by advisory clients of TAMI and held in accounts managed by TAMI. The foregoing amounts include: nil, nil, nil, 267,623 and nil shares issuable upon the exercise of common stock warrants owned by Abramson, Tamasa, Holdco, TCC (held in client managed accounts), and TAMI (held in client managed accounts), respectively.

Subsequent to the year ended May 31, 2012, Lorus completed a Private Placement as described above. Following the private placement two new shareholder groups filed Early Warning Reports in Canada as detailed below:

As at June 29, 2012, Sprott Asset Management LP (Sprott) exercises control or direction, on behalf of accounts fully managed by it, over 4,550,000 common shares and 4,550,000 warrants of Lorus. Based on the number of currently issued and outstanding common shares (as reported by the Issuer), and assuming the exercise of the warrants, Sprott exercises control or direction over 19.6% of the issued and outstanding common shares.

On June 11, 2012, Pinetree Capital Ltd (Pinetree) acquired ownership of 1,500,000 common shares of Lorus and 1,500,000 common share purchase warrants. Immediately following this acquisition Pinetree, together with its joint actors, owns an aggregate of 5,000,000 common shares upon exercise of certain convertible securities including the common share purchase warrants. In the event that the convertible securities are fully exercised, the holdings of Pinetree and joint actors represents a total of 10,000,000 common shares of Lorus, or approximately 21.4% of all issued and outstanding common shares as at June 11, 2012 calculated on a partially diluted basis assuming exercise of the convertible securities only.

B. Related Party Transactions

Herbert Abramson and Affiliates

In connection with the August 2011 Unit Offering, Mr. Abramson, a director of the Company, entered into an irrevocable commitment letter on June 20, 2011, amended on July 11, 2011, to purchase common shares and common share purchase warrants having an aggregate subscription price equal to the difference, if any, between (a) the sum of (i) the gross proceeds realized by Lorus in the Equity Offering and (ii) the gross proceeds received by Lorus in respect of all financings completed by Lorus from the date of the final short form prospectus, which was filed on July 22, 2011, to November 30, 2011 and (b) $4.0 million. On August 15, 2011, Mr. Abramson acquired 2,444,500 units at $0.40 per unit in connection with the Equity Offering. Each unit is comprised of one common share and one common share purchase warrant. Each warrant has an exercise price of $0.45, exercisable for a period of five years following the closing of the Equity Offering. See Item 4.B. - “Business Overview - Financial Strategy - Equity Offering and Financing Commitment.”

Pursuant to the commitment letter provided by Mr. Abramson, the Company has issued a grid promissory note to Mr. Abramson that allows us to borrow funds up to $1.8 million. The funds may be borrowed at a rate of up to $300 thousand per month, incur interest at a rate of 10% per year and are due and payable in full on November 28, 2012. The promissory note is subject to certain covenants which, if breached, could result in the promissory note becoming payable on demand. Lorus has not breached these covenants as of May 31, 2012 and has not received notice of any breach of these covenants by Mr. Abramson. At May 31, 2012 $900 thousand has been drawn under the promissory note and on June 27, 2012, the note and all accrued interest was repaid.

Previously, in October 2009, the Company received a loan by way of a promissory note from Mr. Abramson. The principal amount of $1.0 million bore interest at a rate of 10% per annum. In November 2009, the loan was repaid as part of a private placement, whereby Mr. Abramson acquired 17.0 million common shares and 8.5 million warrants to purchase common shares of the Company at an exercise price of $0.08; the warrants expired on May 27, 2011.

In April 2010, the Company entered into a loan agreement with Trapeze Capital Corp., a corporation affiliated with Mr. Abramson, to borrow $1 million. The loan amount, which was received in April 2010, is unsecured, evidenced by a promissory note and bears interest at an annual rate of 10%. The funds were used for general working capital purposes. In addition, in August 2010, the Company obtained interim financing from Mr. Abramson by way of three $500 thousand six-month loans, the first of which was advanced in August 2010 and the second and third in September and October 2010, respectively.

In August 2010, in connection with the rights offering, the Company secured a standby purchase arrangement of $4 million by Mr. Abramson, pursuant to which Mr. Abramson agreed to make an investment such that the minimum gross proceeds of the rights offering would be $4 million. No fee was payable to Mr. Abramson for this commitment. In accordance with the terms of the standby purchase agreement, Mr. Abramson subscribed at a price of $1.11 per unit for 3.6 million units, resulting in $4 million in gross proceeds to the Company. With the proceeds of the rights offering, the Company repaid the $1 million promissory note outstanding to Trapeze Capital Corporation and the interim financing promissory notes outstanding to Mr. Abramson. For further information regarding the rights offering, see "Business Overview - Financial Strategy - November 2010 Rights Offering."

On August 7, 2008, Technifund Inc., a corporation affiliated with Mr. Abramson, acquired 15.2 million common shares and 7.6 million warrants to purchase common shares at an exercise price of $0.18 pursuant to the 2008 rights offering. The warrants expired on August 9, 2010.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Financial Statements and Other Financial Information

See Item 18 for our Consolidated Financial Statements and other financial information.

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.

B. Significant Changes

None.

Item 9. The Offer and Listing

Not applicable, except for Item 9.A.4. and Item 9.C.

A. Offer and Listing Details

Price Range of Common Stock and Trading Markets

Our common shares, without par value, are currently listed on the TSX under the symbol "LOR". Until October 31, 2008, our common shares were also listed on the American Stock Exchange (now the NYSE Amex) ("**AMEX**") under the symbol "LRP". The following table sets out the price ranges and trading volumes of our common shares on the TSX and AMEX for the periods indicated below. Effective October 31, 2008, we voluntarily delisted from the AMEX. Therefore, no prices are provided for periods after that date.

	AMEX (US$)		TSX (CDN$)	
Five most recent full fiscal years:	High	Low	High	Low
Year ended May 31, 2012	-	-	0.72	0.16
Year ended May 31, 2011	-	-	2.55	0.68
Year ended May 31, 2010	-	-	3.90	1.80
Year ended May 31, 2009	-	-	0.16	0.03
Year ended May 31, 2008	0.27	0.11	0.26	0.14
Year ended May 31, 2012	-	-	0.72	0.16
Quarter ended May 31, 2012	-	-	0.59	0.17
Quarter ended February 29, 2012	-	-	0.25	0.16
Quarter ended November 30, 2011	-	-	0.37	0.20
Quarter ended August 31, 2011	-	-	0.72	0.25
Year ended May 31, 2011				
Quarter ended May 31, 2011	-	-	1.02	0.68
Quarter ended February 28, 2011	-	-	1.18	0.95
Quarter ended November 30, 2010	-	-	1.40	0.95
Quarter ended August 31, 2010	-	-	2.55	1.25
Most recent six months:				
August 2012	-	-	0.50	0.44
July 2012	-	-	0.55	0.45
June 2012	-	-	0.64	0.32
May 2012	-	-	0.59	0.27
April 2012	-	-	0.35	0.20
March 2012			0.28	0.17

B. Plan of Distribution

Not applicable.

C. Markets

See Item 9.A.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expense of the Issue

Not applicable.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Articles of Incorporation and By-laws

We are incorporated pursuant to the laws of Canada. Our Articles of Incorporation ("**Articles**") and by-laws provide no restrictions as to the nature of our business operations. Under Canadian law, a director must inform us, at a meeting of the board of directors, of any interest in a material contract or proposed material contract with us. Directors may not vote in respect of any such contracts made with us or in any such contract in which a director is interested, and such directors shall not be counted for purposes of determining a quorum. However, these provisions do not apply to (i) a contract relating primarily to their remuneration as a director, officer, employee or agent of the Corporation or affiliate, (ii) a contract for their indemnity or insurance as permitted under the *Canada Business Corporations Act*, or (iii) a contract with an affiliate.

We are authorized to issue an unlimited number of common shares. Our shareholders have no rights to share in our profits, are subject to no redemption or sinking fund provisions, have no liability for further capital calls and are not subject to any discrimination due to number of shares owned. By not more than 50 days nor less than seven days in advance of a dividend, the board of directors may establish a record date for the determination of the persons entitled to such dividend.

The rights of holders of our common shares can be changed at any time in a shareholder meeting where the modifications are approved by 66 2/3% of the shares represented by proxy or in person at a meeting at which a quorum exists.

All holders of our common shares are entitled to vote at annual or special meetings of shareholders, provided that they were shareholders as of the record date. The record date for shareholder meetings may precede the meeting date by no more than 50 days and not less than 21 days, provided that notice by way of advertisement is given to shareholders at least seven days before such record date. Notice of the time and place of meetings of shareholders may not be less than 21 nor greater than 50 days prior to the date of the meeting. There are no:

- limitations on share ownership;
- provisions of the Articles or by-laws that would have the effect of delaying, deferring or preventing a change of control of our company;
- by-law provisions that govern the ownership threshold above which shareholder ownership must be disclosed; and
- conditions imposed by the Articles or by-laws governing changes in capital, but Canadian Corporate law requires any changes to the terms of share capital be approved by 66.66% of the shares represented by proxy or in person at a shareholders' meeting convened for that purpose at which a quorum exists.

Common Shares

Each holder of record of common shares, without par value, is entitled to one vote for each share held on all matters properly submitted to the shareholders for their vote, except matters which are required to be voted on as a particular class or series of stock. Cumulative voting for directors is not permitted.

Holders of outstanding common shares are entitled to those dividends declared by the board of directors out of legally available funds. In the event of liquidation, dissolution or winding up our affairs, holders of common shares are entitled to receive, pro rata, our net assets available after provision has been made for the preferential rights of the holders of preferred stock. Holders of outstanding common shares have no pre-emptive, conversion or redemption rights. All of the issued and outstanding common shares are, and all unissued common shares, when offered and sold will be, duly authorized, validly issued, fully paid and non-assessable. To the extent that additional common shares may be issued in the future, the relative interests of the then existing shareholders may be diluted. There were 21,228,081common shares issued and outstanding at May 31, 2012.

Secured Convertible Debentures

On October 6, 2004, we entered into a subscription agreement with TEMIC to issue an aggregate of $15.0 million of secured convertible debentures issuable in three tranches of $5.0 million each, in each of October 2004, January 2005 and April 2005. The debentures were due on October 6, 2009. On June 22, 2009, we reached a settlement with TEMIC with respect to the purchase and settlement of the $15.0 million of debentures.

Under the settlement agreement, we purchased all of the debentures from TEMIC for a cash payment of $3.3 million, the assignment of the rights under the license agreement with ZOR, sale of intellectual property associated with Virulizin® and sale of the shares in our wholly-owned subsidiary, Pharma Immune Inc., which holds an equity interest in ZOR. Under the agreement, we are entitled to 50% of any royalties received under the ZOR license agreement and 50% of the deal value of any transaction completed in territories not covered by the ZOR license agreement. We also retain a perpetual, royalty free license for the animal use of Virulizin®. TEMIC will be fully responsible for all clinical and regulatory costs associated with commercialization of Virulizin® in territories not covered by the ZOR license agreement. We will assist TEMIC with certain agreed upon services.

For receipt of the intellectual property associated with Virulizin® and all of our shares in Pharma Immune, TEMIC has released all security interests in the assets of Lorus.

As a result of the transaction, we recognized a gain on the repurchase of the debentures of $11.0 million reflecting the difference between the carrying value of the debentures at the repurchase date, net of transaction costs of approximately $221 thousand, and the cash payment amount of $3.3 million.

Shares Eligible for Future Sale

Future sales of substantial amounts of our common shares in the public market or even the perception that such sales may occur, could adversely affect the market price for our common shares and could impair our future ability to raise capital through an offering of our equity securities.

At May 31, 2012, there were 1,611,835 options outstanding under our stock option plans to purchase an equal number of common shares. The outstanding options are exercisable at a weighted average price per share of $0.44.

Indemnification of Executive Officers and Directors

We have agreed to indemnify our executive officers and directors for all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by them in respect of any civil, criminal or administrative action or proceeding to which they are made a party by reason of being or having been a director or officer, if (a) they acted honestly and in good faith with a view to our best interests, and (b) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, they had reasonable grounds for believing that their conduct was lawful.

C. Material Contracts

Other than the agreements described below, we have not, in the two years preceding the date hereof, entered into any material agreements other than contracts in the ordinary course of business.

1. License Agreement with Genentech Inc. entered into May 1, 2012 for the non-exclusive right to certain patent rights.

2. Form of Warrant issued in connection with the June 2012 private placement.

3. Share Purchase Warrant Indenture dated August 15, 2011 between the Company and Computershare Trust Company of Canada regarding the provision for issuance of common share purchase warrants.

4. Agency Agreement dated July 20, 2011 in connection with an offering of units between the Company and Euro Pacific Canada Inc.

5. Commitment Letter for minimum $4 million equity investment dated June 20, 2011 and subsequently amended July 11, 2011 from Mr. Abramson.

6. Form of Subscription Agreement used in connection with December 2010 private placement.

7. Form of Warrant issued in connection with December 2010 private placement.

8. Share Purchase Warrant Indenture dated October 4, 2010 between the Company and Computershare Trust Company of Canada regarding the provision for issuance of common share purchase warrants.

9. First Supplemental Indenture dated October 18, 2010 to the Share Purchase Warrant Indenture dated October 4, 2010.

10. Standby Purchase Agreement dated September 16, 2010 between the Company and Herbert Abramson in connection with the November 2010 rights offering.

11. Standby Purchase Agreement Amendment dated September 27, 2010.

12. Promissory Note dated April 14, 2010 between the Company and Herbert Abramson regarding a loan to the Company of $1,000,000.

Please refer to Item 4 - "Business Overview" for further details on certain agreements referred to above.

D. Exchange Controls

There is no law or governmental decree or regulation in Canada that restricts the export or import of capital, or affects the remittance of dividends, interest or other payments to non-resident holders of our voting shares, other than withholding tax requirements.

There is no limitation imposed by Canadian law or by our Articles or our other charter documents on the right of a non-resident to hold or vote voting shares, other than as provided by the *Investment Canada Act*, the *North American Free Trade Agreement Implementation Act* (Canada) and the *World Trade Organization Agreement Implementation Act*.

The *Investment Canada Act* requires notification and, in certain cases, advance review and approval by the government of Canada of the acquisition by a non-Canadian of control of a Canadian business, all as defined in the *Investment Canada Act.* Generally, the threshold for review will be higher in monetary terms for a member of the World Trade Organization or North American Free Trade Agreement.

E. Taxation

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following is a general summary of certain U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership, and disposition of common shares.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder arising from and relating to the acquisition, ownership, and disposition of common shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S. Holder, including specific tax consequences to a U.S. Holder under an applicable tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any U.S. Holder. This summary does not address the U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences to U.S. Holders of the acquisition, ownership, and disposition of common shares. In addition, except as specifically set forth below, this summary does not discuss applicable income tax reporting requirements. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences of the acquisition, ownership, and disposition of common shares.

No legal opinion from U.S. legal counsel or ruling from the Internal Revenue Service (the "**IRS**") has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the positions taken in this summary.

Scope of this Summary

Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (the "**Code**"), Treasury Regulations (whether final, temporary, or proposed), published rulings of the IRS, published administrative positions of the IRS, the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the "**Canada-U.S. Tax Convention**"), and U.S. court decisions that are applicable and, in each case, as in effect and available, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive or prospective basis which could affect the U.S. federal income tax considerations described in this summary. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis.

U.S. Holders

For purposes of this summary, the term "**U.S. Holder**" means a beneficial owner of common shares that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the U.S.;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) organized under the laws of the U.S., any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or
- a trust that (a) is subject to the primary supervision of a court within the U.S. and the control of one or more U.S. persons for all substantial decisions or (b) has a valid election in effect under applicable Treasury regulations to be treated as a U.S. person.

Non-U.S. Holders

For purposes of this summary, a "**non-U.S. Holder**" is a beneficial owner of common shares that is not a U.S. Holder. This summary does not address the U.S. federal income tax consequences to non-U.S. Holders arising from and relating to the acquisition, ownership, and disposition of common shares. Accordingly, a non-U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences (including the potential application of and operation of any income tax treaties) relating to the acquisition, ownership, and disposition of common shares.

U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including the following: (a) U.S. Holders that are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) U.S. Holders that are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) U.S. Holders that are broker-dealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method; (d) U.S. Holders that have a "functional currency" other than the U.S. dollar; (e) U.S. Holders that own common shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position; (f) U.S. Holders that acquired common shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) U.S. Holders that hold common shares other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); or (h) U.S. Holders that own or have owned (directly, indirectly, or by attribution) 10% or more of the total combined voting power of the outstanding shares of the Company. This summary also does not address the U.S. federal income tax considerations applicable to U.S. Holders who are: (a) U.S. expatriates or former long-term residents of the U.S.; (b) persons that have been, are, or will be a resident or deemed to be a resident in Canada for purposes of the *Income Tax Act* (Canada) (the "**ITA**"); (c) persons that use or hold, will use or hold, or that are or will be deemed to use or hold common shares in connection with carrying on a business in Canada; (d) persons whose common shares constitute "taxable Canadian property" under the ITA; or (e) persons that have a permanent establishment in Canada for the purposes of the Canada-U.S. Tax Convention. U.S. Holders that are subject to special provisions under the Code, including U.S. Holders described immediately above, should consult their own tax advisor regarding the U.S. federal, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and foreign tax consequences relating to the acquisition, ownership and disposition of common shares.

If an entity that is classified as a partnership (or "pass-through" entity) for U.S. federal income tax purposes holds common shares, the U.S. federal income tax consequences to such partnership and the partners of such partnership generally will depend on the activities of the partnership and the status of such partners (or owners). Partners of entities that are classified as partnerships for U.S. federal income tax purposes should consult their own tax advisor regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership, and disposition of common shares.

Passive Foreign Investment Company Rules

If the Company were to constitute a "passive foreign investment company" under the meaning of Section 1297 of the Code (a "**PFIC**", as defined below) for any year during a U.S. Holder's holding period, then certain different and potentially adverse rules will effect the U.S. federal income tax consequences to a U.S. Holder resulting from the acquisition, ownership and disposition of common shares.

PFIC Status of the Company

The Company generally will be a PFIC if, for a tax year, (a) 75% or more of the gross income of the Company for such tax year is passive income (the "**income test**") or (b) 50% or more of the value of the Company's assets either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets (the "**asset test**"). "Gross income" generally includes all sales revenues less the cost of goods sold, plus income from investments and from incidental or outside operations or sources, and "passive income" generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions.

For purposes of the PFIC income test and asset test described above, if the Company owns, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, the Company will be treated as if it (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the PFIC income test and asset test described above, "passive income" does not include any interest, dividends, rents, or royalties that are received or accrued by the Company from a "related person" (as defined in Section 954(d)(3) of the Code), to the extent such items are properly allocable to the income of such related person that is not passive income.

In addition, under certain attribution rules, if the Company is a PFIC, U.S. Holders will be deemed to own their proportionate share of the stock of any subsidiary of the Company which is also a PFIC (a ''Subsidiary PFIC''), and will be subject to U.S. federal income tax on their proportionate share of (a) a distribution on the stock of a Subsidiary PFIC and (b) a disposition or deemed disposition of the stock of a Subsidiary PFIC, both as if such U.S. Holders directly held the stock of such Subsidiary PFIC.

The Company believes that it was classified as a PFIC during the tax year ended May 31, 2011, and based on current business plans and financial expectations, the Company believes that it will be a PFIC for the current tax year. The determination of whether any corporation was, or will be, a PFIC for a tax year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether any corporation will be a PFIC for any tax year depends on the assets and income of such corporation over the course of each such tax year and, as a result, cannot be predicted with certainty as of the date of this document. Accordingly, there can be no assurance that the IRS will not challenge any determination made by the Company (or a Subsidiary PFIC) concerning its PFIC status or that the Company (and each Subsidiary PFIC) was not, or will not be, a PFIC for any tax year. Each U.S. Holder should consult its own tax advisor regarding the PFIC status of the Company and each Subsidiary PFIC.

In addition, in any year in which the Company is classified as a PFIC, such holder may be required to file an annual report with the IRS containing such information as Treasury Regulations and/or other IRS guidance may require. . U.S. Holders should consult their own tax advisors regarding the requirements of filing such information returns under these rules, including the requirement to file a IRS Form 8621.

Default PFIC Rules Under Section 1291 of the Code

If the Company is a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the acquisition, ownership, and disposition of common shares will depend on whether such U.S. Holder makes an election to treat the Company and each Subsidiary PFIC as a "qualified electing fund" or "QEF" under Section 1295 of the Code (a "**QEF Election**") or a mark-to-market election under Section 1296 of the Code (a '**Mark-to-Market Election**"). A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election will be referred to in this summary as a "Non-Electing U.S. Holder."

A Non-Electing U.S. Holder will be subject to the rules of Section 1291 of the Code with respect to (a) any gain recognized on the sale or other taxable disposition of common shares and (b) any excess distribution received on the common shares. A distribution generally will be an "excess distribution" to the extent that such distribution (together with all other distributions received in the current tax year) exceeds 125% of the average distributions received during the three preceding tax years (or during a U.S. Holder's holding period for the common shares, if shorter).

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of common shares, and any "excess distribution" received on common shares, must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the respective common shares. The amount of any such gain or excess distribution allocated to the tax year of disposition or distribution of the excess distribution and to years before the entity became a PFIC, if any, would be taxed as ordinary income. The amounts allocated to any other tax year would be subject to U.S. federal income tax at the highest tax applicable to ordinary income in each such year, and an interest charge would be imposed on the tax liability for each such year, calculated as if such tax liability had been due in each such year. A Non-Electing U.S. Holder that is not a corporation must treat any such interest paid as "personal interest," which is not deductible.

If the Company is a PFIC for any tax year during which a Non-Electing U.S. Holder holds common shares, the Company will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether the Company ceases to be a PFIC in one or more subsequent tax years. A Non-Electing U.S. Holder may terminate this deemed PFIC status by electing to recognize gain (which will be taxed under the rules of Section 1291 of the Code discussed above) as if such common shares were sold on the last day of the last tax year for which the Company was a PFIC.

QEF Election

A U.S. Holder that makes a timely and effective QEF Election for the first tax year in which its holding period of its common shares begins, generally, will not be subject to the rules of Section 1291 of the Code discussed above with respect to its common shares. However, a U.S. Holder that makes a timely and effective QEF Election will be subject to U.S. federal income tax on such U.S. Holder's pro rata share of (a) the net capital gain of the Company, which will be taxed as long-term capital gain to such U.S. Holder, and (b) the ordinary earnings of the Company, which will be taxed as ordinary income to such U.S. Holder. Generally, "net capital gain" is the excess of (a) net long-term capital gain over (b) net short-term capital loss, and "ordinary earnings" are the excess of (a) "earnings and profits" over (b) net capital gain. A U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such amounts for each tax year in which the Company is a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by the Company. However, for any tax year in which the Company is a PFIC and has no net income or gain, U.S. Holders that have made a QEF Election would not have any income inclusions as a result of the QEF Election. If a U.S. Holder that made a QEF Election has an income inclusion, such a U.S. Holder may, subject to certain limitations, elect to defer payment of current U.S. federal income tax on such amounts, subject to an interest charge. If such U.S. Holder is not a corporation, any such interest paid will be treated as "personal interest," which is not deductible.

A U.S. Holder that makes a QEF Election generally (a) may receive a tax-free distribution from the Company to the extent that such distribution represents "earnings and profits" of the Company that were previously included in income by the U.S. Holder because of such QEF Election and (b) will adjust such U.S. Holder's tax basis in the common shares to reflect the amount included in income or allowed as a tax-free distribution because of such QEF Election. In addition, a U.S. Holder that makes a QEF Election generally will recognize capital gain or loss on the sale or other taxable disposition of common shares.

The procedure for making a QEF Election, and the U.S. federal income tax consequences of making a QEF Election, will depend on whether such QEF Election is timely. A QEF Election will be treated as "timely" if such QEF Election is made for the first year in the U.S. Holder's holding period for the common shares in which the Company was a PFIC. A U.S. Holder may make a timely QEF Election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such year.

A timely QEF Election will apply to the tax year for which such QEF Election is made and to all subsequent tax years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election. If a U.S. Holder makes a QEF Election and, in a subsequent tax year, the Company ceases to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which the Company is not a PFIC. Accordingly, if the Company becomes a PFIC in another subsequent tax year, the QEF Election will be effective and the U.S. Holder will be subject to the QEF rules described above during any subsequent tax year in which the Company qualifies as a PFIC.

U.S. Holders should be aware that there can be no assurances that the Company will satisfy the record keeping requirements that apply to a QEF, or that the Company will supply U.S. Holders with information that such U.S. Holders require to report under the QEF rules, in the event that the Company is a PFIC. Thus, U.S. Holders may not be able to make a QEF Election with respect to their common shares. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a QEF Election.

Mark-to-Market Election

A U.S. Holder may make a Mark-to-Market Election only if the common shares are marketable stock. The common shares generally will be "marketable stock" if the common shares are regularly traded on (a) a national securities exchange that is registered with the SEC, (b) the national market system established pursuant to section 11A of the Securities and Exchange Act of 1934, or (c) a foreign securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that (i) such foreign exchange has trading volume, listing, financial disclosure, and other requirements and the laws of the country in which such foreign exchange is located, together with the rules of such foreign exchange, ensure that such requirements are actually enforced and (ii) the rules of such foreign exchange ensure active trading of listed stocks. If such stock is traded on such a qualified exchange or other market, such stock generally will be "regularly traded" for any calendar year during which such stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter.

A U.S. Holder that makes a Mark-to-Market Election with respect to its common shares generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to such common shares. However, if a U.S. Holder does not make a Mark-to-Market Election beginning in the first tax year of such U.S. Holder's holding period for the common shares or such U.S. Holder has not made a timely QEF Election, the rules of Section 1291 of the Code discussed above will apply to certain dispositions of, and distributions on, the common shares.

A U.S. Holder that makes a Mark-to-Market Election will include in ordinary income, for each tax year in which the Company is a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the common shares, as of the close of such tax year over (b) such U.S. Holder's tax basis in such common shares. A U.S. Holder that makes a Mark-to-Market Election will be allowed a deduction in an amount equal to the excess, if any, of (a) such U.S. Holder's adjusted tax basis in the common shares, over (b) the fair market value of such common shares (but only to the extent of the net amount of previously included income as a result of the Mark-to-Market Election for prior tax years).

A U.S. Holder that makes a Mark-to-Market Election generally also will adjust such U.S. Holder's tax basis in the common shares to reflect the amount included in gross income or allowed as a deduction because of such Mark-to-Market Election. In addition, upon a sale or other taxable disposition of common shares, a U.S. Holder that makes a Mark-to-Market Election will recognize ordinary income or ordinary loss (not to exceed the excess, if any, of (a) the amount included in ordinary income because of such Mark-to-Market Election for prior tax years over (b) the amount allowed as a deduction because of such Mark-to-Market Election for prior tax years).

A Mark-to-Market Election applies to the tax year in which such Mark-to-Market Election is made and to each subsequent tax year, unless the common shares cease to be "marketable stock" or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a Mark-to-Market Election.

Although a U.S. Holder may be eligible to make a Mark-to-Market Election with respect to the common shares, no such election may be made with respect to the stock of any Subsidiary PFIC that a U.S. Holder is treated as owning, because such stock is not marketable. Hence, the Mark-to-Market Election will not be effective to eliminate the interest charge described above with respect to deemed dispositions of Subsidiary PFIC stock or distributions from a Subsidiary PFIC.

Other PFIC Rules

Under Section 1291(f) of the Code, the IRS has issued proposed Treasury Regulations that, subject to certain exceptions, would cause a U.S. Holder that had not made a timely QEF Election to recognize gain (but not loss) upon certain transfers of common shares that would otherwise be tax-deferred (e.g., gifts and exchanges pursuant to corporate reorganizations). However, the specific U.S. federal income tax consequences to a U.S. Holder may vary based on the manner in which common shares are transferred.

Certain additional adverse rules will apply with respect to a U.S. Holder if the Company is a PFIC, regardless of whether such U.S. Holder makes a QEF Election. For example under Section 1298(b)(6) of the Code, a U.S. Holder that uses common shares as security for a loan will, except as may be provided in Treasury Regulations, be treated as having made a taxable disposition of such common shares.

Special rules also apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to such special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. The rules relating to distributions by a PFIC and their eligibility for the foreign tax credit are complicated, and a U.S. Holder should consult with their own tax advisor regarding the availability of the foreign tax credit with respect to distributions by a PFIC.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisor regarding the PFIC rules and how the PFIC rules may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares.

Ownership and Disposition of Shares

The following discussion is subject to the rules described above under the heading "Passive Foreign Investment Company Rules."

Distributions on Shares

Subject to the PFIC rules discussed above, a U.S. Holder that receives a distribution, including a constructive distribution, with respect to a common share will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of the current or accumulated "earnings and profits" of the Company, as computed for U.S. federal income tax purposes. A dividend generally will be taxed to a U.S. Holder at ordinary income tax rates. To the extent that a distribution exceeds the current and accumulated "earnings and profits" of the Company, such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the common shares and thereafter as gain from the sale or exchange of such common shares. (See " Sale or Other Taxable Disposition of Shares" below). However, the Company may not maintain the calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder should therefore assume that any distribution by the Company with respect to the common shares will constitute ordinary dividend income. Dividends received on common shares generally will not be eligible for the "dividends received deduction". In addition, the Company does not anticipate that its distributions will be eligible for the preferential tax rates applicable to long-term capital gains. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of such rules.

Sale or Other Taxable Disposition of Shares

Subject to the PFIC rules discussed above, upon the sale or other taxable disposition of common shares, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between the amount of cash plus the fair market value of any property received and such U.S. Holder's tax basis in such common shares sold or otherwise disposed of. Subject to the PFIC rules discussed above, gain or loss recognized on such sale or other disposition generally will be long-term capital gain or loss if, at the time of the sale or other disposition, the common shares have been held for more than one year.

Preferential tax rates apply to long-term capital gain of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gain of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

Additional Tax on Passive Income

For tax years beginning after December 31, 2012, certain individuals, estates and trusts whose income exceeds certain thresholds will be required to pay a 3.8% Medicare surtax on "net investment income" including, among other things, dividends and net gain from disposition of property (other than property held in a trade or business). U.S. Holders should consult with their own tax advisors regarding the effect, if any, of this tax on their ownership and disposition of common shares.

Additional Considerations

Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency, or on the sale, exchange or other taxable disposition of common shares, generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). If the foreign currency received is not converted into U.S. dollars on the date of receipt, a U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who receives payment in foreign currency and engages in a subsequent conversion or other disposition of the foreign currency may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Each U.S. Holder should consult its own U.S. tax advisor regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the common shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year.

Complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of a U.S. Holder's U.S. federal income tax liability that such U.S. Holder's "foreign source" taxable income bears to such U.S. Holder's worldwide taxable income. In applying this limitation, a U.S. Holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source." Generally, dividends paid by a foreign corporation should be treated as foreign source for this purpose, and gains recognized on the sale of stock of a foreign corporation by a U.S. Holder should be treated as U.S. source for this purpose, except as otherwise provided in an applicable income tax treaty, and if an election is properly made under the Code. However, the amount of a distribution with respect to the common shares that is treated as a "dividend" may be lower for U.S. federal income tax purposes than it is for Canadian federal income tax purposes, resulting in a reduced foreign tax credit allowance to a U.S. Holder. In addition, this limitation is calculated separately with respect to specific categories of income. The foreign tax credit rules are complex, and each U.S. Holder should consult its own U.S. tax advisor regarding the foreign tax credit rules.

Backup Withholding and Information Reporting

Under U.S. federal income tax law and Treasury regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, recently enacted legislation generally imposes new U.S. return disclosure obligations (and related penalties) on U.S. Holders that hold certain specified foreign financial assets in excess of $50,000. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person and any interest in a foreign entity. U.S. Holders may be subject to these reporting requirements unless their common shares are held in an account at a domestic financial institution. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult with their own tax advisors regarding the requirements of filing information returns under these rules, including the requirement to file an IRS Form 8938.

Payments made within the U.S. or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from the sale or other taxable disposition of, common shares generally may be subject to information reporting and backup withholding tax, at the rate of 28% (increasing to 31% for payments made after December 31, 2012), if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, certain exempt persons generally are excluded from these information reporting and backup withholding rules. Any amounts withheld under the U.S. backup withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner. Each U.S. Holder should consult its own tax advisor regarding the information reporting and backup withholding rules.

The discussion of reporting requirements set forth above is not intended to constitute an exhaustive description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax, and under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. Each U.S. Holder should consult its own tax advisor regarding the information reporting and backup withholding rules.

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

The following is, as of the date hereof, a summary of the principal Canadian federal income tax considerations under the *Income Tax Act* (Canada) (the "**Tax Act**") generally applicable to a holder of common shares of the Corporation ("**Common Shares**") and who, for purposes of the Tax Act and at all relevant times, is neither resident in Canada nor deemed to be resident in Canada for purposes of the Tax Act and any applicable income tax treaty or convention, and who does not use or hold (and is not deemed to use or hold) the Common Shares in carrying on a business in Canada, deals at arm's length with and is not affiliated with the Corporation and holds the Common Shares as capital property (a "**Holder**"). Generally, the Common Shares will be considered to be capital property to a Holder thereof provided that the Holder does not hold the Common Shares in the course of carrying on a business of buying and selling securities and such Holder has not acquired them in one or more transactions considered to be an adventure or concern in the nature of trade.

This summary does not apply to a Holder (i) that is a "financial institution" for purposes of the mark-to-market rules contained in the Tax Act; (ii) that is a "specified financial institution" as defined in the Tax Act; (iii) an interest in which is a "tax shelter investment" as defined in the Tax Act; or (iv) that has elected to report its tax results in a functional currency other than Canadian currency. Special rules, which are not discussed in this summary, may apply to a Holder that is an "authorized foreign bank" within the meaning of the Tax Act or an insurer carrying on business in Canada and elsewhere. Such Holders should consult their own tax advisors.

This summary is based upon the provisions of the Tax Act (including the regulations ("**Regulations**") thereunder) in force as of the date hereof and our understanding of the current administrative policies and assessing practices of the Canada Revenue Agency (the "**CRA**") published in writing by the CRA prior to the date hereof. This summary takes into account all specific proposals to amend the Tax Act (and the Regulations) publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "**Tax Proposals**") and assumes that the Tax Proposals will be enacted in the form proposed, although no assurance can be given that the Tax Proposals will be enacted in their current form or at all. This summary does not otherwise take into account any changes in law or in the administrative policies or assessing practices of the CRA, whether by legislative, governmental or judicial decision or action. This summary is not exhaustive of all possible Canadian federal income tax considerations, and does not take into account other federal or any provincial, territorial or foreign income tax legislation or considerations, which may differ materially from those described in this summary.

This summary is of a general nature only and is not, and is not intended to be, and should not be construed to be, legal or tax advice to any particular Holder, and no representations concerning the tax consequences to any particular Holder are made. **Holders should consult their own tax advisors regarding the income tax considerations applicable to them having regard to their particular circumstances.**

Dividends

Dividends paid or credited (or deemed to be paid or credited) to a Holder by the Corporation are subject to Canadian withholding tax at the rate of 25% unless reduced by the terms of an applicable tax treaty. For example, under the Canada-United States Income Tax Convention (1980) (the "**US Treaty**"), as amended, the dividend withholding tax rate is generally reduced to 15% in respect of a dividend paid or credited to a Holder beneficially entitled to the dividend who is resident in the U.S. for purposes of the US Treaty and whose entitlement to the benefits of the US Treaty is not limited by the limitation of benefits provisions of the US Treaty. Holders are urged to consult their own tax advisors to determine their entitlement to relief under the US Treaty or any other applicable tax treaty as well as their ability to claim foreign tax credits with respect to any Canadian withholding tax, based on their particular circumstances.

Disposition of Common Shares

A Holder generally will not be subject to tax under the Tax Act in respect of a capital gain realized on the disposition or deemed disposition of a Common Share, unless the Common Share constitutes or is deemed to constitute "taxable Canadian property" to the Holder thereof for purposes of the Tax Act, and the gain is not exempt from tax pursuant to the terms of an applicable tax treaty.

In general, provided the Common Shares are listed on a "designated stock exchange" (which currently includes the TSX) at the date of the disposition, the Common Shares will only constitute "taxable Canadian property" of a Holder where, at any time within the 60-month period preceding the disposition: (i) such Holder has, either alone or in combination with persons with whom the holder does not deal at arm's length, owned 25% or more of the issued shares of any class or series of the Corporation's capital stock, and (ii) more than 50% of the fair market value of the Common Shares was derived directly or indirectly from one or any combination of (A) real or immovable property situated in Canada, (B) Canadian resource properties, (C) timber resource properties, and (D) options in respect of, or interests in, or for civil law rights in, property described in any of subparagraphs (ii)(A) to (C), whether or not the property exists. However, and despite the foregoing, in certain circumstances the Common Shares may be deemed to be "taxable Canadian property" under the Tax Act.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We are subject to the information and reporting requirements of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and file periodic reports and other information with the SEC. However, as a foreign private issuer, we are exempt from the rules and regulations under the Exchange Act prescribing the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. Our reports and other information filed with the SEC may be inspected at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. Copies of these materials may be obtained at prescribed rates from the SEC at that address. Our reports and other information can also be inspected at no charge on the SEC's website at www.sec.gov.

We are also subject to the information and reporting requirements of the *Securities Act* (Ontario) and the *Canada Business Corporations Act.* Such reports and information can be inspected at no charge on the website www.sedar.com.

If you are a shareholder, you may request a copy of these filings at no cost by contacting us at:

Director of Finance

Lorus Therapeutics Inc.

2 Meridian Road

Toronto, Ontario M9W 4Z7

Canada

Phone (416) 798-1200

Fax (416) 798-2200

I. Subsidiary Information

Lorus currently has one subsidiary, NuChem Pharmaceuticals Inc., a corporation incorporated under the laws of Ontario, of which Lorus owns 80% of the issued and outstanding voting share capital and 100% of the issued and outstanding non-voting preference share capital.

On May 31, 2009, GeneSense Technologies Inc., of which Lorus owned 100% of the issued and outstanding share capital, was wound up into Lorus and subsequently dissolved. Until June 22, 2009, Lorus owned 100% of the issued and outstanding share capital of Pharma Immune Inc., a corporation incorporated under the laws of Delaware, at which time it disposed of these shares. (See Item 4.B. - Business Overview - Financial Strategy - Secured Convertible Debentures.)

Item 11. Qualitative and Quantitative Disclosures about Market Risk

Refer to notes 4 and 8 to the Consolidated Financial Statements contained in Item 18.

We are not exposed to significant market risks. We do not currently have significant interest, credit or foreign currency risk.

We do not utilize derivative financial instruments to hedge our interest rate or foreign currency rate risks.

Interest Rate Risk

The Company invests its cash resources in liquid government and corporate debt instruments. 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 our investments, owing to the relative short-term nature of the investments.

Credit Risk

Financial instruments potentially exposing the Company to a concentration of credit risk consist principally of cash and cash equivalents and marketable securities. The Company manages this credit risk by maintaining bank accounts with Schedule I banks and investing only in highly rated Canadian securities that are traded on active markets and are capable of prompt liquidation.

Exchange Rate Sensitivity

The functional currency of the Company is the Canadian dollar. The Company does not have significant cash balances in any foreign currencies, does not generally invest in marketable securities denominated in currencies other than Canadian dollars and does not have significant ongoing supply contracts or revenue sources denominated in foreign currencies. Any foreign exchange gains and losses are included in the determination of gain or loss for the relevant period.

Limitations

The above discussion includes only those exposures that exist as of May 31, 2012, and as a result, does not consider exposures or positions that could arise after that date. The Company's ultimate realized gain or loss with respect to interest rate and exchange rate fluctuations would depend on the exposures that arise during the period.

Risk Factors

See Item 3.D.

Item 12. Description of Securities Other Than Equity Securities

Not applicable.

PART II

Item 13. Defaults, Dividends Arrearages and Delinquencies

Not applicable.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

Item 15. Controls and Procedures

(a) Disclosure Controls and Procedures

As of the end of our fiscal year ended May 31, 2012, an evaluation of the effectiveness of our "disclosure controls and procedures" (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), was carried out by our management under the supervision of and with the participation of the principal executive officer and principal financial officer. Based upon on that evaluation, our principal executive officer and principal financial officer have concluded that as of the end of that fiscal year, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

It should be noted that while our principal executive officer and principal financial officer believe that our disclosure controls and procedures are effective and provide a reasonable level of assurance, they do not expect that the disclosure controls and procedures or internal control over financial reporting will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

(b) Management's Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over our financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). 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.

Management has assessed the effectiveness of our internal control over financial reporting as at May 31, 2012. In management's opinion, our internal control over financial reporting is effective as at May 31, 2012. In making its assessment, management used the Committee of Sponsoring Organizations of the Treadway Commission framework in Internal Control - Integrated Framework to evaluate the effectiveness of our internal control over financial reporting.

Changes in Internal Control over Financial Reporting.

There was no change in the Corporation's internal control over financial reporting that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, the Corporation's internal control over financial reporting.

The design of any system of controls and procedures is based in part upon certain assumptions about the likelihood of future events. There can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote.

(c) Attestation Report of the Registered Public Accounting Firm

Because we are a non-accelerated filer under the rules of the SEC, this Annual Report is not required to include, and does not include, an attestation report of our registered public accounting firm with respect to our internal control over financial reporting.

(d) Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the fiscal year ended May 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16. [Reserved]

Item 16A. Audit Committee Financial Expert

Our board of directors has determined that Mr. Warren Whitehead, a director of the Company and the chairman of the Audit Committee, possesses the attributes required of an "audit committee financial expert," and is "independent," under applicable NYSE Amex rules.

Item 16B. Code of Ethics

We have adopted a code of ethics, as such term is defined in Form 20-F, which applies to all of our officers, directors, employees and consultants. A copy of the code of ethics is available, without charge, upon written request from our Director of Finance at our offices located at 2 Meridian Road, Toronto, Ontario M9W 4Z7, Canada. There were no amendments to, or waivers granted under, our code of ethics during our fiscal year ended May 31, 2012.

Item 16C. Principal Accountant Fees and Services

KPMG LLP has served as our principal independent external auditor since October 1994. The total fees billed to us for professional services provided by KPMG LLP for the fiscal years ended May 31, 2012 and 2011 are as follows:

		2012		**2011**
Audit Fees	$	211,500	$	159,250
Audit-Related Fees		$nil	$	153,606
Tax Fees		$nil	$	8,800
All Other Fees	$	25,230	$	26,885
Total	**$**	**236,730**	**$**	**348,541**

Audit fees consist of the fees paid with respect to the audit of our consolidated annual financial statements, quarterly reviews and accounting assistance and fees for services, including assistance with our conversion to IFRS. Audit related fees incurred in the prior year related to prospectus reviews and translation related to public offerings. Tax fees relate to assistance provided with review of tax returns and assistance with specific tax issues. Other fees consist of CPAB fees and expenses.

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 auditor, currently KPMG LLP. Our charter requires Audit Committee pre-approval of all permitted audit, audit-related and tax services.

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 year ended May 31, 2012.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

Not applicable.

Item 16H. Mine Safety Disclosure

Not applicable.

PART III

Item 17. Financial Statements

We have responded to Item 18 in lieu of responding to this Item.

Item 18. Financial Statements

The Consolidated Financial Statements of Lorus Therapeutics Inc. are attached as follows:

Item 19. Exhibits

See the Exhibit Index hereto.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

LORUS THERAPEUTICS INC.

By:"Signed"

Name: Aiping H. Young
Title: President and Chief Executive Officer

Date: September 27, 2012

By:"Signed"

Name: Elizabeth Williams
Title: Director of Finance and Acting Chief Financial Officer

Date: September 27, 2012

EXHIBIT INDEX

Number	Exhibit
1.1 *	Articles of Arrangement.
1.2 *	By-law #2 of the Registrant.
2.1**	Arrangement Agreement dated May 1, 2007, as amended, between the Company, Old Lorus, 6707157 Canada Inc., NuChem Pharmaceuticals Inc., GeneSense Technologies Inc. and Pinnacle International Lands Inc., as amended May 14, 2007 and July 4, 2007.
2.2***	Warrant Repurchase Agreement dated May 1, 2007 between the Company and The Erin Mills Investment Corporation.
2.3***	Assignment, Novation and Amendment Agreement and Consent dated May 1, 2007 among the Company, Old Lorus, GeneSense Technologies Inc. and The Erin Mills Investment Corporation as amended June 28, 2007.
2.4♦♦	Tangible Business Assets Transfer Agreement dated July 10, 2007 between Old Lorus and GeneSense Technologies Inc.
2.5♦♦	Antisense Patent Transfer Agreement dated July 10, 2007 between the Company and GeneSense Technologies Inc.
2.6♦♦	Virulizin® and Small Molecule Patent Assets Transfer Agreement dated July 10, 2007 between Old Lorus and GeneSense Technologies Inc.
2.7♦♦	Prepaid Expenses and Receivables Transfer Agreement dated July 10, 2007 between Old Lorus and GeneSense Technologies Inc.
2.8♦♦	NuChem Pharmaceuticals Inc. Share Purchase Agreement dated July 10, 2007 between Old Lorus and GeneSense Technologies Inc.
2.9♦♦	GeneSense Technologies Inc. Share Purchase Agreement dated July 10, 2007 between Old Lorus and New Lorus.
2.10***	Pinnacle Share Purchase Agreement dated July 10, 2007 between Old Lorus and 6707157 Canada Inc.
2.11+	Indemnification Agreement dated July 10, 2007 between Old Lorus and the Company.
2.12#♦♦	Settlement Agreement dated June 19. 2009 between the Company and The Erin Mills Investment Corporation with respect to the purchase and settlement of $15 million secured convertible debentures.
2.13#♦♦	Asset Purchase Agreement dated June 19, 2009 between the Company and The Erin Mills Investment Corporation under which the Company sold the intellectual property associated with Virulizin®.
2.14#♦♦	Supply and Services Agreement dated June 19, 2009 between the Company and Erin Mills Biotech Inc.
2.15#♦♦	Share Purchase Agreement regarding sale of Pharma Immune Inc dated June 19, 2009 between the Company and The Erin Mills Investment Corporation.
2.16#	Animal Rights License Agreement dated June 19, 2009 between the Company and Erin Mills Biotech Inc.
2.17#♦♦	Amendment, Assignment, Assumption, Novation and Consent Agreement dated June 19, 2009 between the Company, ZOR Pharmaceuticals, LLC, Erin Mills Biotech Inc. and The Erin Mills Investment Corporation.
2.18###	Promissory note dated April 14, 2010 between the Company and Herbert Abramson.
2.19##	List of subsidiaries.
2.20##	Code of Business Conduct and Ethics.
2.21♦	Share Purchase Warrant Indenture dated August 15, 2011 between the Company and Computershare Trust Company of Canada regarding the provision for issuance of common share purchase warrants.
2.22♦	Agency Agreement dated July 20, 2011 in connection with an offering of units between the Company and Euro Pacific Canada Inc.
2.23♦	Commitment Letter for minimum $4 million equity investment dated June 20, 2011 and subsequently amended July 11, 2011 from Mr. Abramson.
2.24	Share Purchase Warrant related to the June 2012 Private Placement

4.1	+++Stock Option Plans.
4.2	+++Form of Officer and Director Indemnity Agreement.
4.3	++ Amalgamation Agreement dated August 23, 1991, among the Company, Mint Gold Resources Ltd., Harry J. Hodge and Wayne Beach.
4.4	#♦♦ Exclusive License Agreement dated April 8, 2008 between the Company and ZOR Pharmaceuticals, LLC Pharmaceuticals LLC.
4.5	#♦♦ Independent Contractor Services Agreement dated April 8, 2008 between the Company and ZOR Pharmaceuticals, LLC Pharmaceuticals LLC.
4.6	#♦♦ Limited Liability Company Agreement dated April 8, 2008 between the Company and ZBV I, LLC.
4.7	♦♦ Non-Exclusive License Agreement dated May 1, 2012 between the Company and Genentech, Inc.
12.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act.
12.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act.
13.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act.
13.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act.
*	Incorporated by reference to File 0-32001, Form 6-K, dated November 19, 2007.

**	Incorporated by reference to File 1-32001, Form 6-K, dated May 30, 2007.
***	Incorporated by reference to File 1-32001, Form 6-K, dated November 20, 2007.
+	Incorporated by reference to File 1-32001, Form 6-K, dated September 4, 2007.
++	Incorporated by reference to File 0-19763, Registration Statement on Form 20-FR, dated March 4, 1992.
+++	Incorporated by reference to File 1-32001, Form 20-F, Annual Report, dated November 29, 2007.
++++	Incorporated by reference to File 1-32001, Form 6-K, dated April 21, 2008.
♦	Incorporated by reference to File 1-32001, Form 20F, Annual Report, dated November 29, 2011
♦♦	Confidential treatment has been requested for portions of this documen which have been omitted and filed separately with the SEC
#	Incorporated by reference to File 1-32001, Form 6-K/A, dated September 27, 2012.
##	Incorporated by reference to File 1-32001, Form 20-F, Annual Report, dated November 30, 2009.
###	Incorporated by reference to File 1-32001, Form 20-F/A, Annual Report, dated December 1, 2010.
####	Incorporated by reference to File 1-32001, Form 6-K, dated December 1, 2010.

Management's Responsibility for Financial Reporting

The accompanying consolidated financial statements of Lorus Therapeutics Inc. and other financial information contained in this annual report are the responsibility of Management and have been approved by the Board of Directors of the Company.

The consolidated financial statements have been prepared in conformity with International Financial Reporting Standards, using Management's best estimates and judgments where appropriate. In the opinion of Management, these consolidated financial statements reflect fairly the financial position and the results of operations and cash flows of the Company within reasonable limits of materiality. The financial information contained elsewhere in this annual report has been reviewed to ensure consistency with that in the consolidated financial statements. The integrity and objectivity of data in the financial statements and elsewhere in this annual report are the responsibility of Management.

In discharging its responsibility for the integrity and fairness of the financial statements, management maintains a system of internal controls designed to provide reasonable assurance, at appropriate cost, that transactions are authorized, assets are safeguarded and proper records are maintained. Management believes that the internal controls provide reasonable assurance that financial records are reliable and form a proper basis for the preparation of the consolidated financial statements, and that assets are properly accounted for and safeguarded. The internal control process includes management's communication to employees of policies that govern ethical business conduct.

The Board of Directors, through an Audit Committee, oversees management's responsibilities for financial reporting. This committee, which consists of three independent directors, reviews the audited consolidated financial statements and recommends the financial statements to the Board for approval. Other key responsibilities of the Audit Committee include reviewing the adequacy of the Company's existing internal controls, audit process and financial reporting with management and the external auditors.

The consolidated financial statements have been audited by KPMG LLP, Chartered Accountants, who are independent auditors appointed by the shareholders of the Company upon the recommendation of the Audit Committee. Their report follows. The independent auditors have free and full access to the Audit Committee.

Aiping Young
President and Chief Executive Officer

Elizabeth Williams
Director of Finance (Acting Chief Financial Officer)

KPMG LLP
Chartered Accountants
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INDEPENDENT AUDITORS' REPORT OF REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and 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 at May 31, 2012, May 31, 2011 and June 1, 2010, the consolidated statements of loss and comprehensive loss, changes in shareholders' equity and cash flows for the years ended May 31, 2012 and May 31, 2011, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with 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 present fairly, in all material respects, the consolidated financial position of Lorus Therapeutics Inc. as at May 31, 2012, May 31, 2011 and June 1, 2010, and its consolidated financial performance and its consolidated cash flows for the years ended May 31, 2012 and May 31, 2011 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Emphasis of Matter

Without qualifying our opinion, we draw attention to note 2(b) in the consolidated financial statements, which indicates that Lorus Therapeutics Inc. is in the development stage, no substantial revenue has been generated from its operating activities and, consequently, it is incurring losses and negative cash flows from its activities and has a deficit of $194,394,000. Accordingly, Lorus Therapeutics Inc. depends on its ability to raise financing in order to discharge its commitments and liabilities in the normal course of business. These conditions, along with other matters as set forth in note 2(b), indicate the existence of a material uncertainty that casts substantial doubt about Lorus Therapeutics Inc.'s ability to continue as a going concern.

KPMG LLP

Chartered Accountants, Licensed Public Accountants

August 3, 2012
Toronto, Canada

LORUS THERAPEUTICS INC.

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

	May 31, 2012	May 31, 2011 (note 16)	June 1, 2010 (note 16)
Assets			
Current assets:			
Cash and cash equivalents (note 4)	$ 320	$ 911	$ 667
Short-term investments (note 4)	–	–	247
Prepaid expenses and other assets	293	388	636
Total current assets	613	1,299	1,550
Non-current assets:			
Equipment (note 5)	55	99	147
Total non-current assets	55	99	147
Total assets	$ 668	$ 1,398	$ 1,697
Liabilities and Shareholders' Equity (Deficiency)			
Current liabilities:			
Accounts payable	$ 322	$ 215	$ 387
Accrued liabilities (notes 9(g) and 14)	1,474	944	1,458
Promissory notes payable (note 7)	900	–	1,000
Total current liabilities	2,696	1,159	2,845
Shareholders' equity (deficiency):			
Share capital (note 9):			
Common shares	170,036	168,787	163,920
Stock options (note 10)	535	1,212	3,803
Contributed surplus	21,186	18,988	14,875
Warrants	609	1,032	1,039
Deficit	(194,394)	(189,780)	(184,785)
Total shareholders' equity (deficiency)	(2,028)	239	(1,148)
Going concern (note 2(b))			
Total liabilities and shareholders' equity (deficiency)	$ 668	$ 1,398	$ 1,697

See accompanying notes to consolidated financial statements.

On behalf of the Board:

_____ Director

_____ 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, 2012 and 2011

	2012	2011 (note 16)
Revenue	$ –	$ –
Expenses:		
Research and development (notes 6 and 12)	2,170	2,518
General and administrative (note 12)	2,430	2,420
Operating expenses	4,600	4,938
Finance expense (note 11)	20	71
Finance income	(6)	(14)
Net finance expense	14	57
Net loss and total comprehensive loss for the year	$ (4,614)	$ (4,995)
Basic and diluted loss per common share	$ (0.23)	$ (0.38)
Weighted average number of common shares outstanding used in the calculation of (in thousands):		
Basic and diluted loss per common share	20,260	13,157

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, 2012 and 2011

	Common shares	Stock options	Warrants	Contributed surplus	Deficit	Total
Balance, June 1, 2011	$ 168,787	$ 1,212	$ 1,032	$ 18,988	$ (189,780)	$ 239
Issuance of units (note 9(b))	1,214	–	609	–	–	1,823
Repricing of warrants (note 9(c)(i))	–	–	239	(239)	–	–
Exercise of warrants (note 9(c)(ii)(a))	35	–	(18)	–	–	17
Expiry of warrants (note 9(c)(ii)(a))	–	–	(1,253)	1,253	–	–
Stock-based compensation (note 10)	–	507	–	–	–	507
Cancellation and forfeiture of stock options	–	(1,184)	–	1,184	–	–
Net loss for the year	–	–	–	–	(4,614)	(4,614)
Balance, May 31, 2012	$ 170,036	$ 535	$ 609	$ 21,186	$ (194,394)	$ (2,028)
Balance, June 1, 2010	$ 163,920	$ 3,803	$ 1,039	$ 14,875	$ (184,785)	$ (1,148)
Issuance of units (note 9(b)(ii)(iii))	4,867	–	1,032	–	–	5,899
Expiry of warrants (note 9(c)(ii)(b)(c))	–	–	(1,039)	1,039	–	–
Stock-based compensation (note 10)	–	483	–	–	–	483
Forfeiture of stock options	–	(3,074)	–	3,074	–	–
Net loss for the year	–	–	–	–	(4,995)	(4,995)
Balance, May 31, 2011	$ 168,787	$ 1,212	$ 1,032	$ 18,988	$ (189,780)	$ 239

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, 2012 and 2011

	2012	2011 (note 16)
Cash flows from operating activities:		
Net loss for the year	$ (4,614)	$ (4,995)
Items not involving cash:		
Stock-based compensation	507	483
Depreciation of equipment	44	56
Finance expense	20	71
Other	–	–
Change in non-cash operating working capital (note 11)	1,632	(1,438)
Cash used in operating activities	(2,411)	(5,823)
Cash flows from financing activities:		
Issuance of common shares and warrants, net of issuance costs (note 9)	1,823	5,899
Exercise of warrants (note 9)	17	–
Interest on promissory notes	(20)	(71)
Cash provided by financing activities	1,820	5,828
Cash flows from investing activities:		
Maturity of marketable securities and other investments	–	247
Additions to equipment	–	(8)
Cash provided by investing activities	–	239
Increase (decrease) in cash and cash equivalents	(591)	244
Cash and cash equivalents, beginning of year	911	667
Cash and cash equivalents, end of year	$ 320	$ 911

Supplemental cash flow information (note 11)

See accompanying notes to consolidated financial statements.

1. Reporting entity:

Lorus Therapeutics Inc. ("Lorus" or the "Company") is a biopharmaceutical company focused on the discovery, research and development of novel anticancer therapies with a high safety profile. 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 subsidiary as at May 31, 2012 are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), and the Company has elected June 1, 2010 as the date of transition to IFRS (the "transition date"). As these financial statements represent the Company's initial presentation of its results and financial position under IFRS, they were prepared in accordance with IFRS 1, *First-time Adoption of IFRS* ("IFRS 1").

The Company's consolidated financial statements were previously prepared in accordance with Canadian generally accepted accounting principles ("Canadian GAAP"). Canadian GAAP differs in some areas from IFRS. See note 16 for reconciliations and descriptions of the effect of the transition from Canadian GAAP to IFRS on equity, loss and the statements of financial position, loss and comprehensive loss, and cash flows.

The consolidated financial statements of the Company were approved and authorized for issue by the Board of Directors on August 3, 2012.

2. Basis of presentation (continued):

(b) Going concern:

These consolidated financial statements have been prepared in accordance with IFRS accounting principles applicable to a going concern using the historical cost basis, except for held-for-trading financial assets which are measured at fair value.

Management has forecasted that the Company's current level of cash and cash equivalents, including the proceeds from private placement completed subsequent to year end (note 17(a)), will not be sufficient to execute its current planned expenditures for more than the next 10 to 12 months without further financing being obtained. The Company is currently in discussion with several potential investors and partners to provide additional funding. Management believes that it will complete one or more of these arrangements in sufficient time to continue to execute its planned expenditures without interruption. However, there can be no assurance that the capital will be available as necessary to meet these continuing expenditures, or if the capital is available, that it will be on terms acceptable to the Company. The issuance of common shares by the Company could result in significant dilution in the equity interest of existing shareholders. There can be no assurance that the Company will be able to obtain sufficient financing to meet future operational needs. As a result, there is a substantial doubt as to whether the Company will be able to continue as a going concern and realize its assets and pay its liabilities as they fall due.

These consolidated financial statements do not reflect the adjustments that would be necessary should the Company be unable to continue as a going concern and therefore be required to realize its assets and settle its liabilities and commitments in other than the normal course of business and at amounts different from those in the accompanying consolidated financial statements. Such amounts could be material.

(c) Functional and presentation currency:

The functional and presentation currency of the Company and its Canadian subsidiary, NuChem Pharmaceuticals Inc. ("NuChem"), is the Canadian dollar.

2. Basis of presentation (continued):

(d) 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.

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) Determination of impairment of goodwill and equipment:

Under IAS 36, *Impairment of Assets* ("IAS 36"), the Company is required to make a formal estimate of the recoverable amount and the carrying amount of a cash-generating unit ("CGU") that is subject to impairment testing. The recoverable amount under IAS 36 is the higher of fair value less costs to sell or value in use. The carrying amounts of the Company's non-financial assets including equipment are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In estimating value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In assessing carrying values and impairment of non-financial assets, including goodwill and equipment, management makes judgments in determining recoverable amounts. Due to the development stage of the Company there is a significant amount of subjectivity when estimating future cash flows and applying a discount to any cash flow model. Changes in these estimates could have a significant impact on the valuation of these non-financial assets.

2. Basis of presentation (continued):

(ii) 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.

(iii) 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 is accumulating tax loss carryforward balances creating a deferred tax asset. Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses 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, prior year research and development expenses, and investment tax credits. 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.

2. Basis of presentation (continued):

(iv) 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:

(i) Business combinations:

As part of its transition to IFRS, the Company elected not to restate any business combinations that occurred prior to June 1, 2010.

(ii) Subsidiary:

The consolidated financial statements include the accounts of the Company and its 80% owned subsidiary, NuChem. 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 subsidiary are consistent with the Company's accounting policies. All intra-group transactions, balances, revenue and expenses are eliminated on consolidation.

3. Significant accounting policies (continued):

(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.

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:

Financial assets	Classification	Measurement
Cash and cash equivalents	Loans and receivables	Amortized cost
Short-term investments (held-for-trading)	Fair value through profit or loss	Fair value

3. Significant accounting policies (continued):

Financial liabilities	Classification	Measurement
Accounts payable, accrued liabilities and promissory notes payable	Other liabilities	Amortized cost

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

Short-term investments are liquid Canadian government or corporate instruments having original maturity dates greater than three months and less than one year. The short-term investments held by the Company on June 1, 2010 were classified as held-for-trading and measured at fair value with any gain or loss being recognized in the consolidated statements of loss and comprehensive loss. As at May 31, 2012 and 2011, the Company did not hold any short-term investments (held-to-maturity or held-for-trading). At June 1, 2010, the Company held $247 thousand in short-term investments that were classified as held-for-trading and measured at fair value.

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.

- 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.

3. Significant accounting policies (continued):

The Company's financial assets as at May 31, 2012, May 31, 2011 and June 1, 2010, 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:

Furniture and equipment 3 - 5 years

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.

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.

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. 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 valued, the fair value of the options granted will be used.

3. Significant accounting policies (continued):

The Company has a deferred share unit 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. 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. As at May 31, 2012, there were 780,000 units issued under this plan (note 9(g)). The Company cannot issue treasury shares under the deferred share unit plan.

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.

(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.

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) Impairment:

Non-financial assets:

The carrying amounts of the Company's non-financial assets including equipment are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In estimating value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of the CGU.

The Company's corporate assets do not generate separate cash inflows. If there is an indication that a corporate asset may be impaired, then the recoverable amount is determined for the CGU to which the corporate asset belongs.

3. Significant accounting policies (continued):

Impairment losses recognized in respect of a CGU are allocated to reduce the carrying amount to the extent the carrying amount of the asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of a CGU are allocated to reduce the carrying amount of the assets in a unit on a pro-rated basis. Impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation, if no impairment loss had been recognized. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through profit and loss.

(l) 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 financial 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 as related to an indemnification as described in note 14.

3. Significant accounting policies (continued):

(m) 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.

(n) Recent accounting pronouncements:

(i) IFRS 7, *Financial Instruments - Disclosures* ("IFRS 7"):

In October 2010, the IASB issued IFRS 7. This amendment enhances the disclosure requirement for transfers of financial assets that result in derecognition. This amendment is effective for the Company's interim and annual consolidated financial statements commencing June 1, 2012. The Company is assessing the impact of this new standard on its consolidated financial statements.

(ii) IAS 1, *Presentation of Financial Statements* ("IAS 1"):

In June 2011, the IASB issued IAS 1. This amendment retains the "one or two statement" approach to presenting the statements of income and comprehensive income at the option of the entity and only revises the way other comprehensive income is presented. This new standard is effective for the Company's interim and annual consolidated financial statements commencing June 1, 2013. The Company is assessing the impact of this new standard on its consolidated financial statements.

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

In October 2010, the IASB issued IFRS 9, which replaces IAS 39,*Financial Instruments - Recognition and Measurement* and establishes principles for the financial reporting of financial assets and financial liabilities that will present relevant and useful information to users of financial statements for their assessment of the amounts, timing and uncertainty of an entity's future cash flows. This new standard is effective for the Company's interim and annual consolidated financial statements commencing June 1, 2015. The Company is assessing the impact of this new standard on its consolidated financial statements.

3. Significant accounting policies (continued):

(iv) IFRS 10, *Consolidated Financial Statements* ("IFRS 10"):

This amendment establishes a single control that applies to all entities. These changes will require management to exercise significant judgment to determine which entities are controlled, and therefore are required to be consolidated by a parent, compared with the former requirements. The amendment becomes effective for annual periods beginning on or after January 1, 2013. The Company does not anticipate any impact on its consolidated financial statements related to the adoption of this new standard.

(v) IFRS 12, *Disclosure of Interests in Other Entities* ("IFRS 12"):

In May 2011, the IASB issued IFRS 12. IFRS 12 establishes new and comprehensive disclosure requirements for all forms of interest in other entities. This new standard is effective for the Company's interim and annual consolidated financial statements commencing June 1, 2013. The Company is assessing the impact of this new standard on its consolidated financial statements.

(vi) IFRS 13, *Fair Value Measurement* ("IFRS 13"):

In May 2011, the IASB issued IFRS 13. IFRS 13, replaces the fair value measurement guidance contained in individual IFRSs with a single source of fair value measurement guidance. This standard establishes a framework for measuring fair value and requires the fair value hierarchy, to be applied to all fair value measurements, including non-financial assets and liabilities that are measured or based on fair value in the statement of financial position as well as non-recurring fair value measurements such as assets held-for-sale. Furthermore, IFRS 13 expands disclosure requirements for fair value measurements to provide information that enables financial statement users to assess the methods and inputs used to develop fair value measurements and, for recurring fair value measurements that use significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income. This new standard is effective for the Company's interim and annual consolidated financial statements commencing June 1, 2013. The Company is assessing the impact of this new standard on its consolidated financial statements.

4. Capital disclosures:

The Company's objectives when managing capital are to:

The Company's objectives when managing capital are to:

- Maintain its ability to continue as a going concern in order to provide returns to shareholders and benefits to other stakeholders;
- 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 cash and cash equivalents and 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.

Pursuant to the commitment letter (described in note 7) provided by Mr. Herbert Abramson ("Mr. Abramson"), a director of the Company and majority shareholder, the Company has issued a grid promissory note to Mr. Abramson that allows Lorus to borrow funds of up to $1.8 million. The funds may be borrowed at a rate of up to $300,000 per month, incur interest at a rate of 10% per year and are due and payable on November 28, 2012. As at May 31, 2012, the Company had borrowed $900 thousand under this promissory note.

This loan and all accrued interest was repaid by the Company subsequent to the year end in June 2012 (note 17).

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, 2011.

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

4. Capital disclosures (continued):

(a) Cash and cash equivalents:

Cash and cash equivalents consists of cash of $76 thousand (May 31, 2011 - $153 thousand; June 1, 2010 - $667 thousand) and funds deposited into high interest savings accounts totalling nil (May 31, 2011 - $758 thousand; June 1, 2010 - nil). The current interest rate earned on these deposits is nil (May 31, 2011 - 1.5%; June 1, 2010 - nil).

At May 31, 2012, the Company had received $244 thousand in deposits related to subscription agreements for the Private Placement (note 17(a)) completed subsequent to year end. The Company recorded a liability related to these funds at May 31, 2012 and on June 8, 2012, the Company reversed the liability with the credit to share capital.

(b) Short-term investments:

An investment consisting of a principal protected deposit note totalling $247 thousand at June 1, 2010, was designated as held-for-trading and classified as short-term investments on the consolidated balance sheets. This investment was carried at fair value. There were no short-term investments held by the Company at May 31, 2012 or 2011.

5. Equipment:

May 31, 2012	Cost	Accumulated depreciation	Net book value
Furniture and equipment	$ 2,914	$ 2,859	$ 55

May 31, 2011	Cost	Accumulated depreciation	Net book value
Furniture and equipment	$ 2,914	$ 2,815	$ 99

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

5. Equipment (continued):

June 1, 2010	Cost	Accumulated depreciation	Net book value
Furniture and equipment	$ 2,907	$ 2,760	$ 147

6. Research and development programs:

The Company has product candidates in three classes of anticancer therapies:

- small molecule therapies based on anti-proliferative and anti-metastatic properties that act at novel cancer specific targets;
- immunotherapy, based on stimulating anticancer properties of the immune system and by direct tumour cell killing; and
- RNA-targeted (antisense) therapies, based on synthetic segments of oligonucleotides designed to bind to the messenger RNA that is responsible for the production of proteins over-expressed in cancer cells.

(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 which entered into a Phase I clinical trial in January 2011 and LOR-500 program, which is in the pre-clinical stage of development.

(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 and the Company is seeking a partnership or collaboration for future development.

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

6. Research and development programs (continued):

(c) RNA-targeted therapies:

The Company's lead RNA-targeted drug candidate is LOR-2040. The Company has reported Phase II clinical results, completed to the end-of-stage assessment time point, of LOR-2040 in combination with cytarabine in relapsed and refractory acute myeloid leukemia patient population. Based on these data, the Company is seeking a partnership or collaboration for future development.

Product costs by product class are as follows:

	2012	2011
Small molecule program	$ 1,900	$ 1,672
Immunotherapy	–	–
RNA-targeted therapies	–	626
	$ 1,900	$ 2,298

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

7. Promissory notes payable:

Pursuant to the commitment letter (described in note 9(b)) provided by Mr. Abramson, the Company issued a grid promissory note to Mr. Abramson that allows Lorus to borrow funds up to $1.8 million. The funds may be borrowed at a rate of up to $300 thousand per month, incur interest at a rate of 10% per year and are due and payable in full on November 28, 2012. The promissory note is subject to certain covenants which, if breached, could result in the promissory note becoming payable on demand.

Lorus has not breached these covenants as of May 31, 2012 and has not received notice of any breach of these covenants by Mr. Abramson.

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

7. Promissory notes payable (continued):

As at May 31, 2012, the Company has drawn $900 thousand on this promissory note and subsequent to year end in June 2012, the note and all accrued interest was repaid.

In April 2010, the Company entered into a loan agreement with a company related to Mr. Abramson to borrow $1 million. The loan amount, which was received on April 14, 2010, was unsecured, evidenced by a promissory note and bore interest at the annual rate of 10%. The principal and interest amount were due in six months and later extended a further three months. The principal amount was repaid in November 2010.

8. Financial instruments:

(a) Financial instruments: The Company has classified its financial instruments as follows:

	May 31, 2012	May 31, 2011	June 1, 2010
Financial assets:			
Cash and cash equivalents, consisting of guaranteed investment certificates, held-for-trading, measured at fair value through loss or profit	$ 320	$ 911	$ 667
Short-term investments, held-for-trading, recorded at fair value through profit or loss	–	–	247
Financial liabilities:			
Accounts payable, measured at amortized cost	322	215	387
Accrued liabilities, measured at amortized cost	1,474	944	1,458
Promissory notes payable, measured at amortized cost	900	–	1,000

8. Financial instruments (continued):

At May 31, 2012, there are no significant differences between the carrying values of these amounts and their estimated market values due to their short-term nature.

Assets measured at fair value include cash and cash equivalents and short-term investments, which have been classified as Level 1 as at May 31, 2012, May 31, 2011 and June 1, 2010.

(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.

The Company manages credit risk for 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 with debt securities that are traded on active markets and 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, the 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. The outstanding promissory note was repaid subsequent to year end (note 17).

8. Financial instruments (continued):

(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 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, 2012, U.S. dollar denominated accounts payable and accrued liabilities amounted to $148 thousand (May 31, 2011 - $254 thousand; June 1, 2010 - $270 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 $15 thousand (May 31, 2011 - $25 thousand). The Company does not have any forward exchange contracts to hedge this risk.

The Company does not invest in equity instruments of other corporations.

(c) Capital management:

The Company's primary objective when managing capital is to ensure that it has sufficient cash resources to fund its development and commercialization activities and to maintain its ongoing operations. To secure the additional capital necessary to pursue these plans, the Company may attempt to raise additional funds through the issuance of equity or by securing strategic partners.

8. Financial instruments (continued):

The Company includes cash and cash equivalents and short-term deposits in the definition of capital.

The Company is 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, 2012.

9. Share capital:

(a) Continuity of common shares and warrants:

	Common shares		Warrants	
	Number	Amount	Number	Amount
	(In thousands)		(In thousands)	
Balance, June 1, 2010	9,933	$ 163,920	1,326	$ 1,039
Expiry of warrants (c)(ii)(b)(c)	–	–	(1,326)	(1,039)
Issuance of units (b)(iii)	4,170	3,226	4,170	1,032
Issuance of shares (b)(ii)	1,582	1,641	–	–
Balance, May 31, 2011	15,685	168,787	4,170	1,032
Issuance of units (b)(i)	5,484	1,214	5,678	609
Warrant repricing (c)(i)	–	–	–	239
Exercise of warrants (c)(ii)(a)	59	35	(59)	(18)
Expiry of warrants (c)(ii)(a)	–	–	(4,111)	(1,253)
Balance, May 31, 2012	21,228	$ 170,036	5,678	$ 609

9. Share capital (continued):

(b) Equity issuances:

(i) August 2011 Unit Offering:

On July 22, 2011, the Company filed a final short-form prospectus in connection with a best efforts offering (the "Offering") of a minimum of 5,000,000 units of the Company at a price of $0.40 per unit for gross proceeds of $2,000,000 and a maximum of 10,000,000 units for gross proceeds of $4,000,000. Each unit consisted of one common share of Lorus and one common share purchase warrant of Lorus. 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 per common share (the "Exercise Price"). If on any date (the "Accelerated Exercise Date") the 10-day VWAP of the common shares on the Toronto Stock Exchange equals or exceeds 200% of the Exercise Price, then upon the Company sending the holders of warrants written notice of such Accelerated Exercise Date 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 on which such written notice is sent to holders of warrants.

In connection with the Offering, Mr. Abramson, a director of the Company, entered into an irrevocable commitment letter on June 20, 2011, and amended July 11, 2011, to purchase, directly or indirectly, common shares and common share purchase warrants (or as may otherwise be agreed) in the capital of Lorus having an aggregate subscription price equal to the difference (the "Commitment Amount"), if any, between: (a) the sum of: (i) the gross proceeds realized by Lorus in the Offering; and (ii) the gross proceeds received by Lorus in respect of all financings completed by Lorus from the date of the final short-form prospectus to November 30, 2011; and (b) $4 million.

The Offering closed on August 15, 2011 for total gross proceeds of $2.2 million. In connection with the Offering, Lorus has issued 5.484 million common shares and
5.678 million warrants including the broker warrants.

Mr. Abramson purchased 2.4 million units as part of the Offering.

9. Share capital (continued):

The total costs associated with the transaction were approximately $395 thousand, which included the $25 thousand which represented the fair value of the brokers' services provided as part of the Offering. Each such broker warrant is exercisable for one unit at a price of $0.40 per unit for a period of 24 months following the closing of the Offering. The Company has 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, $1.2 million of the net proceeds were allocated to the common shares and $609 thousand to the common share purchase warrants.

(ii) December 2010 Private Placement:

On December 1, 2010, pursuant to a private placement, the Company issued 1.6 million common shares in exchange for gross cash consideration of $1.66 million. The total costs associated with the transaction were approximately $20 thousand. Mr. Abramson, a director of the Company, subscribed for 1,410,000 common shares, representing approximately 89% of the total number of common shares issued through the private placement. No commission was paid in connection with the private placement.

(iii) November 2010 Rights Offering:

On August 27, 2010 the Company announced a proposed rights offering as described below, including a $4 million standby purchase agreement from a director of the Company, Mr. Abramson. Mr. Abramson also provided the Company with interim financing by way of three $500 thousand monthly loans, advanced on August 11, 2010, September 13, 2010 and October 5, 2010. The loans were unsecured, had a six-month term (or the earlier of the closing of the rights issue) and bore interest at the annual rate of 10%. All three notes were repaid upon the close of the rights offering described below.

9. Share capital (continued):

On September 27, 2010, Lorus filed a final short-form prospectus in each of the provinces of Canada in connection with a distribution to its shareholders in eligible jurisdictions outside the United States of rights exercisable for units of the Company (the "Rights Offering"). Under the Rights Offering, holders of common shares of the Company as of October 12, 2010, the record date, received one right for each common share held as of the record date. Each two rights entitled the holder thereof to purchase a unit of the Company at a price of $1.11 per unit. Each unit consisted of one common share of the Company and one warrant to purchase an additional common share of the Company at a price of $1.33 until May 2012.

A total of 4.2 million units of the Company at a price of $1.11 per unit were issued in connection with the Rights Offering. As a result of the Rights Offering, Lorus issued
4.2 million common shares and 4.2 million common share purchase warrants for net proceeds of $4.2 million. In connection with the Rights Offering, the Company secured a standby purchase arrangement of $4 million by Mr. Abramson, one of the Company's directors. Mr. Abramson agreed to make an investment such that the minimum gross proceeds of the proposed Rights Offering would be $4 million. No fee was payable to Mr. Abramson for this commitment. In accordance with the terms of the standby purchase agreement, Mr. Abramson subscribed for 3.6 million of the 4.2 million units of the Rights Offering for $4 million.

The total costs associated with the transaction were approximately $370 thousand. The Company has allocated the net proceeds of the Rights Offering to the common shares and the common share purchase warrants based on their estimated relative fair values. Based on relative fair values, $3.2 million of the net proceeds were allocated to the common shares and $1.0 million to the common share purchase warrants.

9. Share capital (continued):

(c) Warrants:

(i) Repricing:

On November 29, 2011, shareholders of the Company (excluding insiders who also held warrants) approved a resolution to amend the exercise price of certain outstanding warrants from $1.33 to the 5-day volume weighted average trading price on the Toronto Stock Exchange five days prior to approval plus a 10% premium. The revised warrant exercise price was $0.28. The Company calculated an increased value attributed to the warrants of $239 thousand related to the amendment. This increase was calculated by taking the Black-Scholes value of the warrants immediately before the amendment and immediately after the amendment. There were 4.2 million warrants which were amended and of those 3.6 million were held by Mr. Abramson, a director of the Company.

(ii) Exercises and expiry:

(a) The warrants issued in November 2010 and for which the price was amended in November 2011 ((i) repricing described above), expired May 8, 2012. A total of 59,384 warrants were exercised for cash proceeds of $17 thousand. The balance of the 4.2 million warrants expired unexercised, resulting in a transfer of the amount attributed to the expired warrants of $1.253 million to contributed surplus.

(b) The warrants issued on November 27, 2009 expired unexercised on May 27, 2011. This expiry resulted in a transfer of the amount attributed to the expired warrants of $622 thousand to contributed surplus.

(c) The warrants issued on August 7, 2008 expired unexercised on August 10, 2010. This expiry results in a transfer of the amount attributed to the expired warrants of $417 thousand to contributed surplus.

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

9. Share capital (continued):

(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.

	2012	2011
Balance, beginning of year	$ 18,988	$ 14,875
Expiry of warrants (c)	1,253	1,039
Warrant repricing (c)	(239)	–
Forfeiture and cancellation of stock options	1,184	3,074
Balance, end of year	$ 21,186	$ 18,988

(e) Continuity of stock options:

	2012	2011
Balance, beginning of year	$ 1,212	$ 3,803
Stock option expense	507	483
Cancellation and forfeiture of stock options	(1,184)	(3,074)
Balance, end of year	$ 535	$ 1,212

(f) Loss per share:

	2012	2011
Issued common shares, beginning of year	15,684,697	9,933,454
Effect of rights offering (note 9(b))	–	2,432,264
Effect of unit offering (note 9(b))	4,570,000	–
Effect of private placement (note 9(b))	–	790,833
Effect of Warrant exercises (note 9(c))	4,945	–
Issued weighted average common shares, end of year	20,259,642	13,156,551

9. Share capital (continued):

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, 2012, 780,000 deferred share units have been issued (May 31, 2011 - nil; June 1, 2010 - nil), with a cash value of $304 thousand representing the fair market value of the units as of May 31, 2012 (May 31, 2011 - nil; June 1, 2010 - nil) recorded in accrued liabilities.

(h) Employee share purchase plan:

The Company has an employee share purchase plan ("ESPP"). The purpose of the ESPP is to assist the Company in retaining the services of its employees, to secure and retain the services of new employees and to provide incentives for such persons to exert maximum efforts for the success of the Company. The ESPP provides a means by which employees of the Company may purchase common shares of the Company at a discount through accumulated payroll deductions with each offering having a three-month duration. Participants may authorize payroll deductions of up to 15% of their base compensation for the purchase of common shares under the ESPP. For the year ended May 31, 2012, 14,120 (May 31, 2011 - 6,652) common shares have been purchased under the ESPP, and the Company has recognized an expense of $1 thousand (May 31, 2011 - $1 thousand) related to this plan in these consolidated financial statements.

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

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, currently estimated at 2,352,000 options at May 31, 2012. Options are granted at the fair market value of the common shares on the 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, 2012 are summarized as follows:

	2012		2011	
	Options	Weighted average exercise price	Options	Weighted average exercise price
Outstanding, beginning of year	1,185,578	$ 1.58	672,901	$ 6.60
Granted	1,538,000	0.21	1,049,700	1.01
Forfeited	(29,341)	6.03	(537,023)	6.76
Cancelled	(1,082,402)	1.21	–	–
Outstanding, end of year	1,611,835	0.44	1,185,578	1.58

The following table summarizes information about stock options outstanding at May 31, 2012:

	Options outstanding			Options exercisable	
Range of exercise prices	Options	Weighted average remaining contractual life (years)	Weighted average exercise price	Options	Weighted average exercise price
$0.18 - $ 0.215	1,538,000	$ 9.6	$ 0.21	948,000	$ 0.21
$1.22 - $ 3.60	40,663	6.7	2.79	34,597	2.89
$3.61 - $18.00	33,172	4.0	8.40	33,172	8.40
	1,611,835	9.4	0.44	1,015,769	0.57

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

10. Stock-based compensation (continued):

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

	2012	2011
Exercise price	$ 0.18 - $0.215	$ 0.89 - $1.05
Grant date share price	$ 0.18 - $0.215	$ 0.86 - $1.03
Risk-free interest rate	1.5 %	1.5% - 1.85%
Expected dividend yield	–	–
Expected volatility	123% - 125%	117% - 119%
Expected life of options	5 years	5 years
Weighted average fair value of options granted or modified during the year	$ 0.17	$ 0.83

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, 2012 have various vesting schedules. Options granted to directors consisted of 221,000 options that vested 50% upon issuance and 50% one year later. Two directors received options that totalled 550,000 options which vested immediately. Options granted to the Chief Executive Officer ("CEO") of 275,000 vested 50% immediately and 25% on each of November 29, 2012 and 2013. Options granted to certain members of management totalled 300,000 and vested 50% upon certain performance criteria measured as of May 31, 2012 and 25% May 31, 2013 and 25% on May 31, 2014. An additional 192,000 options were granted to these members of management which vest 50% on March 9, 2013, 25% on March 9, 2014 and 25% on March 9, 2015.

Stock options granted by the Company during the year ended May 31, 2011 had three types of vesting schedules. Options granted to directors consisted of 30,000 options that vested 50% upon issuance and 50% one year later. Options granted to the CEO of 784,200 vested 50% at May 31, 2011 and 25% May 31, 2012 and 25% May 31, 2013. Options granted to certain members of management totalled 235,500 and vested 50% upon certain performance criteria measured as of May 31, 2011 and 25% May 31, 2012 and 25% on May 31, 2013. These options were cancelled during the year ended May 31, 2012.

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

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

11. Additional cash flow disclosures:

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

	2012	2011
Prepaid expenses and other assets	$ 95	$ 248
Accounts payable	107	(172)
Accrued liabilities	530	(514)
Promissory note payable	900	(1,000)
	$ 1,632	$ (1,438)

During the year ended May 31, 2012, the Company incurred $20 thousand in interest expense on a $900 thousand promissory note due to Mr. Abramson. The interest has been accrued at a rate of 10%. During the year ended May 31, 2011, the Company paid $71 thousand in cash interest on the promissory notes from Mr. Abramson and Mr. Abramson's related company on a promissory note that was repaid in November 2010.

12. Other expenses:

Components of research and development expenses:

	2012	2011
Program costs (note 6)	$ 1,900	$ 2,298
Deferred share unit costs	91	–
Stock-based compensation	146	181
Depreciation of equipment	33	39
	$ 2,170	$ 2,518

Components of research and development expenses:

	2012	2011
General and administrative excluding salaries	$ 1,240	$ 1,354
Salaries	605	747
Deferred share unit costs	213	–
Stock-based compensation	361	302
Depreciation of equipment	11	17
	$ 2,430	$ 2,420

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

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.

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 certain officers of the Company.

Officer compensation:

	2012	2011
Salaries and short-term employee benefits	$ 567	$ 711
Deferred share units	304	–
Stock-based compensation	343	435
	$ 1,214	$ 1,146

Included in accounts payable and accrued liabilities is $160 thousand (May 31, 2011 -$32 thousand; June 1, 2010 - $31 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.

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

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	$ 127	$ 13	$ 5	$ 145

The Company's current facility lease expires in March 2013.

(b) Other contractual commitments:

The Company holds a non-exclusive license from Genetech 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 fiscal years ended May 31, 2013 or 2014, and cannot reasonably predict when such milestones and royalties will become payable, if at all.

The Company has entered into various contracts with service providers with respect to the LOR-253 Phase I clinical trial. These contracts could result in future payment commitments of approximately $1.4 million. Of this amount, $439 thousand has been paid and $70 thousand has been accrued at May 31, 2012 (2011 - $165 thousand paid and $83 thousand accrued). The payments will be based on services performed and amounts may be higher or lower based on actual services performed.

(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.

14. Commitments, contingencies and guarantees (continued):

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.

(d) Indemnification on 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 ("Old Lorus") into a new corporate entity which continued to operate as Lorus Therapeutics Inc. Under the arrangement, the Company agreed to indemnify 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:

(i) prior to, at or after the effective time of the arrangement ("Effective Time") and directly or indirectly relating to any of the assets of Old Lorus 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 by Old Lorus 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 Old Lorus or the arrangement.

The Company recorded a liability of $100 thousand, which it believes to be a reasonable estimate of the fair value of the obligation for the indemnifications provided as at May 31, 2012. There have been no claims on this indemnification to date.

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

15. Income taxes:

Provision for income taxes:

Major items causing the Company's income tax rate to differ from the statutory rate of approximately 27.4% (2011 - 29.5%) are as follows:

	2012	2011
Loss before income taxes	$ (4,614)	$ (4,995)
Statutory Canadian corporate tax rate	27.4%	29.5%
Anticipated tax recovery	$ (1,264)	$ (1,474)
Non-deductible stock-based compensation	141	164
Change in deferred tax benefits deemed not probable to be recovered	1,963	1,116
Change in substantively enacted tax rates	(627)	199
Other	(213)	(5)
	$ –	$ –

The Company has undeducted research and development expenditures, totalling $19.6 million that can be carried forward indefinitely. In addition, the Company has non-capital loss carryforwards of $14.4 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	2,727
	$ 14,422

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

15. Income taxes (continued):

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

	2012	2011
Net operating losses carried forward	$ 3,822	$ 2,918
Research and development expenditures	5,207	4,596
Fixed assets book over tax depreciation	438	402
Intangible asset	3,097	2,922
Ontario harmonization tax credit	287	302
Ontario Research and Development Tax Credit	239	228
Cumulative eligible capital	357	344
Other	228	–
Unrecognized deferred tax asset	$ 13,675	$ 11,712

16. Explanation of transition to IFRS:

As stated in note 2(a), these are the Company's first annual consolidated financial statements prepared in accordance with IFRS.

The accounting policies disclosed in note 3 have been applied in preparing these consolidated financial statements for the year ended May 31, 2012, the comparative information for the year ended May 31, 2011 and in the preparation of an opening IFRS statement of financial position at June 1, 2010 (date of transition).

IFRS 1 requires first-time adopters to retrospectively apply all effective IFRS as of the reporting date. However, it also provides for certain optional exemptions and certain mandatory exceptions for the first-time IFRS adopters. Details of the Company's initial elections of IFRS 1 exemptions are described below.

In preparing the opening statement of financial position, the Company has adjusted amounts reported previously in the consolidated financial statements prepared in accordance with Canadian GAAP. An explanation of how the transition from Canadian GAAP to IFRS has affected the Company's financial position, financial performance and cash flows is set out in the following tables and notes that accompany the tables.

16. Explanation of transition to IFRS (continued):

Initial elections upon adoption of IFRS:

Under IFRS 1, the following applicable exemption applied to the Company's conversion from Canadian GAAP to IFRS:

(a) Share-based payments:

The Company elected not to apply IFRS 2, *Share-based Payments* ("IFRS 2") to equity instruments that vested before the date of transition to IFRS.

(b) Business combinations:

The Company applied the business combinations exemption to not apply IFRS 3, *Business Combinations*, retrospectively to past business combinations. Accordingly, the Company has not restated business combinations that took place prior to the transition date. In addition, and as a condition under IFRS 1 for applying this exemption, goodwill relating to business combinations that occurred prior to the transition date was tested for impairment as described in note 16(d)(i).

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

16. Explanation of transition to IFRS (continued):

Reconciliation of financial position and shareholders' equity:

	Notes	June 1, 2010 Canadian GAAP	June 1, 2010 Effect of transition to IFRS	June 1, 2010 IFRS	May 31, 2011 Canadian GAAP	May 31, 2011 Effect of transition to IFRS	May 31, 2011 IFRS
Assets							
Current assets:							
Cash and cash equivalents		$ 667	$ –	$ 667	$ 911	$ –	$ 911
Short-term investments		247	–	247	–	–	–
Prepaid expenses and other assets		636	–	636	388	–	388
Total current assets		1,550	–	1,550	1,299	–	1,299
Non-current assets:							
Equipment		147	–	147	99	–	99
Goodwill	(d)(i)	606	(606)	–	606	(606)	–
Total non-current assets		753	(606)	147	705	(606)	99
Total assets		$ 2,303	$ (606)	$ 1,697	$ 2,004	$ (606)	$ 1,398

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

16. Explanation of transition to IFRS (continued):

	Notes	June 1, 2010 Canadian GAAP	June 1, 2010 Effect of transition to IFRS	June 1, 2010 IFRS	May 31, 2011 Canadian GAAP	May 31, 2011 Effect of transition to IFRS	May 31, 2011 IFRS
Liabilities Shareholders' Equity (Deficiency)							
Current liabilities:							
Accounts payable		$ 387	$ –	$ 387	$ 215	$ –	$ 215
Accrued liabilities		1,458	–	1,458	944	–	944
Promissory notes payable		1,000	–	1,000	–	–	–
Total current liabilities		2,845	–	2,845	1,159	–	1,159
Shareholders' equity (deficiency):							
Share capital:							
Common shares		163,920	–	163,920	168,787	–	168,787
Stock options	(d)(ii)	3,704	99	3,803	1,156	56	1,212
Contributed surplus		14,875	–	14,875	18,988	–	18,988
Warrants		1,039	–	1,039	1,032	–	1,032
Deficit	(d)(i) and (ii)	(184,080)	(705)	(184,785)	(189,118)	(662)	(189,780)
Total shareholders' equity (deficiency)		(542)	(606)	(1,148)	845	(606)	239
Total liabilities and shareholders' equity (deficiency)		$ 2,303	$ (606)	$ 1,697	$ 2,004	$ (606)	$ 1,398

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

16. Explanation of transition to IFRS (continued):

Reconciliation of consolidated statement of loss and comprehensive loss for the year ended May 31, 2011:

	Note	Canadian GAAP	Effect of transition to IFRS	IFRS
Revenue		$ –	$ –	$ –
Expenses:				
Research and development	(d)(ii)	2,298	220	2,518
General and administrative	(d)(ii)	2,101	319	2,420
Stock-based compensation	(d)(ii)	526	(526)	–
Depreciation of equipment	(d)(ii)	56	(56)	–
Operating expenses		4,981	(43)	4,938
Income (loss) from operations		(4,981)	43	(4,938)
Finance expense		71	–	71
Finance income		(14)	–	(14)
Net finance expense		57	–	57
Net loss and comprehensive loss for the year		$ (5,038)	$ 43	$ (4,995)
Basic and diluted loss per common share		$ (0.38)	$ –	$ (0.38)

16. Explanation of transition to IFRS (continued):

(c) Mandatory exceptions upon adoption of IFRS:

Estimates:

In applying IFRS upon initial adoption, hindsight is not used to create or revise estimates. Estimates previously made by the Company under Canadian GAAP were not revised for application of IFRS, except where necessary to reflect any difference in accounting policy.

(d) Impact on accounting policies upon adoption of IFRS:

The key areas where the Company has identified that accounting policies differ, or where accounting policy decisions were necessary that impacted the Company's consolidated financial statements, are discussed below.

(i) Goodwill:

Under Canadian GAAP, goodwill was reviewed for impairment annually and whenever events or circumstances indicated that the carrying amount of goodwill in a reporting unit exceeded its fair value. Goodwill impairment was calculated using a two-step process. The first step required an identification of impairment loss, if any, by comparing the carrying value of the reporting unit to the fair value, which in turn was determined based on the market capitalization of the Company. Under Canadian GAAP this test was performed at the reporting unit level which is defined as an operating segment or one level below. The Company only had one operating segment or component which is the development of anticancer product candidates. In the Company's case, the first test always showed a higher fair value than carrying value and as such it was not required to proceed to step two, as no indicator of impairment existed.

Under IAS 36, there is no longer a two-step process; rather, the Company is required to make a formal estimate of the recoverable amount and the carrying amount of a CGU that is subject to impairment testing. The recoverable amount under IAS 36 is the higher of fair value less costs to sell or value in use.

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

16. Explanation of transition to IFRS (continued):

Impairment testing under IAS 36 is performed at the CGU level, which is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other CGUs or groups of assets. For the Company, this requirement results in testing at a lower level than under Canadian GAAP. Based on the Company's knowledge and historical transactions, it has identified three separate CGUs that represent each of its product platforms as they could have the ability to generate independent cash inflows. As the goodwill balance of $606 thousand related to the Company's acquisition of a private company in 1999, and the antisense product platform contained therein, the Company has tested goodwill impairment on that CGU specifically for which the entire balance of goodwill has been allocated. There are no other assets subject to IAS 36 impairment testing in this CGU.

Under IAS 36, the carrying value of a CGU subject to impairment testing is compared to the asset's recoverable amount, any future cash flows expected to be provided by the CGU are discounted. Recoverable amount is defined as the greater of value in use and fair value less cost to sell. The discounted cash flow model under IAS 36 indicates that only supportable evidence may be used in the calculations and should generally not use cash flows estimates beyond of a five-year period.

Transition impact: As a result of the application of IFRS, the Company recognized an impairment charge of the entire goodwill balance of $606 thousand as of the transition date related to goodwill as the carrying amount of that CGU exceeded its recoverable amount which the Company has determined to be nil. The impact of the change in applying IFRS at the date of transition and as at May 31, 2011 is summarized as follows:

Consolidated statements of financial position:

	June 1, 2010	May 31, 2011
Decrease in goodwill	$ (606)	$ (606)
Increase in deficit	$ 606	$ 606

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

16. Explanation of transition to IFRS (continued):

There was no impact to the consolidated statement of loss and comprehensive loss.

(ii) Stock-based payments:

IFRS 2 requires the fair value of each tranche of share options be amortized over its vesting period. Canadian GAAP allows for both the aforementioned method as well as the straight-line method of amortizing these costs. Under Canadian GAAP, forfeitures of share options can be accounted for at the time that they occur, whereas under IFRS, the number of share options that would ultimately vest is amortized over their respective vesting period.

Under Canadian GAAP, for share-based awards with graded vesting, the Company recognizes the fair value of the award (all tranches) on a straight-line basis over the underlying vesting period. In addition under Canadian GAAP the Company does not apply a forfeiture rate. The impact of applying the revised amortization method as well as applying an estimated forfeiture rate to the value of unvested options at the date of transition and as at May 31, 2011 is summarized as follows:

Consolidated statements of loss and comprehensive loss:

	Year ended May 31, 2011
Decrease in share-based compensation	$ (43)

Consolidated statements of financial position:

	June 1, 2010	May 31, 2011
Increase (decrease) in stock option equity account	$ 99	$ (43)
Increase (decrease) in deficit	$ 99	$ (43)

16. Explanation of transition to IFRS (continued):

The Company will apply the requirements of estimating a forfeiture rate on stock options as prescribed under IFRS 2 and continue to amortize the fair value of each tranche of stock options over the related vesting period.

(iii) Estimates:

In applying IFRS upon initial adoption, hindsight is not used to create or revise estimates. Estimates previously made by the Company under Canadian GAAP were not revised for application of IFRS except where necessary to reflect any difference in accounting policies.

17. Subsequent events:

(a) On June 8, 2012, the Company completed a private placement whereby the Company issued 20,625,000 units consisting of one common share and one common share purchase warrant at a price of $0.32 for gross proceeds of $6.6 million. Each common share purchase warrant is exercisable for a period of 24 months from the date of issuance. If after one year the closing price of the common shares on the Toronto Stock Exchange equals or exceeds $0.90 for twenty consecutive days, then the Warrants shall only be exercisable for a period of 30 days following the date on which such written notice is sent to holders of the common share purchase warrants. In connection with the private placement the Company paid a cash finder's fee equal to 6% of the gross proceeds of the private placement and issued 1,237,500 finder's warrants (exercisable into units) at an exercise price of $0.32 each.

(b) On June 27, 2012, the Company repaid the $900 thousand principal and all accrued interest on the outstanding promissory note (note 7).

(c) In June 2012, 396,500 common share purchase warrants related to the August 2011 public offering (note 9(b)(i)) were exercised for gross proceeds of $178 thousand.

(d) On August 3, 2012, the Board of Directors issued 1.8 million stock options to directors, officers and employees at an exercise price of $0.48, which was the closing price of the Company's stock on the Toronto Stock Exchange on August 2, 2012. These options will be accounted for in the first quarter of fiscal 2013.

Execution copy

LORUS THERAPEUTICS INC.
(the "**Corporation**")

WARRANT NO. 2012 - PPW-•

PURCHASE WARRANT ENTITLING THE HOLDER TO PURCHASE COMMON SHARES

THE WARRANTS REPRESENTED HEREBY AND THE SECURITIES ISSUABLE UPON THE EXERCISE OF THE WARRANTS REPRESENTED HEREBY HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "U.S. SECURITIES ACT"). THE WARRANTS REPRESENTED HEREBY MAY NOT BE EXERCISED IN THE UNITED STATES OR BY, OR FOR THE ACCOUNT OR BENEFIT OF, ANY U.S. PERSON OR A PERSON IN THE UNITED STATES, EXCEPT PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE U.S. SECURITIES LAWS AND APPLICABLE STATE SECURITIES LAWS. AS USED HEREIN, THE TERMS "UNITED STATES" AND "U.S. PERSON" HAVE THE MEANINGS ASCRIBED TO THEM IN REGULATION S UNDER THE U.S. SECURITIES ACT.

UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE OCTOBER 9, 2012.

This is to certify that for value received, _____ (the "**Holder**") is the registered holder of a purchase warrant ("**Warrant**"), entitling the Holder to subscribe for and purchase • common shares of the Corporation from treasury (each, a "**Share**") at an exercise price of $0.45 (as adjusted pursuant to the provisions hereof, the "**Share Exercise Price**") for a period of twenty-four (24) months, upon the terms and conditions as hereinafter set forth. This Warrant is to remain exercisable until the Expiry Date (as defined hereinafter).

As used herein:

(i) "**Board**" means the board of directors of the Corporation;

(ii) "**Business Day**" means any day other than a Saturday, Sunday or other day on which commercial banks in the City of Toronto are authorized or required by law to close; and

(iii) "**Common Shares**" means the outstanding common shares of the Corporation.

1. Exercise Period

This Warrant is exercisable, in whole or in part, at any time and from time to time during the period from the date hereof and, subject to any regulatory requirements, prior to the earlier of (i) 5:00 p.m. (Toronto time) on June 8, 2014, or (ii) 5:00 p.m. (Toronto time) on the thirtieth (30th) day following the Accelerated Exercise Date (the "**Expiry Date**").

For purposes of this Warrant, "**Accelerated Exercise Date**" means the date on which the Holder receives a written notice from the Corporation, which written notice may be given on or after June 8, 2013, but no later than 10 days after the last day of a period of twenty (20) consecutive trading days of the Corporation where transactions are registered on the Common Shares on the TSX (as defined below) for which the closing price of the Common Shares on the TSX (or such other exchange on which the Common Shares are traded) is equal to or greater than $0.90.

2. Payment

The Shares subscribed for must be paid in full at the time of subscription, by certified cheque or bank draft payable in Canadian funds or wire transfer of immediately available funds to or to the order of the Corporation.

3. Exercise of Warrant

This Warrant may be exercised, in whole or in part, at any time prior to the Expiry Date by the Holder hereof completing the subscription form attached as Schedule A hereto (the "**Subscription Form**") and made a part hereof and delivering same to Elizabeth Williams at the Corporation, at its head office at 2 Meridian Road, Toronto ON, M9W 4Z7 (or such other address as may be designated in writing by the Corporation to the Holder), together with this Warrant and the amount, payable to the order of the Corporation, equal to the Share Exercise Price subscribed for upon exercise of this Warrant. The Corporation will promptly notify the Holder in writing of any change of address of its head office.

Notwithstanding anything to the contrary contained herein, this Warrant has not been and will not be registered under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**") or the securities laws of any state of the United States, and this Warrant may not be exercised, and no Shares will be issued upon the exercise of this Warrant, unless an exemption from registration is available, and the Corporation shall have received either written evidence satisfactory to it upon which it can rely that such exemption is available or an opinion of counsel to such effect in form and substance reasonably satisfactory to the Corporation. Therefore, this Warrant may be exercised only by a Holder who, at the time of exercise, (i) certifies that the Holder (a) did not acquire this Warrant in the United States (as such term is defined in Regulation S under the U.S. Securities Act) or at a time when the Holder was a U.S. Person (as such term is defined in Regulation S under the U.S. Securities Act) or acting for the account or benefit of a U.S. Person or a person in the United States, and (b) is not then located in the United States, is not a U.S. Person and is not exercising this Warrant for the account or benefit of a U.S. Person or a person in the United States; or (ii) provides a legal opinion or other evidence reasonably satisfactory to the Corporation that the exercise of this Warrant does not require registration under the U.S. Securities Act or applicable state securities laws; or (iii) certifies that the Holder is the original purchaser from the Corporation of the Units pursuant to which this Warrant was issued and at the time of such acquisition was a U.S. Person, was in the United States or was acting for the account or benefit of a U.S. Person or a person in the United States, and confirms, as of the date of such exercise, each of the representations, warranties and agreements made by it in connection with its acquisition of such Units, including its status as an "accredited investor" within the meaning of Rule 501(a) under the U.S. Securities Act, as though such representations, warranties and agreements were made on the date of such exercise and in respect of the acquisition of the Shares upon the exercise of this Warrant.

4. Share Certificates

Upon valid exercise of this Warrant, the Corporation will cause to be issued to the person or persons in whose name or names the Shares so subscribed for are to be issued the number of fully paid and non-assessable Shares subscribed for and such person or persons will be deemed upon presentation and payment as aforesaid, to be the holder or holders of record of such Shares. Within three (3) Business Days after receipt of the executed Subscription Form and payment of the Share Exercise Price, the Corporation will cause to be mailed or delivered to the holder at the address or addresses specified in the attached Subscription Form, a certificate or certificates evidencing the number of Shares subscribed for.

5. Exercise in Whole or in Part

This Warrant may be exercised in whole or in part, and if exercised in part, the Corporation will issue another Warrant, in a form substantially evidencing the remaining rights to purchase Shares, provided that any such right will terminate on the Expiry Date.

6. Non-Transferability

This Warrant is not transferable by the Holder.

7. No Fractional Shares

No fractional Shares will be issued upon exercise of this Warrant, nor will any compensation be made for such fractional Shares, if any.

8. Adjustments

The Share Exercise Price in effect and the number and type of securities purchasable under this Warrant at any date will be subject to adjustment from time to time as follows:

(a) If and whenever at any time prior to the Expiry Date, the Corporation will (i) subdivide or redivide the outstanding Common Shares into a greater number of Common Shares, (ii) reduce, combine or consolidate the outstanding Common Shares into a smaller number of Common Shares, or (iii) issue Common Shares to the holders of all or substantially all of the outstanding Common Shares by way of a stock dividend, the Share Exercise Price in effect on the effective date of any such event will be adjusted immediately after such event or on the record date for such issue of Common Shares by way of stock dividend, as the case may be, so that it will equal the amount determined by multiplying the Share Exercise Price in effect immediately prior to such event by a fraction, of which the numerator will be the total number of Common Shares outstanding immediately prior to such event and of which the denominator will be the total number of Common Shares outstanding immediately after such event. The number of Shares which the Holder is entitled to purchase for this Warrant will be adjusted at the same time by multiplying the number by the inverse of the aforesaid fraction. Any such adjustments will be made successively whenever any event referred to in this subparagraph (a) will occur and any such issue of Common Shares by way of a stock dividend will be deemed to have been made on the record date for the stock dividend for the purpose of calculating the number of outstanding Common Shares immediately after such event;

(b) If and whenever at any time prior to the Expiry Date there is a reclassification of the Common Shares at any time outstanding or a capital reorganization of the Corporation not covered in subparagraph (a) or a consolidation, amalgamation, arrangement or merger of the Corporation with or into any other corporation or a sale of the property and assets of the Corporation as or substantially as an entirety to any other person, a Holder of this Warrant which has not been exercised prior to the effective date of such reclassification, capital reorganization, consolidation, amalgamation, merger or sale will therein or, upon the exercise of such Warrant, be entitled to receive and will accept in lieu of the number of Shares, as then constituted, to which the Holder was previously entitled upon exercise of this Warrant, but for the same aggregate consideration payable therefor, the number of Shares or other securities or property of the Corporation or of the company resulting from such reclassification, capital reorganization, consolidation, amalgamation or merger or of the person to which such sale may be made, as the case may be, that such Holder would have been entitled to receive on such reclassification, capital reorganization, consolidation, amalgamation, merger or sale on the effective date thereof, if the Holder had been the registered holder of the number of Shares to which the Holder was previously entitled upon due exercise of this Warrant; and in any case, if necessary, appropriate adjustment will be made in the application of the provisions set forth herein with respect to the rights and interests thereafter of the Holder of this Warrant to the end that the provisions set forth herein will thereafter correspondingly be made applicable, as nearly as may reasonably be, in relation to any Shares or securities or property to which the Holder may be entitled upon the exercise of such Warrant thereafter;

(c) In any case in which this section requires that an adjustment become effective immediately after a record date for an event referred to herein, the Corporation may defer, until the occurrence of such event, issuing to the Holder of any Warrant exercised after such record date and before the occurrence of such event the kind and amount of Shares, other securities or property to which he would be entitled upon such exercise by reason of the adjustment required by such event; provided that the Corporation will deliver to such Holder an appropriate instrument evidencing such Holder's right to receive the kind and amount of Shares, other securities or property to which he or she would be entitled upon the occurrence of the event requiring such adjustment and the right to receive any distributions made or declared in favour of holders of record of Shares as constituted from time to time on and after such date as such Holder would, but for the provisions of this subparagraph (c), have received, or become entitled to receive, on such exercise;

(d) The adjustments provided for in this Section 8 are cumulative and will apply to successive subdivisions, redivisions, reductions, combinations, consolidations, distributions, issues or other events resulting in any adjustment under the provisions of this paragraph; provided that notwithstanding any other provision of this paragraph, (i) no adjustment of the Share Exercise Price or number of Shares, as then constituted, purchasable will be required unless such adjustment would require an increase or decrease of at least 5% in the Share Exercise Price then in effect or the number of Shares, as then constituted, purchasable, and (ii) any adjustments which by reason of this subparagraph (d) are not required to be made will be carried forward and taken into account in any subsequent adjustment;

(e) In the event of any question arising with respect to the adjustments provided in this paragraph, such question will be conclusively determined by the auditors of the Corporation. Such auditors will have access to all necessary records of the Corporation and such determination will be binding upon the Corporation and the Holder;

(f) As a condition precedent to the taking of any action which would require an adjustment in any of the subscription rights pursuant to this Warrant, including the number of Shares which are to be received upon the exercise thereof, the Corporation will take any action which may, in the opinion of counsel, be necessary in order that the Corporation may validly and legally issue as fully paid and non-assessable all the Shares which the Holder of such Warrant is entitled to receive on the full exercise thereof in accordance with the provisions hereof;

(g) No adjustment will be made in the acquisition rights attached to this Warrant, if the issue of Shares is being made pursuant to any Board approved stock option or stock purchase plan in force from time to time for officers, employees or consultants of the Corporation;

(h) No adjustment will be made pursuant to this paragraph if the Holder is entitled to participate in any event described in this paragraph on the same terms, *mutatis mutandis*, as if the Holder had exercised this Warrant prior to, or on the effective date or record date of, such event, subject to regulatory approval; and

(i) In case the Corporation will take any action affecting the Shares other than action described in this Section 8, which in the opinion of the Board would materially affect the rights of the Holder, the Share Exercise Price and/or the number of Shares which may be acquired upon exercise of a Warrant, an appropriate adjustment will be made by action of the Board in such manner and at such time, in their sole discretion, as they may determine to be equitable in the circumstances. Failure of the Board to make such an adjustment will be conclusive evidence that the Board has determined that it is equitable to make no adjustment in the circumstances.

Immediately after the occurrence of any event which requires an adjustment pursuant to this Section 8, other than an adjustment pursuant to Section 8(a), in the Share Exercise Price or in any of the subscription rights pursuant to this Warrant, including the number of Shares, as then constituted, which are to be received upon the exercise thereof, the Corporation will forthwith deliver to the Holder a certificate of the Corporation specifying the particulars of such event and the required adjustment and the computation of such adjustment and give at least 10 Business Days notice to the Holder of this Warrant of the record date or effective date of such event, as the case may be, and such notice will include particulars of such event and the required adjustment.

9. General Covenants of the Corporation

(a) The Corporation covenants and agrees that it is duly authorized to enter into and perform its obligations under this Warrant.

(b) The Corporation will at all times reserve and keep available free from preemptive rights, out of the aggregate of its authorized unissued common shares, for the purpose of enabling it to satisfy any obligation to issue Shares upon exercise of this Warrant, the full number of Shares deliverable upon the exercise or conversion thereof.

(c) The Corporation covenants that all Shares which may be issued on conversion of this Warrant, will upon issue be fully paid and non-assessable.

(d) Subject to applicable laws, the Corporation will from time to time take all action which may be necessary to obtain and keep effective any and all permits, consents and approvals of governmental agencies and authorities and will make all securities' acts filings under Canadian federal, state or provincial laws, which may be or become requisite in connection with the issuance and exercise of this Warrant.

(e) The Corporation will give written notice of the issue of Shares pursuant to the exercise of this Warrant, in such detail as may be required, to each exchange and to applicable securities commissions or similar regulatory authorities.

(f) Upon receipt of evidence satisfactory to the Corporation of the loss, theft, destruction or mutilation of this Warrant, and (in the case of loss, theft or destruction) of indemnification satisfactory to the Corporation, and upon surrender and cancellation of this Warrant, if mutilated, the Corporation will promptly execute and deliver a new Warrant of like tenor and date.

(g) The Corporation covenants and agrees that all necessary corporate actions have been done and performed to create this Warrant and to make this Warrant a legal, valid and binding obligations of the Corporation. The Corporation will do, execute, acknowledge and deliver or cause to be done, executed, acknowledged and delivered, all other acts, deeds and assurances in law as may be reasonably required for the better accomplishing and effecting of the intentions and provisions of this Warrant.

(h) Subject to the express provisions hereof, the Corporation will carry on and conduct and will cause to be carried on and conducted its business in a proper and efficient manner and will cause to be kept proper books of account in accordance with generally accepted accounting practice; and, subject to the express provisions hereof, it will do or cause to be done, all things necessary to preserve and keep in full force and effect its corporate existence, provided, however, that nothing herein contained will prevent the amalgamation, consolidation, merger, sale, winding up or liquidation of the Corporation or any subsidiary of the Corporation or the abandonment of any rights and franchises of the Corporation or any subsidiary of the Corporation if, in the opinion of the Board or officers of the Corporation, it would be advisable and in the best interests of the Corporation or of such subsidiary of the Corporation to do so.

(i) The Corporation will, issue share certificates representing the number of Shares issuable upon exercise of this Warrant as evidenced by a duly executed Subscription Form, and subject to adjustment as set forth herein within three days of receipt of the Subscription Form by the Corporation.

10. Miscellaneous

(a) The Corporation will not, by amendment of its articles or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder under this Warrant.

(b) The Holder will be bound by the terms of the meetings of the Holders that may be called by the Corporation as set out in Schedule B.

(c) Neither this Warrant nor any term hereof may be waived, discharged or terminated other than by an instrument in writing signed by the Corporation and by the Holder hereof.

(d) This Warrant will be governed by the laws in force in the Province of Ontario.

(e) Time will be of the essence.

(*Signature page follows*)

IN WITNESS WHEREOF the Corporation has this certificate to be signed by the signature of its duly authorized officer this 8th day of June, 2012.

LORUS THERAPEUTICS INC.

Per:

Name: Aiping Young
Title: Chief Executive Officer
Authorized Signing Officer

SCHEDULE A

SUBSCRIPTION FORM

TO: LORUS THERAPEUTICS INC.
2 Meridian Road
Toronto ON
M9W 4Z7

The undersigned holder of the attached warrant (the **"Warrant"**) hereby irrevocably elects to subscribe for Shares of Lorus Therapeutics Inc. (the "**Corporation**") at an aggregate subscription price of $0.45, subject to adjustment, evidenced by and on the terms specified in this Warrant and encloses herewith a certified cheque or money order payable to the Corporation.

In connection with this subscription, the undersigned must mark one of Box A or Box B:

Box A	☐	The undersigned hereby certifies that (i) it did not acquire the Warrant in the United States (as that term is defined in Regulation S under the United States Securities Act of 1933, as amended (the "U.S. Securities Act")or at a time when the undersigned was a "U.S. Person" (as that term is defined in the U.S. Securities Act) or acting for the account or benefit of a U.S. Person or a person in the United States, (ii) it is not in the United States or a U.S. Person, (iii) the Warrant is not being exercised for the account or benefit of a U.S. Person or a person in the United States, and (iv) this Subscription Form was not executed or delivered in the United States.
Box B	☐	An exemption from registration under the U.S. Securities Act and all applicable state securities law is available for the issuance of Shares pursuant to this subscription, and attached hereto is an opinion of counsel or other evidence to such effect, it being understood that any opinion of counsel or other evidence tendered in connection with the exercise of this Warrant must be in form and substance satisfactory to the Corporation.

Note: Certificates representing Shares will not be registered or delivered to an address in the United States unless Box B is marked. If Box B is marked, the certificates representing the Shares will bear a legend restricting transfers unless registered under the U.S. Securities Act and applicable state securities laws or an exemption from such registration requirements is available.

The undersigned hereby directs that the said Shares be registered in the name of the Holder as follows:

Name & Address	**Number of Shares**

(Please print full name in which share certificates are to be issued.)

DATED this _____ day of _____, ____.

_____
Name of Warrant Holder (to be the same as appears on the face of the Warrant)

per: _____
Authorized Signing Officer

SCHEDULE B

TERMS OF HOLDER MEETINGS

All capitalized terms used but not defined herein shall have the meaning set forth in the Warrant certificate to which the Schedule B is an attachment.

MEETINGS OF HOLDERS

1. Right to Convene Meetings

The Corporation may convene a meeting of the Holders. Every such meeting shall be held in the City of Toronto, Ontario or at such other place as may be approved or determined by the Corporation.

2. Notice

At least 21 days' prior notice of any meeting of Holders shall be given to the Holders at the expense of the Corporation. Such notice shall state the time and place of the meeting, the general nature of the business to be transacted and shall contain such information as is reasonably necessary to enable the Holders to make a reasoned decision on the matter, but it shall not be necessary for any such notice to set out the terms of any resolution to be proposed or any of the provisions of this Schedule B. The notice convening any such meeting may be signed by an appropriate officer of the Corporation.

3. Chairman

The Corporation may nominate in writing an individual to be chairman of the meeting and if no individual is so nominated, or if the individual so nominated is not present within 15 minutes after the time fixed for the holding of the meeting, the Holders present in person or by proxy shall appoint an individual present to be chairman of the meeting. The chairman of the meeting need not be a Holder.

4. Quorum

Subject to the provisions of Section 11, at any meeting of the Holders a quorum shall consist of two Holders present in person or represented by proxy and representing at least 10% of the aggregate number of Warrants then outstanding. If a quorum of the Holders shall not be present within one-half hour from the time fixed for holding any meeting, the meeting shall be adjourned to the same day in the next week (unless such day is not a Business Day in which case it shall be adjourned to the next following Business Day) at the same time and place to the extent possible and, subject to the provisions of Section 11, no notice of the adjournment need be given. Any business may be brought before or dealt with at an adjourned meeting which might have been dealt with at the original meeting in accordance with the notice calling the same. At the adjourned meeting the Holders present in person or represented by proxy shall form a quorum and may transact the business for which the meeting was originally convened, notwithstanding that they may not represent at least 10% of the aggregate number of Warrants then unexercised and outstanding. No business shall be transacted at any meeting unless a quorum is present at the commencement of business.

5. Power to Adjourn

The chairman of any meeting at which a quorum of the Holders is present may, with the consent of the meeting, adjourn any such meeting, and no notice of such adjournment need be given except such notice, if any, as the meeting may prescribe.

6. Show of Hands

Every question submitted to a meeting shall be decided in the first place by a majority of the votes given on a show of hands except that votes on an Extraordinary Resolution shall be given in the manner hereinafter provided. At any such meeting, unless a poll is duly demanded as herein provided, a declaration by the chairman that a resolution has been carried or carried unanimously or by a particular majority or lost or not carried by a particular majority shall be conclusive evidence of the fact.

7. Poll and Voting

On every Extraordinary Resolution, and when demanded by the chairman or by one or more of the Holders acting in person or by proxy, on any other question submitted to a meeting and after a vote by show of hands, a poll shall be taken in such manner as the chairman shall direct. Questions other than those required to be determined by Extraordinary Resolution shall be decided by a majority of the votes cast on the poll. On a show of hands, every person who is present and entitled to vote, whether as a Holder or as proxy for one or more absent Holders, or both, shall have one vote. On a poll, each Holder present in person or represented by a proxy duly appointed by instrument in writing shall be entitled to one vote in respect of each Common Share which he (or the Holder appointing him as proxy) is entitled to acquire upon the exercise of the Warrant then held by him. A proxy need not be a Holder. The chairman of any meeting shall be entitled, both on a show of hands and on a poll, to vote in respect of the Warrants, if any, held or represented by him.

8. Regulations

(a) Subject to the provisions of this Warrant, the Corporation may from time to time make and from time to time vary such regulations as it shall consider necessary or appropriate:

(i) for the deposit of instruments appointing proxies at such place and time as the Corporation, may in the notice convening the meeting direct;

(ii) for the deposit of instruments appointing proxies at some approved place other than the place at which the meeting is to be held and enabling particulars of such instruments appointing proxies to be mailed, cabled or telecopied before the meeting to the Corporation at the place where the same is to be held and for the voting of proxies so deposited as though the instruments themselves were produced at the meeting;

(iii) for the form of the instrument of proxy and the manner in which the form of proxy may be executed; and

(iv) generally for the calling of meetings of Holders and the conduct of business thereat including setting a record date for Holders entitled to receive notice of or to vote at such meeting.

(b) Any regulations so made shall be binding and effective and the votes given in accordance therewith shall be valid and shall be counted. Save as such regulations may provide, the only persons who shall be recognized at any meeting as a Holder, or be entitled to vote or be present at the meeting in respect thereof (subject to Section 9), shall be Holders or persons holding proxies of Holders.

9. Corporation and Counsel May Be Represented

The Corporation, by its respective directors, officers, employees and agents, and the counsel for the Corporation and the Holders may attend any meeting of the Holders and speak thereat but shall have no vote as such unless in their capacities as Holders.

10. Powers Exercisable by Extraordinary Resolution

The Holders at a meeting shall have the power, exercisable from time to time by Extraordinary Resolution:

(a) to sanction any modification, abrogation, alteration or compromise of the rights of the registered holders of Warrants against the Corporation which shall be agreed to by the Corporation; and/or

(b) to assent to any modification of or change in or omission from the provisions contained herein or in any instrument ancillary or supplemental hereto which shall be agreed to by the Corporation; and/or

(c) to restrain any registered holder of a Warrant from taking or instituting any suit or proceedings against the Corporation for the enforcement of any of the covenants on the part of the Corporation conferred upon the registered holders of Warrants by the terms of the Warrants.

Any such Extraordinary Resolution as aforesaid shall be binding upon all the Holders whether or not assenting in writing to any such Extraordinary Resolution, and each Holder shall be bound to give effect thereto accordingly. Such Extraordinary Resolution shall, where applicable, be binding on the Corporation which shall give effect thereto accordingly.

The Corporation shall forthwith upon receipt of an Extraordinary Resolution provide notice to all Holders of the date and text of such resolution. The Holders assenting to an Extraordinary Resolution agree to provide the Corporation forthwith with a copy of any Extraordinary Resolution passed.

11. Meaning of Extraordinary Resolution

(a) The expression "**Extraordinary Resolution**" when used in this Schedule B means, subject as hereinafter in this Section 11 and in Section 14 provided, a resolution proposed by the Corporation at a meeting of Holders duly convened for that purpose and held in accordance with the provisions of this Schedule B at which there are Holders present in person or represented by proxy representing at least 10% of the aggregate number of all the then outstanding Warrants and passed by the affirmative votes of Holders representing not less than $66^{2}/_{3}$% of the aggregate number of Common Shares which may be acquired upon the exercise of all the then outstanding Warrants represented at the meeting and voted on the poll upon such resolution.

(b) If, at any meeting called for the purpose of passing an Extraordinary Resolution, Holders representing at least 10% of the aggregate number of Common Shares which may be acquired upon the exercise of all the then outstanding Warrants are not present in person or by proxy within one-half hour after the time appointed for the meeting, then the meeting shall stand adjourned to such day, being not less than six or more than 10 Business Days later, and to such place and time as may be appointed by the chairman. Not less than three Business Days' prior notice shall be given of the time and place of such adjourned meeting in the manner provided in subsections 11(d) and 11(e). Such notice shall state that at the adjourned meeting the Holders present in person or represented by proxy shall form a quorum but it shall not be necessary to set forth the purposes for which the meeting was originally called or any other particulars. At the adjourned meeting, the Holders present in person or represented by proxy shall form a quorum and may transact the business for which the meeting was originally convened and a resolution proposed at such adjourned meeting and passed by the requisite vote as provided in subsection 11(a) shall be an Extraordinary Resolution within the meaning of this Warrant notwithstanding that Holders representing at least 10% of all the Common Shares which may be acquired upon the exercise of all of the then outstanding Warrants are not present in person or represented by proxy at such adjourned meeting.

(c) Votes on an Extraordinary Resolution shall always be given on a poll and no demand for a poll on an Extraordinary Resolution shall be necessary.

(d) Any notice to the Holders under the provisions of this Warrant shall be deemed to be validly given if the notice is sent by prepaid mail or delivered by hand to the holders at their addresses and telecopier numbers appearing in the register of Holders. Any notice so delivered shall be deemed to have been received on the date of delivery if that date is a Business Day or the Business Day following the date of delivery if such date is not a Business Day. Accidental error or omission in giving notice or accidental failure to give notice to any Holder shall not invalidate any action or proceeding founded thereon.

(e) If by reason of any interruption of mail service, actual or threatened, any notice to be given to the Holder would reasonably be unlikely to reach its destination in the ordinary course of mail, such notice shall be valid and effective only if delivered to an officer of the party to which it is addressed or if sent to such party, at the appropriate address, by facsimile transmission or other means of prepaid transmitted or recorded communication.

12. Powers Cumulative

It is hereby declared and agreed that any one or more of the powers or any combination of the powers in this Warrant stated to be exercisable by the Holders by Extraordinary Resolution or otherwise may be exercised from time to time and the exercise of any one or more of such powers or any combination of powers from time to time shall not be deemed to exhaust the right of the Holders to exercise such powers or combination of powers then or thereafter from time to time.

13. Minutes

Minutes of all resolutions and proceedings at every meeting of Holders shall be made and duly entered in books to be from time to time provided for that purpose by the Corporation, and any such minutes as aforesaid, if signed by the chairman of the meeting at which such resolutions were passed or proceedings held, or by the chairman of the next succeeding meeting of the Holders, shall be prima facie evidence of the matters therein stated and, until the contrary is proved, every such meeting in respect of the proceedings of which minutes shall have been made shall be deemed to have been duly convened and held, and all resolutions passed thereat or proceedings taken shall be deemed to have been duly passed and taken.

14. Instruments in Writing

All actions which may be taken and all powers that may be exercised by the Holders at a meeting held as provided in this Schedule B also may be taken and exercised by Holders representing at least $66^{2}/_{3}\%$ of the aggregate number of Common Shares issuable upon the exercise of all the then outstanding Warrants by an instrument in writing signed in one or more counterparts by such Holders in person or by attorney duly appointed in writing, and the expression “Extraordinary Resolution” when used in this Warrant shall include an instrument so signed.

15. Binding Effect of Resolutions

Every resolution and every Extraordinary Resolution passed in accordance with the provisions of this Schedule B at a meeting of Holders shall be binding upon all the Holders, whether present at or absent from such meeting, and every instrument in writing signed by Holders in accordance with Section 14 shall be binding upon all the Holders, whether signatories thereto or not, and each and every Holder shall be bound to give effect accordingly to every such resolution and instrument in writing. In the case of an instrument in writing, the Corporation shall give notice of the effect of the instrument in writing to all Holders as is reasonably practicable.

16. Holdings by the Corporation Disregarded

In determining whether Holders are present at a meeting of Holders for the purpose of determining a quorum or have concurred in any consent, waiver, Extraordinary Resolution or other action under this Warrant, Warrants owned legally or beneficially by the Corporation or any associate, affiliate or insider (as those terms are defined in the *Securities Act* (Ontario) of the Corporation shall be disregarded.

NON-EXCLUSIVE LICENSE AGREEMENT

This Non-Exclusive License Agreement ("Agreement") is effective as of 18 April 2012 ("Effective Date") by and between Genentech, Inc., having its principal place of business at 1 DNA Way, South San Francisco, California 94080 (hereinafter "Genentech") and Lorus Therapeutics Inc., having its principal place of business at 2 Meridian Road, Toronto, Ontario, Canada M9W 4Z7 (hereinafter "Lorus").

WHEREAS:

A. Genentech owns and controls certain patent rights relating to methods and compositions in the field of polypeptides (the "Licensed Patents", as that term is defined below);

B. Lorus is developing, and intends to commercialize, a polypeptide product and wishes to acquire a non-exclusive license for such product and related products under the Licensed Patents; and

C. Genentech is willing to grant such a non-exclusive license to Lorus on the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the promises and the mutual covenants recited herein, the Parties agree as follows:

Article I

DEFINITIONS

Unless otherwise specifically set forth herein, the following terms shall have the following meanings:

1.01 "Affiliate" means any corporation, company or business entity which, directly or indirectly, controls, is controlled by or is under common control with, a Party. For the purpose of this **Section 1.01** "control" shall mean (i) the ownership, directly or indirectly, of at least fifty percent (50%) of the outstanding voting securities or other ownership interest of an entity, or (ii) the possession, directly or indirectly, of the power to manage, direct or cause the direction of the management and policies of the corporation or other entity or the power to elect or appoint fifty percent (50%) or more of the members of the governing body of the corporation or other entity.

1.02 "Business Day" means a day on which banking institutions in New York, New York, USA or Toronto, Ontario, Canada are open for business.

1.03 "Calendar Quarter" means each three month period commencing January 1, April 1, July 1 and October 1 of each year during the term of this Agreement.

1.04 "Clinical Trial" means a Phase I Clinical Trial, Phase II Clinical Trial, or Phase III Clinical Trial.

1.05 "EMA" means the European Medicines Agency, or any successor entity thereto performing similar functions.

1.06 "FDA" means the United States Food and Drug Administration, or any successor entity thereto performing similar functions.

1.07 "Field of Use" means treatment of human cancer.

1.08 "First Commercial Sale" shall mean the first sale of any Licensed Product by Lorus or a Sublicensee thereof to a Third Party in the Territory. The sale shall be deemed to occur on the date of the invoice to the Third Party for the Licensed Product. Use for test marketing, sampling and promotional uses, Clinical Trial purposes or compassionate or similar use shall not be considered to constitute a First Commercial Sale, provided no financial consideration is received by Lorus or a Sublicensee for any such use.

1.09 "Licensed Patents" shall mean (a)**REDACTED – PATENT NUMBERS** , (b) any patents issuing from continuations, divisions, or continuations-in-part from which any of the foregoing claim priority, and (c) invention certificates, substitutions, reissues, reexaminations, extensions, registrations, patent term extensions, supplementary, supplementary protection certificates, renewals and foreign counterparts of any of the foregoing (a) or (b), including without limitation **REDACTED**.

1.10 "Licensed Product" shall mean any pharmaceutical product containing Lorus Protein, the making (or having made), using, selling, offering for sale or importing of which, but for the license granted under this Agreement, would infringe a Valid Claim.

1.11 "Lorus Protein" means a IL-17E protein for which either (a) **REDACTED - DEFINITION** (b) Lorus and/or its Sublicensees have exclusive marketing rights worldwide.

1.12 "Net Sales" means with respect to a Licensed Product, the gross amount invoiced for sales of such Licensed Product in bona fide arm's length sales by Lorus and/or its Sublicensees, to Third Parties, commencing with the First Commercial Sale of such Licensed Product, less the following deductions from such gross amounts which are actually incurred, allowed, accrued by Lorus or its Sublicensees and specifically allocated to the sale of Licensed Product, in each case only to the extent reasonable and customary in the pharmaceutical industry:

(a) credits, price adjustments or allowances for damaged Licensed Products, returns or rejections of Licensed Product;

(b) reasonable, normal and customary trade, cash and quantity discounts, allowances and credits (other than price discounts granted at the time of invoicing which have already been included in the gross amount invoiced);

(c) charge back payments and rebates actually granted to group purchasing organizations, managed health care organizations or to federal, state/provincial, local and other governments, including their agencies, or to trade customers;

(d) any invoiced freight, postage, shipping, insurance and other transportation charges; and

(e) sales, value-added (to the extent not refundable in accordance with applicable law), and excise taxes, tariffs and duties, and other taxes directly related to the sale (but not including taxes assessed against the income or profits derived from such sale).Where (i) the consideration for Licensed Product transferred to Third Parties includes any non-cash element, or (ii) Licensed Product is transferred by Lorus or a Sublicensee, in any manner other than an invoiced sale, the Net Sales applicable to any such transaction shall be the fair market value for the applicable quantity of the Licensed Product for the period in question in the applicable country of the Territory.

In the event that the Licensed Product is sold in any country in the form of a combination Licensed Product containing one or more therapeutically active ingredients in addition to such Licensed Product, Net Sales thereof shall be calculated by multiplying the Net Sales, as defined above, by the fraction A/(A+B), where A is the gross invoice price of the Licensed Product sold separately during the royalty period in question and B is the aggregate of the gross invoice prices of any other therapeutically active ingredients in the combination as sold separately during the royalty period in question. In the event that the Licensed Product and the other therapeutically active ingredients in the combination Licensed Product are not sold separately, Net Sales thereof shall be determined by the Parties in good faith.

Net Sales, as set forth in this definition, shall be calculated, in accordance with International Financial Reporting Standards ("IFRS"), or a successor thereto, as consistently applied.

1.13 "Party" shall mean either Genentech or Lorus, and when used in the plural shall mean both Genentech and Lorus.

1.14 "Phase I Clinical Trial" shall mean a human clinical trial, the principal purpose of which is a preliminary determination of safety in healthy individuals or patients as described in 21 CFR 312.21(a), as amended, or any equivalent thereof. A Phase I Clinical Trial shall be deemed to have commenced when the first patient has been enrolled therein.

1.15 "Phase II Clinical Trial" shall mean a human clinical trial, for which a primary endpoint is a preliminary determination of efficacy or dose ranges in patients with the disease target being studied, as described in 21 CFR 312.21(b), as amended, or any equivalent thereof. Any well controlled study intended to provide the substantial evidence of efficacy necessary to support the filing of an approvable marketing authorization (such as a combined Phase II/Phase III Clinical Trial, a Phase IIa/PhaseIIb Clinical Trial or other Phase II Clinical Trial subset, or any Phase III Clinical Trial in lieu of a Phase II Clinical Trial) (a "Pivotal Study") shall automatically be deemed to be a Phase II Clinical Trial. A Phase II Clinical Trial shall be deemed to have commenced when the first patient has been enrolled therein.

1.16 "Phase III Clinical Trial" shall mean a human clinical trial, the principal purpose of which is to establish safety and efficacy in patients with the disease target being studied, as described in 21 CFR 312.21(c), as amended, or any equivalent thereof. A Phase III Clinical Trial shall also include any other human clinical trial intended as a Pivotal Study, whether or not such study is a traditional Phase III Clinical Trial. A Phase III Clinical Trial shall be deemed to have commenced when the first patient has been enrolled in a Pivotal Study.

1.17 "Regulatory Approval" shall mean governmental authorizations and/or approvals required by the competent authorities with respect to a country in the Territory to commence commercial sale of Licensed Product, including but not limited to, product registration(s) and price and marketing approvals, as applicable, in such country.

1.18 "Sublicensee" is defined in **Section 2.02**.

1.19 "Term" is defined in **Section 7.01**.

1.20 "Territory" means worldwide.

1.21 "Third Part(y) ies" means any part(y)ies other than Genentech and Lorus.

1.22 "U.S." and "United States" shall mean the United States of America, including its territories and possessions.

1.23 "Valid Claim" shall mean any claim of an issued and unexpired patent within the Licensed Patents that has not been disclaimed, abandoned or dedicated to the public or held unenforceable, unpatentable or invalid by a decision of a court or governmental agency of competent jurisdiction, which decision is unappealable or unappealed within the time allowed for appeal.

Article II

LICENSE GRANT AND CERTAIN RIGHTS

2.01 License. Genentech hereby grants to Lorus and Lorus hereby accepts a non-exclusive license under Licensed Patents during the Term to research, develop, make (and have made), use, sell, offer for sale, and import Licensed Product in the Territory in the Field of Use. Lorus shall have a right to grant sublicenses as provided in **Section 2.02**.

2.02 Right to Grant Sublicenses. Lorus shall have the right to grant sublicenses to its Affiliates and Third Parties (each Affiliate and Third Party, a "Sublicensee") of the rights granted hereunder to Lorus to research, develop, make (and have made), use, sell, offer for sale, and import Licensed Product, in all or part of the Territory; provided that Lorus shall always be responsible for the payment of royalties on Net Sales of Licensed Product by any such Sublicensee and for all other obligations of such Sublicensee under this Agreement as if such obligations were those of Lorus. A sublicense granted by Lorus to a Sublicensee under this **Section 2.02 REDACTED – SUBLICENSE DETAILS** provided however, that Lorus and/or Sublicensee shall be permitted to contract with a Third Party to have such Third Party perform activities to facilitate the sale of Licensed Product on behalf of Lorus and/or Sublicensee, including without limitation to manufacture, finish, fill and/or ship Licensed Product for Lorus and/or Sublicensee (hereinafter a "Third Party Contractor"). Such Third Party Contractor shall only have the right to perform such activities on behalf of Lorus and/or Sublicensee, shall have no right under the license granted hereunder to use Licensed Product in any other way and shall have no right to sell, offer for sale, import or export Licensed Product, except to Lorus and Sublicensees. Furthermore, any sublicense shall provide that any Sublicensee is bound to at least the same limitations and restrictions as the limitations and restrictions of this Agreement on Lorus, including, without limitation, the grant to Lorus of audit rights similar to Genentech's audit rights under **Section 4.01** of this Agreement, which rights Lorus agrees to exercise for Genentech at Genentech's request and expense. In addition, Lorus shall obtain the consent of any such Sublicensee for Genentech to enforce such audit rights to the full force and effect of Lorus' rights under any such sublicense, in the event that Lorus fails to exercise such audit rights. Lorus shall notify Genentech in writing promptly after the grant of a sublicense hereunder (including in such notice the name and address of the Sublicensee).

2.03 No Other License. Lorus understands and agrees that no license under any patent or patent application other than Licensed Patents, or under any know-how, is or shall be deemed to have been granted under this Agreement, either expressly or by implication.

2.04 SECTION REDACTED

Article III

FEES AND ROYALTIES

3.01 License Grant Fee. Within thirty (30) calendar days after the Effective Date, Lorus shall pay to Genentech a one time non-creditable, non-refundable license grant fee **REDACTED – LICENSE FEE**.

3.02 Development Milestone Fee. Lorus shall pay to Genentech a one time non-creditable, non-refundable milestone fee within thirty (30) calendar days of the occurrence of each of the following milestone events, provided that in no event shall (i) any milestone fee be paid more than once, regardless of the number of Licensed Products that are developed, and (ii) the total payments under this **Section 3.02** exceed **REDACTED – MILESTONE PAYMENTS**

If a milestone fee for the first Licensed Product is paid and such first Licensed Product subsequently is withdrawn from development for any reason, then a subsequent Licensed Product will become the first Licensed Product for the purposes of the above milestone events, and any milestone fee that has already been paid shall be counted as a milestone fee paid for such subsequent Licensed Product, such that no milestone fee is paid twice for the same milestone event.

3.03 Royalties. Within sixty (60) calendar days after the end of each Calendar Quarter following the First Commercial Sale of Licensed Product in the Territory, Lorus shall pay to Genentech on a country-by-country basis, and on a Calendar Quarter basis, a royalty of **REDACTED – ROYALTY RATE** of the portion of worldwide aggregate annual Net Sales of all Licensed Product that is less than or equal to **REDACTED -ROYALTY RATE AND THRESHOLD** of the portion of worldwide aggregate annual Net Sales of all Licensed Product that is greater than **REDACTED – ROYALTY THRESHOLD**.

3.04 Sales To or Between Lorus and Sublicensees. It is the intent of the Parties that Net Sales shall be based on arm's length sales transactions to Third Parties. No royalties shall be paid upon sales of Licensed Product to or between any of Lorus and Sublicensees for further sale; provided, however, that in such cases royalties shall be paid upon such further sale of Licensed Product by Lorus or Sublicensees to Third Parties.

3.05 No Non-Monetary Consideration. Without the prior written consent of Genentech, Lorus and Sublicensees shall not solicit or accept any consideration for the sale of any Licensed Product other than as will be accurately reflected in Net Sales.

3.06 No Third Party Offsets. Lorus shall not be entitled to deduct any portion of royalties or other amounts paid by Lorus and/or a Sublicensee to any Third Party from the fees or royalties due from Lorus and/or a Sublicensee to Genentech pursuant to this Agreement for any reason.

Article IV

RECORDS, REPORTS AND PAYMENTS

4.01 Records Retention. Lorus shall keep and shall cause its Sublicensees to keep true, complete and accurate records of all sales of all Licensed Product in accordance with IFRS, or the equivalent, and in sufficient detail to confirm the accuracy of Lorus' royalty calculations. At Genentech's request and expense, Lorus shall permit, not more than once in a twelve (12) month period, an independent certified public accountant appointed by Genentech and acceptable to Lorus to examine at Lorus' principal place of business, upon reasonable notice and at reasonable times, such records solely to the extent necessary to verify Lorus' royalty calculations. Lorus shall be responsible for providing access to such records as in the ordinary course of business are in the possession or control of its Sublicensees. Such examination shall be limited to a period of time no more than three (3) years immediately preceding the request for examination. The report of any such examination shall be made first to Lorus and the independent accountant shall be further instructed to redact any proprietary information of Lorus not relevant to the calculation of royalties prior to providing that audit report to Genentech. The report shall state the amount, if any, by which Lorus has overpaid or underpaid its royalties, including without limitation an explanation of such overpayment or underpayment and all data and calculations used to arrive at such overpayment or underpayment. If Lorus' royalties are found to be in error such that royalties to Genentech were underpaid, then Lorus shall promptly pay the deficiency plus interest pursuant to **Section 4.05** to Genentech; and if royalties to Genentech were underpaid by more than **REDACTED - PERCENTAGE** of the total royalty owed for the period in question, then Lorus shall additionally reimburse Genentech for its reasonable, out-of-pocket costs incurred in examining such records. If Lorus' royalties are found to be in error such that royalties to Genentech were overpaid, then such overpayment shall be credited against future royalty payments to Genentech, or if there are no future royalty payments, Genentech will promptly repay the overpayment to Lorus. Amounts credited or paid by Genentech pursuant to the previous sentence shall not exceed the amount of overpayment for the thirty-six (36) month period immediately preceding the date Lorus provides written notice to Genentech that an overpayment has occurred. Genentech shall treat the report under this **Section 4.01** in accordance with the confidentiality provisions of **Section 8.11**, and shall cause its independent certified public accountant to enter into an acceptable confidentiality agreement with Lorus and/or Sublicensee obligating the independent certified public accountant to retain all such information in confidence pursuant to such confidentiality agreement.

4.02 Reports. Within sixty (60) calendar days after the end of each Calendar Quarter following the First Commercial Sale of Licensed Product in the Territory, Lorus shall furnish to Genentech a written report of all sales of all Licensed Product subject to royalty under **Article III** during such Calendar Quarter. Such report shall include, without limitation, (i) the determination of Net Sales as specified in **Section 1.12**, setting forth the amount of gross receipts, Net Sales, and all deductions and allowances taken from gross receipts to arrive at Net Sales on a country-by-country basis; and (ii) the royalty payment then due. Concurrently with each report pursuant to this **Section 4.02**, Lorus shall make the royalty payment then due. If Net Sales are in a currency other than U.S. dollars, the reports under this **Section 4.02** shall show the amount of Net Sales converted to U.S. dollars on a country-by-country basis and the exchange rate used for conversion to U.S. dollars.

4.03 Payments. Payments shall be in United States dollars and, unless otherwise agreed in writing, shall be made by wire transfer of immediately available funds to such account of Genentech in such bank as Genentech may from time to time designate in writing. If laws or regulations require withholding of any taxes imposed on account of any royalties and payments, paid under this Agreement, such taxes shall be deducted by Lorus as required by law from such remittable royalty and payment and shall be paid by Lorus to the proper tax authorities. Official receipts of payment of any withholding tax shall be secured and sent to Genentech as evidence of such payment. The Parties shall exercise their reasonable efforts to ensure that any withholding taxes imposed are reduced as far as possible under the provisions of any relevant tax treaty. The Parties shall cooperate to take advantage of the benefit of any double taxation treaty(ies) that may be applicable.

4.04 Currency Conversion. Net Sales of Licensed Product made in currency other than U.S. dollars shall be converted to U.S. dollars using the average exchange rates for the applicable foreign currency published in The Wall Street Journal (Eastern Edition) for the applicable Calendar Quarter. If at any time legal restrictions prevent the prompt remittance of any payments in any jurisdiction, Lorus may notify Genentech and make such payments by depositing the amount thereof in local currency in a bank account or other depository in such country in the name of Genentech or its designee, and Lorus will have no further obligations under this Agreement with respect thereto.

4.05 Interest. All payments not made when due shall bear interest at the annual rate of**REDACTED - PERCENTAGE** over the three (3) month U.S. LIBOR rate on the day the payment was due.

4.06 Final Phase I Clinical Study Report Lorus shall provide to Genentech in writing the Final Phase 1 Clinical Study Report prior to the start of any additional or subsequent Clinical Trial for Licensed Product. The term "Final Phase 1 Clinical Study Report" as used herein shall mean the final (non-draft) report approved by Lorus that describes, among other things, the processes used and results generated during the performance of the first Phase I Clinical Trial for the first Licensed Product.

Article V

REPRESENTATIONS AND WARRANTIES

5.01 Genentech represents and warrants that it has the full right, power and authority to enter into this Agreement and to grant the license granted under this Agreement.

5.02 Each Party represents and warrants that it has made such investigation of all matters pertaining to this Agreement as such Party deems necessary, and does not rely on any statement, promise, or representation, whether oral or written, with respect to such matters other than those expressly set forth herein. Each Party agrees that it is not relying on any matter or any statement, promise, or representation, whether oral or written, made by any person or entity, not specifically set forth in this Agreement.

5.03 Nothing in this Agreement is or shall be construed as:

(i) A warranty or representation by Genentech as to the validity, enforceability, patentability or scope of any claim or patent or patent application within the Licensed Patents;

(ii) A warranty or representation by Genentech that anything made, used, sold, or otherwise disposed of under any license granted in this Agreement is or will be free from infringement of any patent rights or other intellectual property right of any Third Party.

(iii) A grant by Genentech, whether by implication, estoppel, or otherwise, of any licenses or rights other than that expressly granted under **Section 2.01**; or

(iv) An obligation to bring or prosecute actions or suits against any Third Party for infringement of any of the Licensed Patents.

5.04 NO WARRANTY OF ANY KIND IS GIVEN BY EITHER PARTY WITH RESPECT TO THE LICENSED PATENTS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUE OR OTHERWISE; GENENTECH ASSUMES NO RESPONSIBILITIES WHATSOEVER WITH RESPECT TO THE USE, SALE OR OTHER DISPOSITION BY LORUS, SUBLICENSEES OR OTHER TRANSFEREES OF LICENSED PRODUCTS INCORPORATING OR MADE BY USE OF THE LICENSED PATENT LICENSED UNDER THIS LICENSE AGREEMENT; EACH PARTY SPECIFICALLY DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY, ENFORCEABILITY, PATENTABILITY, AND/OR SCOPE OF THE LICENSED PATENTS, OR NON-INFRINGEMENT OF THE RIGHTS OF ANY THIRD PARTY.

Article VI

LIABILITY

6.01 Indemnification by Lorus. Lorus shall indemnify, defend and hold Genentech and its directors, officers, employees and agents harmless from and against any and all liabilities, claims, demands, expenses (including, without limitation, reasonable attorneys' and professional fees and other costs of litigation), losses or causes of action (each, a "Liability") arising out of or relating in any way to (i) the possession, manufacture, use, sale or other disposition of Licensed Product hereunder, whether based on breach of warranty, negligence, product liability or otherwise, (ii) the exercise of any right granted to Lorus pursuant to this Agreement, or (iii) any breach of this Agreement by Lorus, except to the extent, in each case, that such Liability is caused by the negligence or willful misconduct of Genentech, its directors, officers, employees and/or agents (as determined by a court of competent jurisdiction); provided, however, that upon receiving notice of any such Liability, Genentech shall promptly notify Lorus and permit Lorus to handle and control the defense (including litigation and settlement) of such Liability, at Lorus' sole expense, and Genentech shall reasonably cooperate with Lorus in the defense of such Liability, at Lorus' sole expense.

Article VII

TERM AND TERMINATION

7.01 Term. This Agreement will commence on the Effective Date and remain in full force and effect until the expiration of the last patent within the Licensed Patents (the "Term"), unless earlier terminated in accordance with this **Article VII**. Lorus' obligation to pay royalties to Genentech under this Agreement shall commence on the date of the First Commercial Sale of Licensed Product in the Territory and shall continue on a country-by-country basis until expiration of the last patent within the Licensed Patents in such country. Upon expiration of Lorus' obligation to make any payments for a particular Licensed Product in a given country in the Territory, the non-exclusive license granted to Lorus under this Agreement with respect to such Licensed Product in such country shall become fully paid, royalty free, and irrevocable.

7.02 Termination without Cause. Lorus has the right to terminate this Agreement for any reason upon sixty (60) days prior written notice to Genentech.

7.03 Termination for Material Breach. Genentech shall have the right to terminate this Agreement and the licenses granted hereunder upon written notice to Lorus for a material breach of this Agreement if Lorus has failed to cure such breach within thirty (30) days following written notice thereof. Lorus' failure to pay royalties and provide reports to Genentech under this Agreement when owed shall constitute a material breach.

7.04 Insolvency. Genentech may terminate this Agreement if, at any time, Lorus shall file in any court pursuant to any statute of any individual state or country, a petition in bankruptcy, insolvency or for reorganization or for an agreement among creditors or for the appointment of a receiver or trustee of Lorus or of its assets, or if Lorus proposes a written agreement of composition or extension of its debts, or if Lorus shall be served with an involuntary petition against it filed in any insolvency proceeding, and such petition shall not be dismissed within sixty (60) days after the filing thereof, or if Lorus shall propose or be a party to any dissolution or liquidation, or if Lorus shall make an assignment for the benefit of creditors. Any termination pursuant to this **Section 7.04** shall be effective immediately upon notice of such termination.

7.05 Rights in Bankruptcy. All rights and licenses granted under or pursuant to this Agreement by Genentech are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the United States Bankruptcy Code, licenses of rights to "intellectual property" as defined under Section 101 of the United States Bankruptcy Code. The Parties agree that Lorus, as licensee of such rights under this Agreement, shall retain and may fully exercise all of their rights and elections under the United States Bankruptcy Code.

7.06 Effect of Termination. Termination of this Agreement in whole or in part for any reason shall not relieve Lorus of its obligations to pay all undisputed fees and royalties that shall have accrued hereunder prior to the effective date of termination. Termination of this Agreement shall result in the termination of the license granted to Lorus hereunder. The provisions of **Article I**, **Article IV**, **Article V**, **Article VI**, **Section 7.05** and **Section 7.07**, and **Article VIII** shall survive expiration or termination, for any reason, of the Agreement.

7.07 Direct License to Sublicensee on Termination. A sublicense granted by Lorus to a Sublicensee in accordance with this Agreement shall survive termination of this Agreement and shall be deemed to be a direct license from Genentech to such Sublicensee, provided that (i) such Sublicensee is then in full compliance with all terms of this Agreement and the respective sublicense, (ii) such Sublicensee agrees in writing to assume all of the obligations of Lorus under this Agreement and can reasonably show the capacity to comply with such obligations to the same extent as if such Sublicensee were an original party hereto, (iii) the obligations of Genentech under such direct license shall not be greater than the obligations of Genentech under this Agreement, and (iv) the scope of such direct license shall not be broader than the rights sublicensed by Lorus to such Sublicensee.

7.08 Challenge to Licensed Patents

(a) The Parties acknowledge and agree that they are entering the Agreement in lieu of enforcing their respective statutory rights, defenses and remedies under relevant laws, including without limitation under 35 USC 271 and 285 (collectively "Statutory Patent Rights"). By entering the Agreement each Party waives its Statutory Patent Rights in favor of proceeding under the terms of the Agreement. Each Party further acknowledges that each and every term in the Agreement, including, but not limited to, the fees and royalties set forth in **Article III** herein, reflects the value of avoiding the risk of loss associated with litigating the Statutory Patent Rights and the risk of being subject to certain statutory rights, defenses and/or remedies.

(b) The Parties acknowledge and agree that Genentech may terminate the Agreement at Genentech's sole and absolute discretion, in the event Lorus or a Sublicensee thereof, challenges, directly or indirectly, the validity, enforceability, patentability and/or scope of any claim within the Licensed Patents in a court or patent office or other governmental agency. In the event of termination by Genentech pursuant to this **Section 7.08**, any royalty or other payment owed to Genentech prior to such termination shall be non-refundable.

(c) Further, in the event Lorus challenges, directly or indirectly, the validity, enforceability, patentability and/or scope of any claim within the Licensed Patents, Lorus shall bear all of Genentech's fees, costs and expenses associated with litigating such action, including without limitation the fees, costs and expenses associated with any appeals.

Article VIII

MISCELLANEOUS PROVISIONS

8.01 Relationship of the Parties. Nothing in this Agreement is intended or shall be deemed to constitute or give rise to a partnership, agency, distributorship, employer-employee, joint venture, or fiduciary relationship between the Parties. No Party shall incur any debts or make any commitments for the other.

8.02 Patent Prosecution, Maintenance and Enforcement. Genentech shall be solely responsible, at its sole discretion and expense, for the prosecution, defense, and maintenance of Licensed Patents, and for enforcing Licensed Patents against actual or suspected Third Party infringers.

8.03 Assignment. Neither Party shall assign any of its rights or obligations hereunder except: (a) as incident to the merger, consolidation, reorganization, plan of arrangement, or acquisition of stock or assets affecting substantially all of the assets or voting control of the assigning Party; (b) to any corporation or other entity to which it may transfer substantially all of its assets related to the Licensed Product; (c) to any wholly owned subsidiary if the assigning Party remains liable and responsible for the performance and observance of all of the subsidiary's duties and obligations hereunder; or (d) with the prior written consent of the other Party (which consent shall not be unreasonably withheld). This Agreement shall be binding upon the successors and permitted assigns of the Parties, and the name of a Party appearing herein shall be deemed to include the names of such Party's successors and permitted assigns to the extent necessary to carry out the intent of this Agreement. Any assignment not in accordance with this **Section 8.03** shall be void.

8.04 Further Acts and Instruments. Upon request by either Party, the other Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be reasonably necessary or appropriate in order to carry out the purposes and intent of this Agreement.

8.05 Trade names and Trademarks. Except as otherwise provided herein, no right, express or implied, is granted to a Party by this Agreement to use in any manner the name of the other Party or its affiliates or any other trade name, trademark or logo of the other Party or its affiliates

8.06 Entire Agreement. This Agreement constitutes and contains the entire understanding and agreement of the Parties and cancels and supersedes any and all prior negotiations, correspondence, understandings and agreements, whether verbal or written, between the Parties respecting the subject matter hereof. No waiver, modification or amendment of any provision of this Agreement shall be valid or effective unless made in writing and signed by a duly authorized representative of each of the Parties.

8.07 Severability. In the event any one or more of the provisions of this Agreement should for any reason be held by any court or authority having jurisdiction over this Agreement or either of the Parties to be invalid, illegal or unenforceable, such provision or provisions shall be validly reformed to as nearly as possible approximate the intent of the Parties and, if un-reformable, shall be divisible and deleted in such jurisdiction; elsewhere, this Agreement shall not be affected so long as the Parties are still able to realize the principal benefits bargained for in this Agreement.

8.08 Waiver. The waiver by a Party of any breach of or default under any of the provisions of this Agreement or the failure of a Party to enforce any of the provisions of this Agreement or to exercise any right hereunder shall not constitute or be construed as a waiver of any other breach or default or as a waiver of any such rights or provisions hereunder.

8.09 Choice of Law. This Agreement shall be governed by and interpreted in accordance with the laws of the State of Delaware without regard to its conflict of laws provisions. This Agreement shall be construed as if drafted equally by the Parties, and in construing this Agreement no presumption shall operate in either Party's favor as a result of the role of it or its counsel in drafting or negotiating the terms or provisions hereof. The United Nations Convention on Contracts for the International Sale of Goods will not apply in any way to this Agreement or to the transactions contemplated by this Agreement or otherwise to create any rights or to impose any duties or obligations on any party to this Agreement.

8.10 Notices. Any notice, request, consent, or other document required or permitted to be given under this Agreement or otherwise relating to this Agreement shall be in writing and shall be deemed to have been sufficiently given if delivered in person, transmitted by facsimile (with a confirming copy sent by overnight courier), or sent by overnight courier or registered mail to the Party to whom it is directed at its address shown below or such other address as such Party shall have last given by notice to the other Party. Any such notice, requests, delivery, approval or consent shall be deemed received on the date of hand delivery or transmission by facsimile (provided that such date is a business day, otherwise it shall be deemed received on the next business day), one (1) business day after dispatch by overnight courier, or five (5) business days after dispatch of the registered mail.

If to Lorus, addressed to:

Lorus Therapeutics Inc.
Meridian Road,
Toronto, Canada M9W 4Z7
Attn: General Counsel
Facsimile: 416-798-2200

If to Genentech, addressed to:

Genentech, Inc.
1 DNA Way
South San Francisco, CA 94080
Attn: Corporate Secretary
Facsimile: (650) 467-9146

8.11 Confidentiality. Neither Party shall disclose any of the terms of this Agreement (including, but not limited to, the financial terms) to any Third Party without the prior written consent of the other Party; provided, however, that each Party shall be free to disclose any of the terms of this Agreement (a) to the extent that a Party reasonably believes it is required to do so by securities or other applicable laws, regulations, or rules (including the regulations or rules of any relevant stock exchange), (b) pursuant to a legal proceeding or order of a court or governmental agency, (c) to Affiliates and to actual or prospective Sublicensees or Third Party Contractors (in the case of Lorus), (d) to F. Hoffmann-La Roche Ltd. or any Affiliate thereof (in the case of Genentech), (e) to its accountants, attorneys and other professional advisors, (f) in connection with a financing, merger, consolidation, acquisition or a permitted assignment of this Agreement, and (g) to competent regulatory authorities (in the case of Lorus) as required in connection with any filing, application or request for any regulatory approvals (including pricing and reimbursement approvals), licenses, registrations or authorizations, necessary for the development or commercialization of a Licensed Product in a country, provided that in the case of any disclosure under (c), (d), (e), or (f) above, the recipient(s) are obligated and do so undertake to keep such terms of this Agreement confidential to the same extent as said Party, and provided that in the case of disclosure under (a), (b) or (g), the disclosing Party will use reasonable efforts to secure confidential treatment of such terms of this Agreement as are required to be disclosed.

8.12 Publicity. Neither Party shall issue any press release or other publicity material or make any public representation that refers to the terms, including, without limitation, the financial terms, of this Agreement without the prior written consent of the other Party.

8.13 Counterparts. This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile signatures shall be treated the same as original signatures.

8.14 Number and Gender. Unless the context of this Agreement otherwise requires, to the extent necessary so that each clause will be given the most reasonable interpretation, the singular number will include the plural and vice versa, the verb will be construed as agreeing with the word so substituted, words importing the masculine gender will include the feminine and neuter genders, words importing persons will include firms and corporations and words importing firms and corporations will include individuals.

8.15 Headings and Captions. The headings and captions of sections and paragraphs contained in this Agreement are all inserted for convenience of reference only and are not to be considered when interpreting this Agreement.

[Signature page follows]

IN WITNESS WHEREOF, Genentech and Lorus have caused this Agreement to be executed by their duly authorized representatives.

GENENTECH, INC.

By: _____

Name:

Title:

LORUS THERAPEUTICS INC.

By: _____

Name:

Title:

Exhibit 12.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANTTO
SECURITIES AND EXCHANGE COMMISSION RULE 13a-14(a)

I, Aiping H. Young, certify that:

1. I have reviewed this annual report on Form 20-F of Lorus Therapeutics Inc. for the year ended May 31, 2012;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: September 27, 2012

/s/ Aiping H. Young
Aiping H. Young
President and Chief Executive Officer

Exhibit 12.2

CERTIFICATION OF CHIEF FINANCIALOFFICER PURSUANTTO
SECURITIES AND EXCHANGE COMMISSION RULE 13a-14(a)

I, Elizabeth Williams, certify that:

1. I have reviewed this annual report on Form 20-F of Lorus Therapeutics Inc. for the year ended May 31, 2012;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: September 27, 2012

/s/ Elizabeth Williams
Elizabeth Williams
Director of Finance and Acting Chief Financial Officer

Exhibit 13.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. §1350,

In connection with the Annual Report of Lorus Therapeutics Inc. (the "Company") on Form 20-F for the period ended May 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Aiping H. Young, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: September 27, 2012

/s/ Aiping H. Young
Aiping H. Young
President and Chief Executive Officer

Exhibit 13.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. §1350,

In connection with the Annual Report of Lorus Therapeutics Inc. (the "Company") on Form 20-F for the period ended May 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Elizabeth Williams, Director of Finance and Acting Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: September 27, 2012

/s/ Elizabeth Williams
Elizabeth Williams
Director of Finance and Acting Chief Financial Officer