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

Report of Foreign Issuer

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

For the Month of August, 2010

Commission File Number 1-32001

Lorus Therapeutics Inc.

(Translation of registrant's name into English)

2 Meridian Road, Toronto, Ontario M9W 4Z7

(Address of principal executive offices)

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

Form 20-F ☒ Form 40-F ☐

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

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

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

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

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

Yes ☐ No ☒

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

SIGNATURES

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

Lorus Therapeutics Inc.

Date: August 31, 2010	By: /s/ "Elizabeth Williams"
	Elizabeth Williams
	Director of Finance and Controller

EXHIBIT INDEX

99.1	Annual Financial Statements
99.2	Management's Discussion and Analysis
99.3	Annual Information Form
99.4	CEO/CFO Certification

Consolidated Financial Statements of

LORUS THERAPEUTICS INC.

Years ended May 31, 2010, 2009 and 2008

KPMG LLP
Chartered Accountants
Bay Adelaide Centre
333 Bay Street Suite 4600
Toronto ON M5H 2S5
Canada

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AUDITORS' REPORT TO THE SHAREHOLDERS

We have audited the consolidated balance sheets of Lorus Therapeutics Inc. as at May 31, 2010 and 2009 and the consolidated statements of operations and comprehensive income, deficit and cash flows for each of the years in the three-year period ended May 31, 2010 and for the period from inception on September 5, 1986 to May 31, 2010. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at May 31, 2010 and 2009 and the results of its operations and its cash flows for each of the years in the three-year period ended May 31, 2010 and for the period from inception on September 5, 1986 to May 31, 2010 in accordance with Canadian generally accepted accounting principles.

KPMG LLP

Chartered Accountants, Licensed Public Accountants

Toronto, Canada

August 23, 2010, except
as to note 18 which is
as of August 27, 2010

LORUS THERAPEUTICS INC.

Consolidated Balance Sheets
(Expressed in thousands of Canadian dollars)

May 31, 2010 and 2009

	2010	2009
Assets		
Current assets:		
Cash and cash equivalents (notes 9 and 12)	$ 667	$ 5,374
Short-term investments (notes 4 and 9)	247	490
Prepaid expenses and other assets	636	826
	1,550	6,690
Fixed assets (note 5)	147	231
Goodwill	606	606
	$ 2,303	$ 7,527
Liabilities and Shareholders' Deficiency		
Current liabilities:		
Accounts payable	$ 387	$ 299
Accrued liabilities	1,458	1,131
Promissory note payable (note 17)	1,000	-
Secured convertible debentures (note 13)	-	14,448
	2,845	15,878
Shareholders' deficiency:		
Share capital (note 6):		
Common shares	163,920	162,240
Equity portion of secured convertible debentures (note 13)	-	3,814
Stock options	3,704	3,845
Contributed surplus	14,875	10,744
Warrants	1,039	417
Deficit accumulated during development stage	(184,080)	(189,411)
	(542)	(8,351)
Basis of presentation (note 1)		
Contingencies, commitments and guarantees (note 14)		
Subsequent events (note 18)		
	$ 2,303	$ 7,527

See accompanying notes to consolidated financial statements.

On behalf of the Board:

"Denis R. Burger" Director

"Aiping H. Young" Director

LORUS THERAPEUTICS INC.

Consolidated Statements of Operations and Comprehensive Income
(Expressed in thousands of Canadian dollars, except for per common share data)

	Years ended May 31,			Period from inception on September 5, 1986 to May 31,
	2010	2009	2008	2010
Revenue	$ 131	$ 184	$ 43	$ 1,171
Expenses:				
Research and development (note 11)	2,517	3,757	6,260	126,514
General and administrative	2,964	2,958	3,715	60,839
Stock-based compensation (note 7)	176	446	719	8,594
Depreciation and amortization of fixed assets	86	189	317	9,817
Cost of sales	-	-	2	105
	5,743	7,350	11,013	205,869
Other expenses (income):				
Interest expense	54	707	1,029	4,022
Accretion in carrying value of convertible debentures (note 13)	80	1,707	1,176	4,983
Amortization of deferred financing costs (note 13)	-	-	-	412
Interest income	(21)	(270)	(542)	(12,257)
	113	2,144	1,663	(2,840)
Loss from operations	(5,725)	(9,310)	(12,633)	(201,858)
Gain on repurchase of convertible debentures and transfer of assets (note 13)	11,006	-	-	11,006
Gain on sale of shares (notes 1(b) and 14)	50	450	6,299	6,799
Net earnings (loss) for the period and other comprehensive income (loss)	$ 5,331	$ (8,860)	$ (6,334)	$ (184,053)
Basic and diluted earnings (loss) per common share	$ 0.57	$ (1.08)	$ (0.87)	
Weighted average number of common shares outstanding used in the calculation of (in thousands):				
Basic earnings per share	9,364	8,236	7,169	
Diluted earnings per share	9,379	8,236	7,169	

See accompanying notes to consolidated financial statements.

LORUS THERAPEUTICS INC.

Consolidated Statements of Deficit
(Expressed in thousands of Canadian dollars)

	Years ended May 31,			Period from inception on September 5, 1986 to May 31,
	2010	2009	2008	2010
Deficit, beginning of period:				
As previously reported	$ (189,411)	$ (180,551)	$ (174,190)	$ -
Change in accounting policy	-	-	(27)	(27)
As restated	(189,411)	(180,551)	(174,217)	(27)
Net earnings (loss) for the period	5,331	(8,860)	(6,334)	(184,053)
Deficit, end of period	$ (184,080)	$ (189,411)	$ (180,551)	$ (184,080)

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, 2010	2009	2008	Period from inception on September 5, 1986 to May 31, 2010
Cash flows from operating activities:				
Net earnings (loss) for the period	$ 5,331	$ (8,860)	$ (6,334)	$ (184,053)
Items not involving cash:				
Gain on repurchase of convertible debentures and transfer of assets (note 13)	(11,006)	-	-	(11,006)
Gain on sale of shares (note 1(b) and 14)	(50)	(450)	(6,299)	(6,799)
Stock-based compensation	176	446	719	8,594
Interest on convertible debentures	15	707	1,029	3,983
Accretion in carrying value of convertible debentures	80	1,707	1,176	4,983
Amortization of deferred financing costs	-	-	-	412
Depreciation, amortization and write-down of fixed assets and acquired patents and licenses	86	189	317	22,378
Other	(8)	(10)	(7)	437
Change in non-cash operating working capital (note 12)	1,655	(942)	(794)	1,201
Cash used in operating activities	(3,721)	(7,213)	(10,193)	(159,870)
Cash flows from financing activities:				
Issuance of debentures, net of issuance costs	-	-	-	12,948
Issuance (repurchase) of warrants	-		(252)	37,153
Payment on settlement of convertible debentures, including transaction costs (note 13)	(3,521)	-	-	(3,521)
Proceeds on sale of shares, net of arrangement costs (note 1(b) and 14)	-	600	7,561	6,899
Issuance of common shares and warrants, net of issuance costs (note 6)	2,287	3,207	-	114,519
Cash provided by financing activities	(1,234)	3,807	7,309	167,998
Cash flows from investing activities:				
Maturity (purchase) of investments, net	250	6,304	4,189	(250)
Business acquisition, net of cash received	-	-	-	(539)
Acquired patents and licenses	-	-	-	(715)
Additions to fixed assets	(2)	(176)	(58)	(6,305)
Proceeds on sale of fixed assets	-	-	-	348
Cash provided by (used in) investing activities	248	6,128	4,131	(7,461)
Increase (decrease) in cash and cash equivalents	(4,707)	2,722	1,247	667
Cash and cash equivalents, beginning of period	5,374	2,652	1,405	-
Cash and cash equivalents, end of period	$ 667	$ 5,374	$ 2,652	$ 667

Supplemental cash flow information (note 12)

See accompanying notes to consolidated financial statements.

1. Basis of presentation:

(a) Going concern:

Lorus Therapeutics Inc. (the "Company") has not earned substantial revenue from its drug candidates and is therefore considered to be in the development stage. The continuation of the Company's research and development activities is dependent upon the Company's ability to successfully fund its cash requirements through a combination of equity financing and payments from strategic partners. The Company has no current sources of significant payments from strategic partners.

These consolidated financial statements have been prepared on a going concern basis in accordance with Canadian generally accepted accounting principles ("Canadian GAAP"). The going concern basis of presentation assumes that the Company will continue in operation for the foreseeable future and be able to realize its assets and discharge its liabilities and commitments in the normal course of business. There is significant doubt about the appropriateness of the use of the going concern basis because management has forecasted that the Company's current level of cash and cash equivalents and short-term investments, including the $4 million investment described in note 18, will not be sufficient to execute its current planned expenditures for the next 12 months without further investment. The Company is currently in discussion with several potential investors 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. The Company is also considering alternatives to delay its research program until financing is available, amongst other cost savings measures. 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 significant 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.

The consolidated financial statements do not reflect adjustments that would be necessary if the going concern assumption were not appropriate. If the going concern basis were not appropriate for these consolidated financial statements, then adjustments would be necessary in the carrying value of the assets and liabilities, the reported revenue and expenses and the balance sheets classifications used.

1. Basis of presentation (continued):

(b) Reorganization:

On November 1, 2006, the Company was incorporated as 6650309 Canada Inc. pursuant to the provisions of the Canada Business Corporation Act and did not carry out any active business from the date of incorporation to July 10, 2007. From its incorporation to July 10, 2007, the Company was a wholly owned subsidiary of 4325231 Canada Inc., formerly Lorus Therapeutics Inc. ("Old Lorus").

On July 10, 2007, the Company and Old Lorus completed a plan of arrangement and corporate reorganization (the "Arrangement"). 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 the Company (the "Exchange") and the board of directors and management of Old Lorus continued as the board of directors and management of the Company.

In connection with the Arrangement, the Company received cash consideration of approximately $8.5 million less an escrowed amount of $600 thousand related to the indemnification (received in July 2008), before transaction costs. After completion of the Arrangement, the Company is not related to Old Lorus, which was subsequently renamed Global Summit Real Estate Inc.

Under the Arrangement, the Company and its subsidiaries 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 various matters discussed in note 14.

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.

1. Basis of presentation (continued):

The Arrangement has been accounted for on a continuity of interest basis and, accordingly, the consolidated financial statements of the Company reflect the financial position, results of operations and cash flows as if the Company has always carried on the business formerly carried on by Old Lorus. Consequently, all comparative figures presented in these consolidated financial statements include those of Old Lorus.

(c) 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 in a ratio of between 1-for-10 and 1-for-50 at any time prior to November 30, 2010, the Company's Board of Directors approved a 1-for-30 share consolidation which became effective May 25, 2010. The share consolidation affects all of the Company's 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, the Company 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 these consolidated financial statements, 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. All amounts based on the number of shares, stock options or warrants, unless otherwise specified, 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 1-for-30 share consolidation.

2. Changes in accounting policies:

(a) Goodwill and intangible assets:

Effective June 1, 2009, the Company adopted The Canadian Institute of Chartered Accountants' ("CICA") Handbook Section 3064, Goodwill and Intangible Assets, which replaced Handbook Section 3062, Goodwill and Other Intangible Assets ("Section 3062"), and Section 3450, Research and Development Costs and establishes the standards for the recognition, measurement, presentation and disclosure of goodwill and intangible assets. The adoption of this new standard did not have an impact on the Company's consolidated financial statements.

(b) Financial instruments:

Effective June 1, 2009, the Company adopted the amendments under Handbook Section 3862, Financial Instruments - Disclosures ("Section 3862"), to include additional disclosure requirements about fair value measurement for financial instruments and liquidity risk disclosures. These amendments require a three level hierarchy that reflects the significance of the inputs used in making the fair value measurements. Fair value of assets and liabilities included in Level 1 are determined by reference to quoted prices in active markets for identical assets and liabilities. Assets and liabilities in Level 2 include valuations using inputs other than the quoted prices for which all significant inputs are based on observable market data, either directly or indirectly. Level 3 valuations are based on inputs that are not based on observable market data. The adoption of the new standard did not have a material impact on the consolidated financial statements.

(c) Credit risk and fair value of financial assets and financial liabilities:

Effective January 1, 2009, the Company adopted Emerging Issue Committee Abstract 173 ("EIC 173"), Credit Risk and the Fair Value of Financial Assets and Financial Liabilities. EIC 173 requires the Company to take into account the Company's own credit risk and the credit risk of the counterparty in determining the fair value of financial assets and financial liabilities, including derivative instruments. The adoption of the new standard did not have a material impact on the consolidated financial statements.

3. Significant accounting policies:

(a) Principles of consolidation:

The consolidated financial statements include the accounts of the Company and its 80% owned subsidiary, NuChem Pharmaceuticals Inc. ("NuChem"). On May 31, 2009, its wholly owned subsidiary, GeneSense Technologies Inc. ("GeneSense") was wound up and its operations and net assets assumed by Lorus Therapeutics, the parent company. On June 19, 2009 the Company disposed of its shares of Pharma Immune Inc. ("Pharma Immune") (note 13). The results of operations for acquisitions are included in these consolidated financial statements from the date of acquisition. All significant intercompany balances and transactions have been eliminated on consolidation.

The consolidated financial statements have been prepared by management in accordance with Canadian GAAP.

(b) Revenue recognition:

Revenue includes product sales, service, license and royalty revenue.

The Company recognizes revenue from product sales and provision of services when persuasive evidence of an arrangement exists, delivery has occurred, the Company's price to the customer is fixed or determinable and collectability is reasonably assured. The Company allows customers to return product. Provisions for these returns are estimated based on historical return and exchange levels, and third-party data with respect to inventory levels in the Company's distribution channels.

Revenue from multiple element arrangements consisting of non-refundable license fees, receipt of milestone payments, royalty and delivery of services over a defined term are recognized in accordance with Emerging Issues Committee Abstract No. 142, Revenue Arrangements with Multiple Deliverables. The Company recognizes the non-refundable license fee as revenue when the technology license is delivered, the fee is fixed or determinable, collection of the amount was probable and there is no continuing involvement or obligation to perform under the arrangement. Any milestone payment subsequently received from the customer is recognized when the customer acknowledges achievement of the milestone, when the fee is fixed or determinable and collection of the amount is probable. If the multiple deliverables in an arrangement do not meet the criteria for separation, the proceeds from the entire arrangement are deferred and recognized as revenue on a proportionate performance basis, or over the term of the arrangement.

3. Significant accounting policies (continued):

(c) Financial instruments:

Financial instrument classification:

Management determines the classification of financial assets and financial liabilities at initial recognition and, except in very limited circumstances, the classification is not changed subsequent to initial recognition. The classification depends on the purpose for which the financial instruments were acquired, their characteristics and/or management's intent. Transaction costs with respect to instruments not classified as held-for-trading are recognized as an adjustment to the cost of the underlying instruments and amortized using the effective interest method.

The Company's financial instruments were classified in the following categories:

(i) Cash and cash equivalents:

Cash and cash equivalents are classified as held-for-trading investments and measured at fair value. By virtue of the nature of these assets, fair value is generally equal to cost plus accrued interest. Where applicable, any significant change in market value would result in a gain or loss being recognized in the consolidated statements of operations and comprehensive income. As a result of adopting the new standards, there was no material change in valuation of these assets.

The Company considers unrestricted cash on hand and in banks, term deposits and guaranteed investment certificates with original maturities of three months or less as cash and cash equivalents.

3. Significant accounting policies (continued):

(ii) Short-term investments:

Short-term investments are liquid Canadian government or corporate instruments having original maturity dates greater than three months and less than one year and are classified as held-to-maturity investments, except where the Company does not intend to, or cannot reasonably expect to hold the investment to maturity in which case the investment is designated as held-for-trading. Held-to-maturity investments are measured at amortized cost using the effective interest rate method, while held-for-trading investments are measured at fair value and the resulting gain or loss is recognized in the consolidated statements of operations and comprehensive income.

Upon adoption of CICA Handbook Section 3855, Financial Instruments - Recognition and Measurement ("Section 3855"), on June 1, 2007, the Company designated certain corporate instruments then having maturities greater than one year previously carried at amortized cost as held-for-trading investments. This change in accounting policy resulted in a decrease in the carrying amount of these investments of $27 thousand and a corresponding increase in the opening deficit at June 1, 2007. The Company recognized a net unrealized gain in the consolidated statements of operations and comprehensive income for the year ended May 31, 2010 of $8 thousand (2009 - $10 thousand, 2008 - $7 thousand).

The Company invests in high-quality fixed income government and corporate investments with low credit risk.

(iii) Accounts payable and accrued liabilities:

Accounts payable and accrued liabilities and promissory note payable are typically short-term in nature and classified as other financial liabilities. These liabilities are carried at amortized cost.

(iv) Secured convertible debentures:

The secured convertible debentures, prior to their repurchase in June 2009, were classified as other financial liabilities and accounted for at amortized cost using the effective interest method. The deferred financing charges related to the secured convertible debentures for the periods presented were included as part of the carrying value of the secured convertible debentures and were amortized using the effective interest method.

3. Significant accounting policies (continued):

(v) Embedded derivatives:

Where applicable, the Company separates embedded derivatives from a related host contract and measures those embedded derivatives at fair value. Subsequent changes in fair value of embedded derivatives are recognized in the consolidated statements of operations and comprehensive income in the period in which the change occurs. In the periods, presented, the Company did not identify any embedded derivatives that require separation from the related host contract.

(vi) Transaction costs:

Transaction costs directly attributable to the acquisition or issuance of financial assets or liabilities are accounted for as part of the respective asset or liability's carrying value at inception except for held-for-trading securities where the costs are expensed immediately.

(vii) Fair value hierarchy:

All financial instruments are required to be measured at fair value on initial recognition, except for certain related party transactions. Financial instruments are required to be measured at fair value at each reporting. Financial instruments have been ranked using a three-level hierarchy that reflects the significance of the inputs used in making the fair value measurements:

- Level 1 - applies to assets or liabilities for which there are quoted prices in active markets for identical assets or liabilities.

- Level 2 - applies to assets or liabilities for which there are inputs other than quoted prices that are observable for the asset or liability such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs are observable or can be derived principally from, or corroborated by, observable market data.

3. Significant accounting policies (continued):

- Level 3 - applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

See note 15 for a breakdown of these financial instruments.

(d) Fixed assets:

Fixed assets are recorded at cost less accumulated depreciation and amortization. The Company records depreciation and amortization 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	Over 3 to 5 years

(e) Research and development:

Research costs are charged to expense as incurred. Development costs, including the cost of drugs for use in clinical trials, are expensed as incurred unless they meet the criteria under Canadian GAAP for deferral and amortization. No development costs have been deferred to date.

(f) Goodwill:

Goodwill represents the excess of the purchase price over the fair value of net identifiable assets acquired in the GeneSense business combination. Goodwill acquired in a business combination is tested for impairment on an annual basis and at any other time if an event occurs or circumstances change that would indicate that impairment may exist. The impairment test is carried out in two steps.

3. Significant accounting policies (continued):

In the first step, the carrying amount of the reporting unit including goodwill is compared with its fair value. When the fair value of a reporting unit including goodwill exceeds its carrying amount, goodwill of the reporting unit is not considered to be impaired and the second step of the impairment test is unnecessary.

The second step is carried out when the carrying amount of a reporting unit exceeds its fair value, in which case the implied fair value of the reporting unit's goodwill is compared with its carrying amount to measure the amount of the impairment loss if any. The implied fair value of goodwill is determined in the same manner as the value of goodwill is determined in a business combination.

The Company has identified no impairment relating to goodwill for 2010, 2009 and 2008.

(g) Acquired patents and licenses:

Intangible assets with finite lives acquired in a business combination or other transaction are amortized over their estimated useful lives.

The Company capitalized the cost of acquired patent and license assets on the acquisitions of GeneSense and the NuChem compounds. The nature of this asset is such that it was categorized as an intangible asset with a finite life. These assets have now been fully amortized.

(h) Impairment of long-lived assets:

The Company reviews long-lived assets which include fixed assets and intangible assets with finite useful lives for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. If the sum of the undiscounted expected future cash flows expected to result from the use and eventual disposition of an asset is less than its carrying amount, it is considered to be impaired. An impairment loss is measured at the amount by which the carrying amount of the asset exceeds its fair value, which is estimated as the expected future cash flows discounted at a rate proportionate with the risks associated with the recovery of the asset.

The Company has identified no impairment relating to long-lived assets for 2010, 2009 and 2008.

3. Significant accounting policies (continued):

(i) 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.

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. Actual forfeitures are accounted for as they occur.

Stock options awarded to non-employees are accounted for using the fair value method and expensed as the service or product is received. The Company calculates the fair value of each stock option grant using the Black Scholes Option Pricing model at the grant date. Consideration paid on the exercise of stock options and warrants is credited to common shares.

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. 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. There are currently no units issued under this plan.

The Company has an alternate compensation plan ("2009 ACP") that provides directors and senior management ("participants") 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.

3. Significant accounting policies (continued):

(j) Investment tax credits:

The Company is entitled to Canadian federal and provincial investment tax credits, which are earned as a percentage of eligible research and development expenditures incurred in each taxation year. Investment tax credits are accounted for as a reduction of the related expenditure for items of a current nature and a reduction of the related asset cost for items of a long-term nature, provided that the Company has reasonable assurance that the tax credits will be realized. Investment tax credits receivable at May 31, 2010 of $400 thousand are classified as prepaid expenses and other assets (2009 - $600 thousand).

(k) Income taxes:

Income taxes are accounted for using the asset and liability method. Under this method, future tax assets and liabilities are recorded for the future tax consequences attributable to differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases, and operating loss and research and development expenditure carryforwards. Future tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply when the asset is realized or the liability is settled. The effect on future tax assets and liabilities of a change in tax rates is recognized in income in the year that enactment or substantive enactment occurs. A valuation allowance is recorded if it is not more likely than not that some portion of or all of a future tax asset will be realized.

(l) Earnings (loss) per share:

Basic earnings (loss) per common share is calculated by dividing the earnings (loss) for the year by the weighted average number of common shares outstanding during the year. Diluted earnings (loss) per common share is calculated by dividing the loss for the year by the sum of the weighted average number of common shares outstanding and the dilutive common equivalent shares outstanding during the year. Common equivalent shares consist of the shares issuable upon exercise of stock options and warrants as applicable, calculated using the treasury stock method. Common equivalent shares are not included in the calculation of the weighted average number of shares outstanding for diluted loss per common share when the effect would be anti-dilutive.

3. Significant accounting policies (continued):

(m) Segmented information:

The Company is organized and operates as one operating segment, the research and development of anti-cancer therapies. Substantially all of the Company's identifiable assets as at May 31, 2010 and 2009 are located in Canada.

(n) Foreign currency translation:

Foreign currency transactions are translated into Canadian dollars at rates prevailing on the transaction dates. Monetary assets and liabilities are translated into Canadian dollars at the rates in effect on the balance sheets dates. Gains or losses resulting from these transactions are accounted for in the loss for the period and are not significant.

(o) Use of estimates:

The preparation of financial statements in accordance with Canadian GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates and assumptions. Significant areas requiring the use of management estimates include the historical valuation of the convertible debentures, fair value of guarantees, fair value of the obligation for indemnifications provided on the Arrangement between the Company and Old Lorus, the fair value of long-lived assets and the determination of impairment thereon, the economic lives of intangible assets, the recoverability of future income tax assets, the determination of fair values of financial instruments, as well as the determination of stock-based compensation and the fair value of warrants issued.

(p) Recent Canadian accounting pronouncements not yet adopted:

The Canadian Accounting Standards Board ("AcSB") requires all Canadian publicly accountable entities to adopt International Financial Reporting Standards ("IFRS") for years beginning on or after January 1, 2011. The Company's first annual filing under IFRS will be for the year ended May 31, 2012; its first quarterly filing under IFRS will be for the quarter ending August 31, 2011 and will include IFRS comparative figures for the period ended August 31, 2010. Accordingly, the Company's adoption date for IFRS is June 1, 2011, but its transition date ("Transition Date") is June 1, 2010 in order to present IFRS comparative figures in the Company's 2011 consolidated financial statements.

3. Significant accounting policies (continued):

IFRS uses a conceptual framework similar to Canadian GAAP, however, there are significant differences in recognition, measurement and disclosure. Given the nature of Lorus' business and the make-up of its current balance sheets, IFRS could have an impact on its reported financial statements. The Company's implementation of IFRS will require the Company to make and disclose certain policy choices and increase the amount of disclosure necessary to fulfill its IFRS reporting obligations.

During 2009, a detailed project plan with expected milestones was established and approved by senior management of the Company. There are three phases to the plan: a diagnostic phase, a solution development phase and an implementation phase. The plan involves an assessment of the impact of the move to IFRS on accounting and reporting (including any Impact on the Company's internal controls over financial reporting, disclosure controls and procedures, IT systems and processes, and the business implications of this conversion). The Company has allocated resources and included in its project plan training required for both the conversion team and all impacted employees of the organization.

The Company has substantially completed the diagnostic phase and has begun the second and third phases of its plan. During 2010, the Company continued to make progress on its established milestones including analyzing its policy selections both on conversion and post conversion as well as evaluating new financial statement disclosure requirements.

Moving forward, the Company expects to meet all milestones leading up to the conversion in 2012. In 2011, the Company expects to finalize the elections under IFRS 1, publish new policy choices and quantify the impact of the changes to the consolidated financial statements in preparation for the 2012 conversion.

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

4. Short-term investments, marketable securities and other investments:

2010	Less than one year maturities	Greater than one year maturities	Total	Yield to maturity
Corporate investments (guaranteed investment certificates)	$ 247	$ -	$ 247	-

2009	Less than one year maturities	Greater than one year maturities	Total	Yield to maturity
Corporate investments (guaranteed investment certificates)	$ 248	$ 242	$ 490	-

Certain corporate investments, totalling $247 thousand at May 31, 2010 (2009 - $490 thousand), have been designated as held-for-trading investments, and have been classified as short-term investments on the consolidated balance sheets. These investments are carried at fair value. The net increase in fair value for the year ended May 31, 2010 amounted to $8 thousand (2009 - $10 thousand) and has been included in the consolidated statements of operations and comprehensive income in interest income.

5. Fixed assets:

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

5. Fixed assets (continued):

2009	Cost	Accumulated depreciation and amortization	Net book value
Furniture and equipment	$ 2,905	$ 2,674	$ 231

6. Share capital:

(a) Continuity of common shares and warrants:

	Common shares		Warrants	
	Number	Amount	Number	Amount
	(in thousands)		(in thousands)	
Balance, May 31, 2007	7,076	$ 157,714	-	$ -
Interest payments (note 13)	179	1,029	-	-
Balance, May 31, 2008	7,255	158,743	-	-
Interest payments (note 13)	354	707	-	-
Issuance of units (b)	951	2,790	571	417
Balance, May 31, 2009	8,560	162,240	571	417
Interest payments (note 13)	7	15	-	-
Issuance of units (b)	1,366	1,665	755	622
Balance, May 31, 2010	9,933	$ 163,920	1,326	$ 1,039

6. Share capital (continued):

(b) Share issuances:

On November 27, 2009, pursuant to a private placement, the Company issued 1.366 million common shares and 683 thousand 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 on October 6, 2009 which was applied to subscribe for units of the Company ("Units") as part of the private placement. In addition, the Company issued 72 thousand brokers' warrants to purchase an equivalent number of common shares at $2.40 until May 27, 2011. The total costs associated with the transaction were approximately $250 thousand which included the $77 thousand which 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 was allocated to the common shares and $545 thousand to the common share purchase warrants.

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 July 9, 2008 (the "Record Date") received one right for each common share held as of the Record Date. Each four rights entitled the holder thereof to purchase a Unit. Each Unit consists of one common share of the Company at $3.90 and a one-half common share purchase warrant to purchase additional common shares of the Company at $4.53 until August 7, 2010. All unexercised rights expired on August 7, 2008. 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 approximately $500 thousand. The Company has 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 resulting 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.

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

6. Share capital (continued):

On July 10, 2007, as part of the Arrangement described in note 1(b), the Company surrendered its original common share issued when the Company was incorporated, ("Original Share"), and exchanged all of the shares in Old Lorus for an equivalent number of shares of the Company.

(c) Terminated U.S. financing:

In April 2010, the Company filed a Registration Statement on Form F-1 (the "Registration Statement") with the United States Securities and Exchange Commission (the "SEC") for an offering of up to US$17.5 million of units in the United States.

In August 2010, subsequent to year end, the Company announced that due to unfavourable 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 have been included in general and administrative expenses for the year ended May 31, 2010 and an additional $200 thousand in fees incurred subsequent to year end which will be paid in the year ended May 31, 2011.

(d) Contributed surplus:

	2010	2009	2008
Balance, beginning of year	$ 10,744	$ 9,181	$ 8,525
Forfeiture of stock options	317	1,563	656
Equity portion of secured convertible Debenture (note 13)	3,814	-	-
Balance, end of year	$ 14,875	$ 10,744	$ 9,181

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

6. Share capital (continued):

(e) Continuity of stock options:

	2010	2009	2008
Balance, beginning of the year	$ 3,845	$ 4,961	$ 4,898
Stock option expense	176	446	719
Forfeiture of stock options	(317)	(1,562)	(656)
Balance, end of year	$ 3,704	$ 3,845	$ 4,961

(f) Alternate compensation plans:

The Company did not issue any share units under its deferred share unit plan or allot any shares for issuance under its 2009 ACP.

(g) 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 and its affiliates 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, 2010, 3,159 (2009 - 7,966; 2008 - 9,400) common shares have been purchased under the ESPP, and the Company has recognized an expense of $2 thousand (2009 - $3 thousand; 2008 - $10 thousand) related to this plan in these consolidated financial statements.

(h) Earnings/loss per share:

For the year ended May 31, 2010, the determination of diluted earnings per share includes in the calculation all common shares potentially issuable upon the exercise of stock options and share purchase warrants, using the treasury stock method.

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

6. Share capital (continued):

Diluted earnings per share, using the treasury stock method, assumes outstanding stock options and share purchase warrants are exercised at the beginning of the period, and the Company's common shares are purchased at the average market price during the period from the funds derived on the exercise of these outstanding options and share purchase warrants. Stock options and share purchase warrants with a strike price above the average market price for the period were excluded from the calculation of fully diluted earnings per share as to include them would have increased the earnings per share.

7. Stock-based compensation:

Stock option plan:

Under the Company's stock option plan, options 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 1,490,000 options. 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 three years ended May 31, 2010 are summarized as follows:

	2010		2009		2008	
	Options	Weighted average exercise price	Options	Weighted average exercise price	Options	Weighted average exercise price
Outstanding, beginning of year	562,358	$ 8.66	547,874	$ 13.52	432,830	$ 17.69
Granted	189,406	2.41	170,807	3.39	201,637	6.26
Exercised	-	-	-	-	-	-
Forfeited	(78,863)	11.24	(156,323)	19.94	(86,593)	17.44
Outstanding, end of year	672,901	6.60	562,358	8.66	547,874	13.52
Exercisable, end of year	439,452	$ 8.54	323,555	$ 11.39	341,296	$ 14.91

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

7. Stock-based compensation (continued):

The following table summarizes information about stock options outstanding at May 31, 2010:

	Options outstanding			Options exercisable	
Range of exercise prices	Options	Weighted average remaining contractual life (years)	Weighted average exercise price	Options	Weighted average exercise price
$2.10 - $7.49	484,152	8.31	$ 3.81	250,703	$ 4.64
$7.50 - $14.99	146,955	5.39	8.88	146,955	8.88
$15.00 - $29.99	28,852	3.88	24.62	28,852	24.62
$30.00 - $75.00	12,942	2.08	44.38	12,942	44.38
	672,901	7.36	6.60	439,452	8.54

For the year ended May 31, 2010, stock option expense comprised $83 thousand (2009 - $127 thousand; 2008 - $171 thousand) related to research and development and $93 thousand (2009 - $319 thousand; 2008 - $548 thousand) related to general and administrative.

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

	2010	2009	2008
Risk-free interest rate	2.44% - 2.60%	2.00% - 3.50%	3.75% - 4.70%
Expected volatility	82% - 124%	76%	77% - 80%
Expected dividend yield	-	-	-
Expected life of options	5 years	5 years	5 years
Weighted average fair value of options granted or modified during the year	$ 1.43	$ 2.16	$ 4.05

The Company has assumed no forfeiture rate as adjustments for actual forfeitures are made in the year they occur.

8. Capital risk management:

The Company's objectives when managing capital are to:

(a) maintain its ability to continue as a going concern in order to provide returns to shareholders and benefits to other stakeholders;

(b) maintain a flexible capital structure which optimizes the cost of capital at acceptable risk; and

(c) ensure sufficient cash resources to fund its research and development activity, to pursue partnership and collaboration opportunities and to maintain ongoing operations.

At May 31, 2010, the capital structure of the Company consisted of equity comprised of share capital, 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 and short-term investments balances or by undertaking other activities as deemed appropriate under the specific circumstances. The Company has forecasted that its current capital resources will not be sufficient to carry its research and development plans and operations for the next twelve months (note 1(a)) without additional financing.

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, 2009.

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

9. Financial instruments and risk management:

(a) Financial instruments:

The Company has classified its financial instruments as follows:

	2010	2009
Financial assets:		
Cash and cash equivalents, consisting of term deposits and guaranteed investment certificates at fair value	$ 667	$ 5,374
Short-term investments, held-for-trading, recorded at fair value	247	490
Financial liabilities:		
Accounts payable, measured at amortized cost	387	299
Accrued liabilities, measured at amortized cost	1,458	1,131
Secured convertible debentures, measured at amortized cost	-	14,448
Promissory note payable, measured at amortized cost	1,000	-

(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 and short-term investments. The carrying amount of the financial assets represents the maximum credit exposure.

9. Financial instruments and risk management (continued):

The Company manages credit risk for its cash and cash equivalents and short-term investments 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 Board considers securing additional funds through equity, debt or partnering transactions. The Company manages its liquidity risk by continuously monitoring forecasts and actual cash flows. Refer to note 1(a) for further discussion on the Company's ability to continue as a going concern.

(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.

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

9. Financial instruments and risk management (continued):

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, 2010, U.S. dollar denominated accounts payable and accrued liabilities amounted to $270 thousand (2009 - $70 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 $27 thousand (2009 - $7 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.

10. Income taxes:

Income tax recoveries attributable to losses from operations differ from the amounts computed by applying the combined Canadian federal and provincial income tax rates to pre-tax income from operations primarily as a result of the provision of a valuation allowance on net future income tax benefits.

Significant components of the Company's future tax assets are as follows:

	2010	2009
Non-capital loss carryforwards	$ 2,197	$ 3,099
Capital loss carryforwards	-	218
Research and development expenditures	4,237	4,518
Book over tax depreciation	529	749
Intangible asset	3,115	3,386
Ontario harmonization tax credit	347	179
Other	172	-
Future tax assets	10,597	12,149
Valuation allowance	(10,597)	(12,149)
	$ -	$ -

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

10. Income taxes (continued):

During the year ended May 31, 2010, the Company reached a settlement with the convertible debenture holders (note 13) which resulted in an accounting gain of $11.0 million. For tax purposes this transaction resulted in a taxable capital gain of $5.7 million. There are no taxes payable on this gain as the Company has sufficient capital and non-capital losses to offset the gain.

During the year ended May 31, 2008, under the Arrangement, numerous steps were undertaken as part of a taxable reorganization. However, these steps did not result in any taxes payable as the tax benefit of income tax attributes was applied to eliminate any taxes otherwise payable. Of the total unrecognized future tax assets available at the time of the Arrangement, approximately $7.0 million was transferred to the Company and the balance remained with Old Lorus and is subject to the indemnification agreement (note 1(b)). Those tax attributes remaining with Old Lorus are no longer available to the Company.

In assessing the realizable benefit from future tax assets, management considers whether it is more likely than not that some portion or all of the future tax assets will not be realized. The ultimate realization of future tax assets is dependent on the generation of future taxable income during the years in which those temporary differences become deductible. Management considers projected future taxable income, uncertainties related to the industry in which the Company operates and tax planning strategies in making this assessment. Due to the Company's stage of development and operations, and uncertainties related to the industry in which the Company operates, the tax benefit of the above amounts has been completely offset by a valuation allowance.

The Company has undeducted research and development expenditures, totalling $16.9 million that can be carried forward indefinitely. In addition, the Company has non-capital loss carryforwards of $8.8 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	4,387
2030	16
	$ 8,787

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

10. Income taxes (continued):

Income tax rate reconciliation:

	2010	2009	2008
Income tax expense (recovery) based on statutory rate of 32.6% (2009 - 33.3%, 2008 - 35.0%)	$ 1,738	$ (2,950)	$ (2,217)
Expiry of losses	46	247	127
Change in valuation allowance	(1,552)	3,068	2,048
Non deductible accretion, stock-based compensation and capital gains	(1,694)	582	(1,880)
Ontario harmonization tax credit	-	(260)	-
Change in substantively enacted tax rates	1,643	299	1,585
Adjustment of prior year research and development expenditures	-	(856)	-
Other	(181)	(130)	337
	$ -	$ -	$ -

11. Research and development programs:

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

- RNA-targeted (antisense and siRNA) therapies, based on synthetic segments of DNA or RNA designed to bind to the messenger RNA that is responsible for the production of proteins over-expressed in cancer cells;
- small molecule therapies based on anti-angiogenic, anti-proliferative and anti-metastatic agents; and
- immunotherapy, based on macrophage-stimulating biological response modifiers.

11. Research and development programs (continued):

(a) RNA-Targeted Therapies:

The Company's RNA-targeted drug candidates include LOR-2040 and LOR-1284. 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 ("AML") patient population. Based on these data, the Company is proceeding with protocol development for the expanded development program. LOR-1284 is in pre-clinical stage of development.

(b) Small Molecule Program:

The Company has small molecule drug screening technologies and preclinical scientific expertise, which it is using to create a drug candidate pipeline. The Company's proprietary group of small molecule compounds includes lead drug LOR-253.

(c) Immunotherapy:

The Company's immunotherapy product candidates are Virulizin® and Interleukin-17E ("IL-17E"). In June 2009, as part of the consideration for our repurchase of the secured convertible debentures from The Erin Mills Investment Corporation ("TEMIC"), the Company assigned to TEMIC its rights under the license agreement with Zor Pharmaceuticals, LLC ("ZOR"), and sold to TEMIC its intellectual property rights associated with Virulizin®. In return, the Company will be entitled to 50% of the deal value of any transaction completed in ZOR and non-ZOR territories. IL-17E is a protein-based therapeutic that the Company is developing as an immunotherapy for cancer treatment.

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

11. Research and development programs (continued):

	Years ended May 31,			Period from inception on September 5, 1986 to May 31,
	2010	2009	2008	2010
RNA-Targeted Therapies:				
Expensed	$ 945	$ 1,123	$ 3,291	$ 36,904
Acquired	-	-	-	11,000
Small molecules:				
Expensed	1,572	2,634	2,821	14,413
Acquired	-	-	-	1,228
Immunotherapy:				
Expensed	-	-	148	75,197
Total expensed	$ 2,517	$ 3,757	$ 6,260	$ 126,514
Total acquired	$ -	$ -	$ -	$ 12,228

Amortization of the acquired patents and licenses is included in the expensed line of the table.

12. Supplemental cash flow and other information:

Cash and cash equivalents consist of:

	2010	2009
Cash	$ 667	$ 2,676
Term deposits and guaranteed investment certificates	-	2,698
	$ 667	$ 5,374

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

12. Supplemental cash flow and other information (continued):

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

	Years ended May 31,			Period from inception on September 5, 1986 to May 31,
	2010	2009	2008	2010
Prepaid expenses and other assets	$ 190	$ (105)	$ (386)	$ (60)
Accounts payable	88	(624)	(181)	(857)
Accrued liabilities	377	(213)	(227)	1,118
Promissory note payable	1,000	-	-	1,000
	$ 1,655	$ (942)	$ (794)	$ 1,201

During the year ended May 31, 2010, the Company received interest of $139 thousand (2009 -$367 thousand; 2008 - $519 thousand).

During the year ended May 31, 2010, the Company paid $27 thousand (2009 - nil; 2008 - nil) in cash interest related to the convertible debentures settled on June 22, 2009.

During the year ended May 31, 2010, the Company paid nil (2009 - nil; 2008 - nil) in income taxes and received nil (2009 - nil; 2008 - nil) in income taxes.

13. Convertible debentures:

On October 6, 2004, the Company entered into a Subscription Agreement (the "Agreement") to issue an aggregate of $15.0 million of secured convertible debentures (the "debentures") to TEMIC (the "debenture holder"). The debentures were secured by a first charge over all of the assets of the Company.

13. Convertible debentures (continued):

The Company received three tranches of $5.0 million on each of October 6, 2004, January 14 and April 15, 2005. All debentures issued under the Agreement were due on October 6, 2009 and subject to interest payable monthly at a rate of prime plus 1%. Interest was payable in common shares of the Company. Common shares issued in payment of interest were issued at a price equal to the weighted average trading price of such shares for the 10 trading days immediately preceding their issue in respect of each interest payment. For the year ended May 31, 2010, the Company issued 7,000 (2009 - 354,000; 2008 - 179,433) shares in settlement of approximately $15 thousand (2009 - $707 thousand; 2008 - $1.0 million) in interest. In addition the Company paid $12 thousand of interest expense in cash.

With the issuance of each $5.0 million debenture, the Company issued to the debenture holder from escrow 33,333 purchase warrants expiring October 6, 2009 to buy common shares of the Company at a price per share equal to $30.00. In July 2007, the 100,000 common share purchase warrants were repurchased in connection with the Arrangement (note 1(b)).

The debentures contained both a liability and an equity element, represented by the conversion option and, therefore, under Canadian GAAP, these two elements were split and classified separately as debt and equity. In addition, as noted above, the debenture holder received 33,333 purchase warrants on the issuance of each tranche of convertible debt (warrants were repurchased in July 2007). The Company allocated the total proceeds received from the issuance of the debentures to these three elements based on their relative fair values. The fair value of the purchase warrants was determined based on an option pricing model. The fair value of the debt was based on the discounted cash flows using an estimated cost of borrowing of 15% to represent an estimate of what the Company may have borrowed as secured debt without a conversion option or purchase warrant. The debentures conversion option was valued using a trinomial model. The resulting allocation based on relative fair values resulted in the allocation of $9.8 million to the debt instrument, $4.1 million to the conversion option and $1.1 million to the purchase warrants. The financing fees totalling $1.1 million related to the issuance of the convertible debentures were allocated pro rata between deferred financing charges of $652 thousand, against the equity portion of the convertible debentures of $322 thousand and against the purchase warrants of $87 thousand. This allocation resulted in net amounts allocated to the equity portion of the debentures and warrants of $3.8 million and $991 thousand, respectively.

13. Convertible debentures (continued):

Prior to the adoption of Section 3855 on June 1, 2007, deferred financing costs were amortized over the five-year life of the Agreement. As a consequence of the adoption of Section 3855, deferred financing costs at June 1, 2007 were reclassified and reduced the carrying value of the debentures. Deferred financing costs were recognized in the consolidated statements of operations as accretion expense.

Each reporting period, the Company was required to accrete the carrying value of the convertible debentures such that at maturity on October 6, 2009, the carrying value of the debentures will be their face value of $15.0 million. For the year ended May 31, 2010, the Company has recognized $80 thousand (2009 - $1.7 million; 2008 - $1.2 million) in accretion expense.

On June 22, 2009, the Company reached a settlement with TEMIC with respect to the purchase and settlement of the $15.0 million secured convertible debentures.

Under the Agreement, the Company purchased all of the convertible debentures from TEMIC for consideration that included a cash payment on close of the transaction of $3.3 million, the assignment of the rights under the license agreement with ZOR certain intellectual property associated with Virulizin® and all of the Company's shares in its wholly owned subsidiary, Pharma Immune, which held an equity interest in ZOR (the "Consideration"). Under the agreement, the Company is entitled to 50% of any royalties received under the ZOR license agreement and 50% of the value of any transaction completed in territories not covered by the ZOR license agreement. The Company also retains a perpetual royalty free license for the animal use of Virulizin®. TEMIC will be fully responsible for all clinical and regulatory costs associated with the commercialization of Virulizin® in territories not covered by the ZOR license agreement. The Company will assist TEMIC with certain agreed upon services.

For receipt of the Consideration, TEMIC has released all security interest in the assets of the Company.

13. Convertible debentures (continued):

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. In addition, as a result of extinguishing the debentures in the amount of $3.8 million, the equity portion of the debentures, was transferred to contribute surplus. 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. Capital loss and non-capital loss carryforwards, and the associated valuation allowance have been reduced accordingly.

14. Contingencies, commitments 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 of approximately $129 thousand in 2011, $9 thousand in 2012. The Company's current facility lease expires in March 2011.

During the year ended May 31, 2010, operating lease expenses were $146 thousand (2009 - $143 thousand; 2008 - $140 thousand).

(b) Other contractual commitments:

In December 1997, the Company acquired certain patent rights and a sub-license to develop and commercialize the anticancer application of certain compounds in exchange for a 20% share interest in NuChem; a payment of US$350 thousand in shares of the Company; and up to US$3.5 million in cash.

To date, the Company has made cash payments of US$500 thousand. The remaining balance of up to US$3.0 million remains payable upon the achievement of certain milestones based on the commencement and completion of clinical trials. Additional amounts paid will be classified as acquired patents and licenses and will be amortized over the estimated useful life of the licensed asset.

14. Contingencies, commitments and guarantees (continued):

The Company did not meet any of these milestones during the current year and does not currently expect to achieve any of the above milestones in fiscal years ended May 31, 2011 or 2012 and cannot reasonably predict when such milestones will be achieved, if at all.

The Company holds an exclusive world-wide license from the University of Manitoba (the "University") and Cancer Care Manitoba ("CCM") to certain patent rights to develop and sub-license certain oligonucleotide technologies. In consideration for the exclusive license of the patent rights, the University and CCM are entitled to an aggregate of 1.67% of the net sales received by the Company from the sale of products or processes derived from the patent rights and 1.67% of all monies received by the Company from sub-licenses of the patent rights. Any and all improvements to any of the patent rights derived in whole or in part by the Company after the date of the license agreement, being June 20, 1997, are not included within the scope of the agreement and do not trigger any payment of royalties.

The Company has not yet earned any revenue from the products covered under this agreement and, therefore, has not paid any royalties thereunder and cannot reasonably predict the timing and amount of any future payment. The Company does not expect to make any royalty payments under this agreement in fiscal years ended May 31, 2011 or 2012, and cannot reasonably predict when such royalties will become payable, if at all.

(c) Guarantees:

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

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

14. Contingencies, commitments and guarantees (continued):

(d) Indemnification on Arrangement:

Under the Arrangement (note 1(b)), the Company has 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.

Subsequent to the release of the escrowed amount of $600 thousand in July 2008, the Company recorded a liability of $150 thousand, which it believes to be a reasonable estimate of the fair value of the obligation for the indemnifications provided at that time. This liability was reduced to $100 thousand in the current year resulting in a gain on sale of $50 thousand in the year ended May 31, 2010 (2009 - $450 thousand). The reduction in liability is the result of the passage of time and related reduction in risk associated with claims under the liability as there have been no claims under this indemnification to date. This amount is included on the consolidated balance sheets in accrued liabilities as at May 31, 2010.

(e) Financing fees:

The Company has incurred approximately $200 thousand in fees subsequent to year end related to the financing in note 6(c) which will be paid despite the termination of the financing.

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

14. Contingencies, commitments and guarantees (continued):

(f) Regulatory matter:

On October 31, 2008, the Company voluntarily delisted its common shares from trading on the NYSE Alternext US LLC (formerly the American Stock Exchange or AMEX). The Company was eligible to apply for deregistration from the Security Exchange Commission one year after delisting from the NYSE Alternext US LLC.

15. Financial instruments:

Fair value estimates are made at a specific point in time, based on relevant market information and information about the financial instrument. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and, therefore, cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Cash and cash equivalents, short-term investments, other assets, accounts payable, accrued liabilities and promissory note payable:

Due to the short period to maturity of the financial instruments, the carrying values as presented in the consolidated balance sheets are reasonable estimates of fair value.

Financial instruments potentially exposing the Company to a concentration of credit risk consist principally of cash equivalents and short-term investments. The Company mitigates this risk by investing in high grade fixed income securities.

Assets measured at fair value on a recurring basis as of May 31, 2010 and May 31, 2009 were as follows:

2010	Level 1	Level 2	Level 3	Total
Assets:				
Cash and cash equivalents	$ 667	$ -	$ -	$ 667
Short-term investments, consisting of guaranteed investment certificates	247	-	-	247
	$ 914	$ -	$ -	$ 914

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

15. Financial instruments (continued):

2009	Level 1	Level 2	Level 3	Total
Assets:				
Cash and cash equivalents	$ 5,374	$ -	$ -	$ 5,374
Short-term investments, consisting of guaranteed investment certificates	490	-	-	490
	$ 5,864	$ -	$ -	$ 5,864

16. License agreement:

Effective April 8, 2008, the Company entered into a non-exclusive multinational license agreement with ZOR, formed as a subsidiary of Zoticon Bioventures Inc., to further develop and commercialize Virulizin® for human therapeutic applications.

Under the terms of the agreement, the Company received an upfront licensing fee of $100 thousand, was eligible to receive certain milestone payments totalling approximately US$10 million based on progress through financing and clinical development, and royalties on net sales that vary from 10% to 20% depending on the level of sales of Virulizin® achieved in those territories covered by the license and subject to certain other adjustments. ZOR will assume all future costs for the development of the licensed technology. In 2009, the Company received an additional payment of $178 thousand (US$150 thousand).

As described in note 13, on June 22, 2009, this license agreement was assigned to TEMIC as part of the Consideration for the repayment of the convertible debentures.

The Company also entered into a service agreement with ZOR to assist in the transfer of knowledge. Under this agreement, the Company agreed to provide ZOR with 300 hours of consulting service during a period of 18 months (the agreement expired in October 2009).

The initial fee of $100 thousand and a milestone payment of $178 thousand (US$150 thousand) were deferred under this arrangement and revenue was recognized based on the measure of progress toward completion of the technical support services under this contract based on the actual hours provided relative to the total number of hours required to be provided, applied to the total of these initial fee and non-contingent contractual payments related to the support services. At any time, the amount of cumulative revenue recognized would not exceed the cumulative amount of non-refundable payments received under the arrangement. All of the revenue received under this agreement has now been recognized.

16. License agreement (continued):

In addition, the Company acquired an equity interest in ZOR in exchange for a capital contribution of $2,500. As described in note 13, on June 22, 2009, as part of the agreement to repurchase the convertible debentures, the Company disposed of its interest in ZOR and assigned the licence agreement to TEMIC.

17. Related party transactions:

In October 2009, the Company entered into a loan agreement with a member of its Board of Directors 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 the 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.

In April 2010, the Company entered into a loan agreement with a company related to the same member as above of its Board of Directors 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 the annual rate of 10%. The principal and interest amount are due in six months. The funds will be used for general working capital purposes.

During the year ended May 31, 2010, the Company expensed consulting fees of nil to a director of the Company (2009 - $25 thousand; 2008 - $31 thousand). There was no amount payable at May 31, 2010 (2009 - nil; 2008 - $30 thousand).

This transaction was in the normal course of business and has been measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

See also note 18 for additional related party transactions.

18. Subsequent events:

On August 27, 2010, subsequent to the year end, due to unfavourable market conditions, the Company withdrew a previously announced equity issue and is proposing a shareholders' rights issue with a financing commitment for an investment of $4 million by one of the Company's directors, Mr. Herbert Abramson by way of standby purchase arrangements for the proposed rights offering such that the minimum gross proceeds of the proposed rights offering are $4 million. The Company expects the proposed investment to be made by October 31, 2010. Mr. Abramson is also providing the Company with interim financing by way of three $500 thousand monthly loans, the first of which was advanced on August 11, 2010. The loans are unsecured, have a six-month term (or the earlier of the closing of the rights issue) and bear interest at the annual rate of 10%. In addition, the loan due in October 2010 has been extended for an additional three months.

MANAGEMENT'S DISCUSSION AND ANALYSIS

August 30, 2010

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

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

- *our ability to obtain the substantial capital required to fund research and operations;*
- *our plans to obtain partners to assist in the further development of our product candidates;*
- *our expectations with respect to existing and future corporate alliances and licensing transactions with third parties, and the receipt and timing of any payments to be made by us or to us in respect of such arrangements;*
- *our expectations regarding future financings;*
- *our plans to conduct clinical trials and pre-clinical programs;*
- *the length of clinical trials;*
- *the partnering potential of our products;*
- *our business strategy*
- *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; and*
- *other statements including words such as "anticipate", "contemplate", "continue", "believe", "plan", "estimate", "expect", "intend", "will", "should", "may", and other similar expressions.*

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

- *our ability to continue to operate as a going concern;*
- *our ability to obtain the substantial capital required to fund research and operations;*
- *our lack of product revenues and history of operating losses;*
- *our early stage of development, particularly the inherent risks and uncertainties associated with (i) developing new drug candidates generally, (ii) demonstrating the safety and efficacy of these drug candidates in clinical studies in humans, and (iii) obtaining regulatory approval to commercialize these drug candidates;*
- *our liability associated with the indemnification of Old Lorus and its directors, officers and employees in respect of the arrangement described in the financial statements;*
- *our ability to find and enter into agreements with potential partners;*
- *our ability to recruit patients for clinical trials;*
- *the progress of our clinical trials;*
- *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 attract and retain key personnel;*
- *our ability to obtain patent protection and protect our intellectual property rights;*
- *our ability to protect our intellectual property rights and to 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 on-going quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the SEC, and those which are discussed under the heading "Risk Factors" in management discussion and analysis for the fiscal year ended May 31, 2010.*

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

LIQUIDITY AND CAPITAL RESOURCES

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

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

Management has forecasted that the Company’s current level of cash and cash equivalents and short-term investments, including the $4 million investment describe under subsequent events, will not be sufficient to execute its current planned expenditures for the next twelve months without further investment. The Company is currently in discussion with several potential investors 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, we cannot assure you 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. The Company is also considering alternatives to delay its research program until financing is available, amongst other cost savings measures. 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 significant 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.

The financial statements do not reflect adjustments that would be necessary if the going concern assumption were not appropriate. If the going concern basis were not appropriate for these financial statements, then adjustments would be necessary in the carrying value of the assets and liabilities, the reported revenues and expenses and the balance sheet classifications used.

The following management’s discussion and analysis (“MD&A”) should be read in conjunction with the audited financial statements for the year ended May 31, 2010 and the accompanying notes (the "Financial Statements"). The Financial Statements, and all financial information discussed below, have been prepared in accordance with Canadian generally accepted accounting principles (“GAAP”). All amounts are expressed in Canadian dollars unless otherwise noted. All comparative figures presented in these consolidated financial statements include those of Old Lorus prior to the Arrangement Date (as defined below) and the Company 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 recently completed Phase II clinical trial. A growing intellectual property portfolio supports our diverse product pipeline.

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 drugs currently approved for the treatment and management of cancer are toxic with severe side effects, and we therefore 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 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 antisense, small molecules and immunotherapeutics.

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.
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.

Plan of Arrangement and Corporate Reorganization
On July 10, 2007 (the “Arrangement Date”), the Company, (or “New Lorus”) completed a plan of arrangement and corporate reorganization with, among others, 4325231 Canada 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 common share of the Company 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. 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 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 included in this MD&A reflect that of the Company as if it had always carried on the business formerly carried on by Old Lorus.

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 in a ratio of between 1-for-10 and 1-for-50 at any time prior to November 30, 2010, the Company's Board of Directors approved a 1-for-30 share consolidation which became effective May 25, 2010. The share consolidation affects 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 MD&A, 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.

RESULTS OF OPERATIONS

Our loss from operations for the year ended May 31, 2010 decreased to $5.7 million ($0.61 per share) compared to $9.3 million ($1.13 per share) during the same period in fiscal 2009. The current year net earnings and other comprehensive earnings of $5.3 million (earnings of $0.57 per share) are a result of the $11.0 million gain on sale recognized on the extinguishment of our convertible debentures in June 2009 (described below in the section titled "Gain on repurchase of convertible debentures and transfer of assets") as well as the gain on sale of shares related to the Arrangement (as described in the section titled "Gain on sale of share") of $50 thousand due to a reduction in the indemnification liability (described below). For the year ended May 31, 2009 the Company recorded a gain on sale of shares of $450 thousand resulting in a net loss and other comprehensive loss for the period of $8.9 million ($1.08 per share). During the year ended May 31, 2008, the Company realized a gain on the sale of shares related to the Arrangement in the amount of $6.3 million resulting in net loss and other comprehensive loss for the period of $6.3 million ($0.87 per share).

The decrease in net loss from operations for the year ended May 31, 2010 compared with the prior year is due primarily to lower research and development costs of $1.2 million resulting from less spending on GLP-toxicity studies as well as an overall reduction in company spending to conserve cash balances, as well as reduced interest and accretion charges of $653 thousand and $1.6 million respectively, resulting from the settlement of the convertible debentures described below and lower stock based compensation costs of $270 thousand as a result of a lower share price in the current year. These reductions were offset by a decrease in interest income from $270 thousand for the year ended May 31, 2009 to $21 thousand for the year ended May 31, 2010 as a result of lower cash and investment balances.

We utilized cash of $3.7 million in our operating activities in the year ended May 31, 2010 compared with $7.2 million in the prior year. The decrease is primarily a result of a reduced loss from operations and increased accounts payable and accrued liabilities balances in the current year.

At May 31, 2010, we had cash and cash equivalents and short-term investments of $914 thousand compared to $5.9 million at May 31, 2009.

Revenue
For the year-ended May 31, 2010, revenue decreased to $131 thousand from $184 thousand in the same period last year and $43 thousand in 2008. This decrease in revenue in the current year is related to the timing of recognition of milestone payments associated with the license of Virulizin to ZOR Pharmaceuticals. In prior years Lorus received two milestone payments under the license agreement, one upon signing the agreement and a second upon ZOR achieving a financing milestone. The milestone revenue has been recognized over the period of a service contract period whereby Lorus agreed to provide consulting services to ZOR. The milestone revenue was fully recognized by the end of the second quarter of 2010 as the service agreement with ZOR expired in October 2009.

The increased revenue in 2009 compared with 2008 is primarily related to the recognition of the milestone revenue from ZOR.

Research and Development
Research and development expenses totaled $2.5 million in the year ended May 31, 2010 compared to $3.8 million during the prior year and $6.3 million in 2008. The decrease in expenditures of $1.2 million during the current year compared to the same period in the prior year is primarily a result of the cost of toxicity studies for our lead small molecule drug candidate LOR-253 completed in fiscal 2009. No similar costs were incurred in the current year. In addition, we reduced overall, non-critical research and development costs in response to the current cash position.

The decrease in spending during the year ended May 31, 2009 compared with the prior year is due to the GLP-toxicity studies for both our LOR-2040 bladder cancer and LOR-253 small molecule programs during the 2008 fiscal year as well as the cost of manufacturing LOR-2040 further increasing the research and development spending costs in 2008. In 2009, we manufactured LOR-253 drug, our lead small molecule, the manufacturing cost of which is significantly less than LOR-2040.

General and Administrative
General and administrative expenses totaled $3.0 million for the year ended May 31, 2010 compared to $3.0 million in the prior year and $3.7 million in 2008. While the general and administrative expenses in the current year were consistent with the prior year, there were significant reductions to personnel, travel, board of directors and general office costs as we work to conserve cash and reduce our burn rate these savings were offset by financing costs of $569 thousand associated with a financing terminated subsequent to year end (described below). The decrease in general and administrative costs for 2009 compared to 2008 is the result of lower personnel, travel, board of directors and general office costs.

Stock-Based Compensation
Stock-based compensation expense, net of forfeitures, totaled $176 thousand for the year ended May 31, 2010 compared with $446 thousand in the prior year and $719 thousand in 2008. The lower stock based compensation for the year ending May 31, 2010 is due primarily to a lower share price and therefore lower fair value in the current year. The decrease in option expense for the year ended May 31, 2009 compared with May 31, 2008 is the result of expense associated with a one-time increase in options granted that vested immediately in order to bring option granting practices in line with industry standards in 2008, no similar transaction occurred in 2009 or 2010. Also in 2008, the Company recorded an expense of $83 thousand relating to the extension of options to directors not standing for re-election at the Company's annual general meeting and Dr. Wright for options granted in his capacity as President and CEO. A similar extension was made in 2009 for directors not seeking re-election resulting in a $3 thousand additional expense.

Depreciation and Amortization
Depreciation and amortization expenses decreased to $86 thousand in the year ended May 31, 2010 as compared to $189 thousand in the prior year and $317 thousand in 2008. The decrease in depreciation and amortization expense is the result of reduced capital asset purchases over the past several fiscal years. During 2009, we acquired research and development equipment that provides us with the ability to do certain testing in house that was previously outsourced.

Interest Expense
Interest expense was $54 thousand compared with $707 thousand for the prior year and $1.0 million in 2008. During the year ended May 31, 2010 $27 thousand interest expense was paid to the debenture holders (prior to June 22, 2010) with $15 thousand in common shares and $12 thousand in cash with the remaining $27 thousand in interest expense accrued on the two $1 million, 10% interest promissory notes (described under 'transactions with related parties') advanced during the year. The interest expense in 2009 and 2008 was for non-cash payments related to the interest payable at a rate of prime plus 1% on the $15.0 million convertible debentures which were repurchased in June 2009. The Company benefited from lower interest rates in 2009 as compared to 2008 due to a reduced prime rate of interest. All interest on the debentures (prior to May 31, 2009) was paid in common shares of the Company.

Accretion in Carrying Value of Secured Convertible Debentures
Accretion in the carrying value of the Company's secured convertible debentures was $80 thousand in the year ended May 31, 2010 compared with $1.7 million in the prior year and $1.2 million in 2008. The current year amount of $80 thousand relates to the period in the current year during which the convertible debentures were outstanding, June 1, 2009 to June 19, 2009. Accretion charges arise as under GAAP the Company has allocated the proceeds from each tranche of the debentures to the debt and equity instruments issued on a relative fair value basis resulting in the $15.0 million debentures having an initial cumulative carrying value of $9.8 million as of their dates of issuance. Each reporting period, the Company was required to accrete the carrying value of the convertible debentures such that at maturity on October 6, 2009, the carrying value of the debentures would have been the face value of $15.0 million. The increase in expense year ended May 31, 2009 compared with the prior year is due to the increasing principal balance to which the implicit interest is applied in determining the accretion amount.

Interest Income
Interest income totaled $21 thousand in the year ended May 31, 2010 compared to $270 thousand in the prior year and $542 thousand in 2008. The decrease in interest income during the current year is due to significantly lower average cash and marketable securities balances throughout the year and lower interest rates available on investments in comparison with the prior years.

Loss from operations for the period
For the reasons discussed above, our loss from operations for the year ended May 31, 2010 decreased to $5.7 million ($0.61 per share) compared to $9.3 million ($1.13 per share) in the prior year and $12.6 million ($1.74 per share) in 2008. During the current year the Company recognized a $11.0 million gain on sale on the extinguishment of its convertible debentures in June 2009 and a gain of $50 thousand related to a reduction in the indemnification liability. These gains resulted in net earnings and other comprehensive earnings of $5.3 million (earnings $0.57 per share) for the year ended May 31, 2010. During the year ended May 31, 2009 the Company recorded a gain on sale of shares related to the Arrangement of $450 thousand which resulted in a net loss and other comprehensive loss of $8.9 million ($1.08 per share). During the year ended May 31, 2008, the Company realized a gain related to the Arrangement in the amount of $6.3 million resulting in a net loss and other comprehensive loss for the period of $6.3 million ($0.87 per share).

Gain on repurchase of convertible debentures and transfer of assets
The terms of the secured convertible debentures are described in note 13 to the Company's annual financial statements for the period ended May 31, 2010. The Company repurchased these debentures, which were originally due on October 6, 2009, on June 19, 2009.

Under the agreement, Lorus repurchased all of the convertible debentures from The Erin Mills Investment Corporation (“TEMIC “) for consideration that included a cash payment on close of the transaction of $3.3 million, the assignment of the rights under the license agreement with ZOR Pharmaceuticals Inc, LLC (“ZOR”), certain intellectual property associated with Virulizin and all of Lorus' shares in its wholly owned subsidiary, Pharma Immune, which held an equity interest in ZOR (the "Consideration"). Under the agreement, Lorus is entitled to 50% of any royalties received under the ZOR license agreement and 50% of the value of any transaction completed in territories not covered by the ZOR license agreement. Lorus also retains a perpetual royalty free license for the animal use of Virulizin. TEMIC will be fully responsible for all clinical and regulatory costs associated with the commercialization of Virulizin in territories not covered by the ZOR license agreement. Lorus will assist TEMIC with certain agreed upon services.

For receipt of the Consideration, TEMIC released all security interest in the assets of Lorus.

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. In addition, as a result of extinguishing the debentures in the amount of $3.8 million, the equity portion of the debentures, was transferred to contributed surplus. The gain on repurchase of the debentures does not result in income taxes payable as the Company has sufficient capital loss and non-capital loss carryforwards to shelter these gains. Capital loss and non-capital loss carryforwards, and the associated valuation allowance have been reduced accordingly.

Gain on sale of shares
As a result of the Arrangement described above, the Company recognized a gain on the sale of the shares of Old Lorus to the investor of approximately $6.3 million for the year ended May 31, 2008 and a gain on sale in 2009 of $450 thousand which represents the $600 thousand released from escrow less $150 thousand accrued as management’s estimate of the fair value of the liability associated with the indemnification described below. This liability was reduced to $100 thousand in the current year resulting in a gain on sale of $50 thousand in the year ended May 31, 2010. The reduction in liability is the result of the passage of time and related reduction in risk associated with claims under the liability. This liability is included on the balance sheet in Accrued Liabilities as at May 31, 2010.

Under the Arrangement, New Lorus and its subsidiaries have 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 New Lorus 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 New Lorus 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.

There have been no claims under this indemnification to date.

Terminated US financing
In April 2010, the Company filed a Registration Statement on Form F-1 (the “Registration Statement”) with the United States Securities and Exchange Commission (the “SEC”) for an offering of up to US$17.5 million of units in the United States.
In August 2010, subsequent to year end, the Company announced that due to unfavourable market conditions the F1 would be withdrawn and the public financing would not proceed.

The Company incurred fees of approximately $569 thousand related to this filing which have been included in general and administrative expenses for the year ended May 31, 2010 and an additional $200 thousand in fees incurred subsequent to year end which will be paid in the year ended May 31, 2011.

SUBSEQUENT EVENTS

Subsequent to year end, due to unfavourable market conditions, the Company withdrew a previously announced equity issue, and is proposing a shareholder rights issue with a financing commitment for an investment of $4 million by Herbert Abramson, one of Lorus’ directors by way of standby purchase arrangements for the proposed rights offering, such that that the minimum gross proceeds of the proposed rights offering are $4 million. The Company expects the rights offering to be complete by October 31st, 2010. Mr. Abramson is also providing the Company with interim financing by way of three $500,000 monthly loans, the first of which was advanced on August 11, 2010, are unsecured, have a six month term (or the earlier of the closing of the rights issue) and bear interest at the annual rate of 10%. In addition the loan due in October 2010 has been extended for an additional three months.

REGULATORY MATTERS

On October 31, 2008, Lorus voluntarily delisted its common shares from trading on the NYSE Alternext US LLC (formerly the American Stock Exchange or AMEX).

In April 2010, the Company listed its shares on the Over-the-Counter Bulletin Board under the symbol LRUSF.

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, 2010 which are prepared in accordance with Canadian GAAP.

Consolidated Statements of Earnings (Loss)

	Years Ended May 31		
(amounts in Canadian 000's except for per common share data)	**2010**	2009	2008
REVENUE	**$ 131**	$ 184	$ 43
EXPENSES			
Cost of sales	**-**	-	2
Research and development	**2,517**	3,757	6,260
General and administrative	**2,964**	2,958	3,715
Stock-based compensation	**176**	446	719
Depreciation and amortization	**86**	189	317
Operating expenses	**5,743**	7,350	11,013
Interest expense	**54**	707	1,029
Accretion in carrying value of secured convertible debentures	**80**	1,707	1,176
Interest income	**(21)**	(270)	(542)
Loss from operations for the period	**(5,725)**	(9,310)	(12,633)
Gain on repurchase of convertible debentures and transfer of assets	**11,006**	-	**-**
Gain on sale of shares	**50**	450	6,299
Net earnings (loss) and other comprehensive income (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 used in the calculation of:			
Basic earnings (loss) per share	**9,364**	8,236	7,169
Diluted earnings (loss) per share	**9,379**	8,236	7,169
Total Assets	**$ 2,303**	$ 7,527	$ 11,607
Total Long-term liabilities	**$ -**	$ -	$ 12,742

QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

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

Revenue recognized over the past eight quarters is primarily related to milestone payments received from ZOR pharmaceuticals for the license of Virulizin. Lorus received two milestone payments under the license agreement, one upon signing the agreement and a second upon ZOR achieving a financing milestone. The milestone revenue was recognized over the period of a service contract period whereby Lorus agreed to provide consulting services to ZOR. The milestone revenue was fully recognized by the end of the second quarter of 2010 as the service agreement with ZOR expired in October 2009.

Research and development expenditures have been consistent over the past eight quarters with increased activity in the quarters ended February 28, 2009 and August 31, 2008. The increase in August 31, 2008 was a result of increased activity related to the LOR-2040 bladder cancer studies and LOR-253 GLP toxicity costs which were predominantly wrapped up in this quarter. Increased research and development spending in the quarter ended February 28, 2009 was due to the manufacture of LOR-253 drug.

General and administrative expenses have trended lower for the past year quarter over quarter due to reduced headcount, a small board of directors (and related costs) as well as an overall reduction in spending to conserve cash balances. The increase in general and administrative costs for the quarter ended May 31, 2010 was due to the write off of $569K in costs associated with a terminated financing initiative.

The net earnings shown in the quarter ended August 31, 2009 is related to the gain on settlement of the convertible debentures described above.

Cash used in operating activities was significantly lower in the quarters ended May 31, 2010, November 30, 2009 and August 31, 2009 due to increased accounts payables and accrued liabilities balances.

(Amounts in 000's except for per common share data)	**May 31, 2010**	**Feb 28, 2010**	**Nov 30, 2009**	**Aug 31, 2009**	**May 31, 2009**	**Feb 28, 2009**	**Nov. 30, 2008**	**Aug. 31, 2008**
Revenue	$ —	$ 3	$ 79	$ 49	$ 78	$ 64	$ 39	$ 3
Research and development expense [1]	601	718	658	540	701	1,090	741	1,225
General and administrative expense[1]	1,173	515	743	533	516	775	873	794
Net earnings (loss)	(1,820)	(1,343)	(1,266)	9,760	(1,895)	(2,469)	(2,284)	(2,212)
Basic and diluted net (loss) profit per share	$ (0.18)	$ (0.14)	$ (0.14)	$ 1.14	$ (0.22)	$ (0.29)	$ (0.27)	$ (0.29)
Cash used in operating activities	$ (271)	$ (1,812)	$ (651)	$ (987)	$ (1,394)	$ (1,789)	$ (2,080)	$ (1,950)

[1]Prior quarter amounts have been reclassified to conform to the financial statement presentation subsequent to that date.

CAPITAL RISK MANAGEMENT

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;
- Ensure sufficient cash resources to fund its research and development activity, to pursue partnership and collaboration opportunities and to maintain ongoing operations.

At May 31, 2010, the capital structure of the Company consisted of equity comprised of share capital, 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 and short-term investments balances or by undertaking other activities as deemed appropriate under the specific circumstances. The Company settled its secured convertible debentures and extinguished its liability in the amount of $15.0 million for consideration consisting of cash and other assets in June 2009. The Company expects that its current capital resources will not be sufficient to carry out its research and development plans and operations for the next twelve months without further investment. (See "Liquidity and Capital Resources")

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, 2009.

Loan

In April 2010, the Company entered into a loan agreement with a company related to a member of its Board of Directors 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 the annual rate of 10%. The principal and interest amount are due in October 2010. The funds are being used for general working capital purposes.

In October 2009, the Company entered into a loan agreement with the same member of our Board of Directors 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 the 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.

Private placement

On November 27, 2009, pursuant to a private placement, the Company issued 1.366 million common shares and 683 thousand 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 on October 6, 2009 which was applied to subscribe for Units as part of the private placement. In addition, the Company issued 72 thousand brokers' warrants to purchase an equivalent number of common shares at $2.40 until May 27, 2011. The total costs associated with the transaction were approximately $250 thousand which included the $77 thousand which 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 was allocated to the common shares and $545 thousand to the common share purchase warrants.

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 July 9, 2008 (the "Record Date") received one right for each common share held as of the Record Date. Each four rights entitled the holder thereof to purchase a unit of Lorus ("Unit"). Each Unit consists 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, 2010, Lorus had cash and cash equivalents and short-term investments totaling $914 thousand compared to $5.9 million at May 31, 2009. 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, short term investments and other current assets less current liabilities) at May 31, 2010 was a deficiency of $1.3 million as compared to a deficiency of $9.2 million at May 31, 2009 (which included the $15 million convertible debentures)).

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 the ability of the Company 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 the Company's compounds and the timing and development status of competitive products.

As discussed above, management has forecasted that the Company’s current level of cash, cash equivalents and short-term investments will not be sufficient to execute its current planned expenditures for the next twelve months without further investment.

Contractual Obligations and Off-Balance Sheet Financing

At May 31, 2010, we had contractual obligations requiring annual payments as follows:

(Amounts in 000’s)

	Less than 1 year	1-3 years	Total
Operating leases	129	9	138

Lorus has incurred approximately $200 thousand in costs, subsequent to the year-end, related to the postponed US financing which are owed despite the termination of the proposed financing.

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, 2010 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, 2010 no amounts were owing and the amount of future fees payable to the consultants are not determinable.

As at May 31, 2010, we have not entered into any off- balance sheet arrangements.

Indemnification

Under the Arrangement, Lorus 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 and directly or indirectly relating to any of the assets of Old Lorus transferred to New Lorus 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 New Lorus 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.

Lorus has recorded a liability of $100 thousand, which we believe is a reasonable estimate of the fair value of the obligation for the indemnifications provided. The liability has been reduced in the current year to $100 thousand from $150 thousand due to changes in assumption resulting from the passage of time. There have been no claims under this indemnification to date. This amount is included on the balance sheet in Accrued Liabilities at May 31, 2010.

FINANCIAL INSTRUMENTS

The Company has classified its financial instruments as follows:

	May 31, 2010	May 31, 2009
Financial assets		
Cash and cash equivalents, consisting of term deposits, and guaranteed investment certificates measured at fair value	**$ 667**	$ 5,374
Short-term investments, held-for-trading, recorded at fair value	**247**	490
Financial liabilities		
Accounts payable, measured at amortized cost	**387**	299
Accrued liabilities, measured at amortized cost	**1,458**	1,131
Promissory note payable, measured at amortized cost	**1,000**	**-**
Secured convertible debentures, measured at amortized cost	**-**	14,448

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.

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 and short-term investments. The carrying amount of the financial assets represents the maximum credit exposure.

The Company manages credit risk for its cash and cash equivalents and short-term investments by maintaining minimum standards of R1 low or A low investments and Lorus invests only in highly rated Canadian corporations with debt securities that are traded on active markets and are capable of prompt liquidation.

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 Board considers securing additional funds through equity, debt or partnering transactions. The Company manages its liquidity risk by continuously monitoring forecasts and actual cash flows. Refer to "Liquidity and Capital Resources" for further discussion on the Company's ability to continue as a going concern.

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, 2010, U.S. dollar denominated accounts payable and accrued liabilities amounted to $270 thousand (2009 - $70 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 $27 thousand (2009 - $7 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.

OUTLOOK

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

As a result of the Company's current cash position, management is pursuing investment and other opportunities aimed at funding its research and development programs. 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.

TRANSACTIONS WITH RELATED PARTIES

See 'Subsequent Events' for additional related party transactions.

In October 2009, the Company entered into a loan agreement with a member of its Board of Directors 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 the 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.

In April 2010, the Company entered into a loan agreement with a company related to the same member of its Board of Directors 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 the annual rate of 10%. The principal and interest amount are due in October 2010. The funds will be used for general working capital purposes.

During the year ended May 31, 2010, the Company expensed consulting fees of nil to a director of the Company (2009 - $25 thousand; 2008 - $31 thousand). There was no amount payable at May 31, 2010 (2009 - nil; 2008 - $30 thousand).

This transaction was in the normal course of business and has been measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

RISK FACTORS

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

We 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 will not be sufficient to execute our current planned expenditures for the next 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 a significant 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 need to raise additional capital.

We need to raise additional capital. To obtain the necessary capital, we must rely on some or all of the following: grants and tax credits, additional share issues and collaboration agreements or corporate partnerships 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.

If we cannot obtain the necessary capital on acceptable terms, we will have 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 Canadian generally accepted accounting principles, we reported net (earnings) losses of ($5.3 million), $8.9 million and $6.3 million for the years ended May 31, 2010, 2009 and 2008, respectively, and as of May 31, 2010, we had an accumulated deficit of $184.1 million.

To date we have only generated nominal revenues from the sale of Virulizin ™ in Mexico and revenues associated with the license agreement with Zor Pharmaceuticals, LLC. We stopped selling Virulizin™ in Mexico in July 2005 and assigned the rights under the Zor Agreement to The Erin Mills Investment Corporation, as part of the consideration for our repurchase of secured convertible debentures in June 2009. We have not generated any other 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 candidate, LOR-2040, 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 are an early stage development company.

We are at an early stage of development. Significant additional investment will be necessary to complete the development of any of our products. Pre-clinical and clinical trial work must be completed before our products could be ready for use within the market that we have identified. We may fail to develop any products, to obtain regulatory approvals, to enter clinical trials or to 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.

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. Such funding will be very difficult, or impossible to raise in the public markets. If such 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 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 he 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.

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 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. 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. For example, results of our Phase III clinical trial of Virulizin™ did not meet the primary endpoint of the study despite promising preclinical and early stage clinical data. All of our potential drug candidates are 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 such as acute myeloid leukemia. 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.

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 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 and the medical community. 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 heavily 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.

Until recently, patent applications in the United States were maintained in secrecy until the patents issued, and publication of discoveries in scientific or patent literature often lags behind actual discoveries. Patent applications filed in the United States after November 2000 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, 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-2040 and small molecules. 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.

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. Further, liability insurance coverage is becoming increasingly expensive and we might not be able to obtain or maintain product liability insurance in the future on acceptable terms or in sufficient amounts to protect us against 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.

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-2040, small molecule 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 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.

Our interest income is subject to fluctuations of interest rates in our investment portfolio.

Our investments are held to maturity and have staggered maturities to minimize interest rate risk. We cannot assure you that interest income fluctuations will not have an adverse impact on our financial condition. We maintain all our accounts in Canadian dollars, but a portion of our expenditures are in foreign currencies. We do not currently engage in hedging our foreign currency requirements to reduce exchange rate risk.

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. 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 and our collaborators' clinical trials, including our and our collaborators' ability to produce clinical supplies of our product candidates on a timely basis and in sufficient quantities to meet our clinical trial requirements;
- announcements of technological innovations or new product candidates by us, our collaborators or our competitors;
- fluctuations in our operating results;
- published reports by securities analysts;
- developments in patent or other intellectual property rights;
- publicity concerning discovery and development activities by our licensees;
- 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;
- governmental regulation and changes in medical and pharmaceutical product reimbursement policies; and
- general market conditions.

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.

CRITICAL ACCOUNTING POLICIES

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

(a) Drug Development Costs

We incur costs related to the research and development of pharmaceutical products and technologies for the management of cancer. These costs include internal and external costs for preclinical research and clinical trials, drug costs, regulatory compliance costs and patent application costs. All research costs are expensed as incurred as required under GAAP.

Development costs, including the cost of drugs for use in clinical trials, are expensed as incurred unless they meet the criteria under GAAP for deferral and amortization. The Company continually assesses its activities to determine when, if ever, development costs may qualify for capitalization. By expensing the research and development costs as required under GAAP, the value of the product portfolio is not reflected on the Company's Financial Statements.

(b) Stock-Based Compensation

We have applied the fair value based method to expense stock options awarded since June 1, 2002 using the Black-Scholes option-pricing model as allowed under Canadian Institute of Chartered Accountants (“CICA”) Handbook Section 3870. The option pricing model calculates the theoretical fair value of fully transferable options, without vesting restrictions, which significantly differs from the stock option awards granted by Lorus. The option pricing model also requires four highly subjective assumptions including future stock price volatility and expected time until exercise, which greatly affect the calculated fair values. The increase or decrease of one of these assumptions could materially increase or decrease the fair value of stock options issued and the associated expense.

(c) Valuation Allowance for Future Tax Assets

We have a net tax benefit resulting from non-capital losses carried forward, and scientific research and experimental development expenditures. In light of the continued net losses and uncertainty regarding our future ability to generate taxable income, management is of the opinion that it is not more likely than not that these tax assets will be realized in the foreseeable future and hence, a full valuation allowance has been recorded against these income tax assets. Consequently, no future income tax assets or liabilities are recorded on the balance sheets.

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 our results of operations through the recovery of future income taxes.

(d) Valuation of Goodwill and Long Lived Assets

Goodwill acquired in a business combination is tested for impairment on an annual basis and at any other time if an event occurs or circumstances change that would indicate that impairment may exist. The impairment test is carried out in two steps. In the first step, the carrying amount of the reporting unit including goodwill is compared with its fair value. When the fair value of a reporting unit including goodwill exceeds its carrying amount, goodwill of the reporting unit is not considered to be impaired and the second step of the impairment test is unnecessary. The second step is carried out when the carrying amount of a reporting unit exceeds its fair value, in which case the implied fair value of the reporting unit's goodwill is compared with its carrying amount to measure the amount of the impairment loss if any. The implied fair value of goodwill is determined in the same manner as the value of goodwill is determined in a business combination.

The Company reviews long-lived assets which include fixed assets and intangible assets with finite useful lives for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. If the sum of the undiscounted expected future cash flows expected to result from the use and eventual disposition of an asset is less than its carrying amount, it is considered to be impaired. An impairment loss is measured at the amount by which the carrying amount of the asset exceeds its fair value, which is estimated as the expected future cash flows discounted at a rate proportionate with the risks associated with the recovery of the asset.

Recently Adopted Accounting Recommendations
Effective June 1, 2009, the Company adopted the following accounting policies:

(a) Goodwill and Intangible Assets

Effective June 1, 2009, the Company adopted The Canadian Institute of Chartered Accountants' ("CICA") Handbook Section 3064, Goodwill and Intangible Assets, which replaced Handbook Section 3062, Goodwill and Other Intangible Assets ("Section 3062"), and Section 3450, Research and Development Costs and establishes the standards for the recognition, measurement, presentation and disclosure of goodwill and intangible assets. The adoption of this new standard did not have an impact on the Company's consolidated financial statements.

(b) Financial Instruments

Effective June 1, 2009, the Company adopted the amendments under Handbook Section 3862, Financial Instruments - Disclosures ("Section 3862"), to include additional disclosure requirements about fair value measurement for financial instruments and liquidity risk disclosures. These amendments require a three level hierarchy that reflects the significance of the inputs used in making the fair value measurements. Fair value of assets and liabilities included in Level 1 are determined by reference to quoted prices in active markets for identical assets and liabilities. Assets and liabilities in Level 2 include valuations using inputs other than the quoted prices for which all significant inputs are based on observable market data, either directly or indirectly. Level 3 valuations are based on inputs that are not based on observable market data. The adoption of the new standard did not have a material impact on the consolidated financial statements.

(c) Credit risk and fair value of financial assets and financial liabilities:

Effective January 1, 2009, the Company adopted Emerging Issue Committee Abstract 173 ("EIC 173"), Credit Risk and the Fair Value of Financial Assets and Financial Liabilities. EIC 173 requires the Company to take into account the Company's own credit risk and the credit risk of the counterparty in determining the fair value of financial assets and financial liabilities, including derivative instruments. The adoption of the new standard did not have a material impact on the consolidated financial statements.

Recent Accounting Recommendations not yet adopted

The Canadian Accounting Standards Board (“AcSB”) requires all Canadian publicly accountable entities to adopt IFRS for years beginning on or after January 1, 2011. Lorus’ first annual filing will be for the year ended May 31, 2012; its first filing under IFRS will be for the quarter ending August 31, 2011 and will include IFRS comparative figures for the period ended August 31, 2010. Accordingly, Lorus’ adoption date for IFRS is June 1, 2011, but the transition date (“Transition Date”) is June 1, 2010 in order to accommodate IFRS comparative figures in Lorus’ 2011 financial statements.

IFRS uses a conceptual framework similar to Canadian GAAP (“CGAAP”); however, there are significant differences in recognition, measurement and disclosure. Given the nature of Lorus’ business and the make-up of its current balance sheet IFRS could have an impact on its reported financial statements. The Company’s implementation of IFRS will require the Company to make and disclose certain policy choices and increase the amount of disclosure necessary to fulfill its IFRS reporting obligations.

Adoption of IFRS is not expected to change the actual cash flows the Company generates or change its business activities. To the extent possible, Lorus will make these choices with a view to providing meaningful information to stakeholders that is also comparable between industry peers.

Project Plan:
The Company is managing the IFRS conversion requirements in phases:

Phase 1 - Scope and Plan
The objective of Phase 1 involves the preparation of an IFRS conversion plan and consists of the following activities:
- establishment of a project management structure;
- completion of a high-level diagnostic assessment that identified potential differences between IFRS and Canadian GAAP and implementation challenges that may impact the Company.

Phase 2 - Design and Build
This phase involves performing the comprehensive IFRS conversion and is in progress. The key elements of Phase 2 are as follows:
- make policy and disclosure choices and design IFRS compliant internal and external reporting;
- assess control framework implications to supporting an IFRS reporting environment; and
- assess the financial statement impact of IFRS

Phase 3 - Implement and Review
This phase, which commenced in the first quarter of fiscal 2010 focuses on enabling continued IFRS reporting development, including the development of draft comparative/parallel reporting and facilitating knowledge transfer. The key elements of Phase 3 are as follows:

- Using the May 31, 2010 Canadian GAAP financial statements, prepare IFRS illustrative financial statements based on the proposed policy choices determined in Phase 2 to include:
    - June 1, 2010 Transition Date balance sheet and reconciliation from CGAAP to IFRS
    - August 31, 2010 financial statements and reconciliations from CGAAP to IFRS
    - Full set of IFRS-based notes, including the IFRS Transition note;
- Continue to update the IFRS illustrative financial statements each quarter for the year ending May 31, 2012 (resulting in appropriate comparative amounts and reconciliations);
- Develop new accounting policies, guidelines, processes for reporting packages to regulators, the Board of Directors and internal management;
- Develop revised internal control and disclosure control processes as necessary, updating key controls as required, and address any internal or disclosure control deficiencies;
- Provide technical accounting training and deliver initial and on-going controls training, and

Current Implementation Status
To date, Phase 1 has been completed and the Company is in the process of assessing policy and disclosure choices through the preparation of impact assessments based on those changes expected to have the largest impact on the financial statements and internal control processes and controls. Based on initial analysis, the areas which are expected to have the most significant impact on the Company include:

- Property, plant and equipment (IAS 16)
- Intangible Assets (IAS 38)
- Impairment (IAS 36)
- Provisions, Contingent Liabilities and Contingent Assets (IAS 37)
- Stock-based compensation (IFRS 2)
- Financial statement presentation (IAS 1)

The Company is in the process of identifying the impact of these changes and the availability of various policy choices and optional exemptions under IFRS 1 First time adoption of IFRS. Management has yet to determine the extent to which it will affect the financial statements when these standards are implemented. Management has provided the Board of Directors with details of the implementation strategy and has established a reporting schedule and timeline for fiscal 2011 in order to meet its implementation requirements.

DISCLOSURE CONTROLS AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

The Company has implemented a system of internal controls that it believes adequately protects the assets of the Company and is appropriate for the nature of its business and the size of its operations. These internal controls include disclosure controls and procedures designed to ensure that information required to be disclosed by the Company is accumulated and communicated as appropriate to allow timely decisions regarding required disclosure.

Internal controls over financial reporting means a process designed by or under the supervision of the Chief Executive Officer and the acting Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. The internal controls are not expected to prevent and detect all misstatements due to error or fraud. Management advises that there have been no changes in the Corporation's internal controls over financial reporting during 2010 that have materially affected or are reasonably likely to materially affect the Corporation's internal control over financial reporting.

As at May 31, 2010, the Company's management evaluated the effectiveness of the design and operation of its disclosure controls and procedures and operation of its internal controls over financial reporting using the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. Based on their evaluation, the Chief Executive Officer and the acting Chief Financial Officer have concluded that these controls and procedures are effective to provide reasonable assurance that material information is made known to them by others in the Company. Management has identified the following two areas of concern, but believes that the Company's limited number of transactions, day-to-day management involvement in operations and reporting and access to third party experts are sufficient compensating controls to limit our risk of material misstatement.

Segregation of Duties
Given our limited staff, certain duties within the accounting and finance department cannot be properly segregated. We believe that none of the segregation of duty concerns has resulted in a material misstatement to the financial statements as we rely on certain compensating controls, including substantive periodic review of the financial statements by the Chief Executive Officer and Audit Committee. This weakness is considered to be a common area of deficiency for many smaller listed companies in Canada. We continue to evaluate whether additional accounting staff should be hired to deal with this weakness.

Complex and Non-Routine Transactions
As required, we record complex and non-routine transactions. These sometimes are extremely technical in nature and require an in-depth understanding of GAAP. Our accounting staff has only a fair and reasonable knowledge of the rules related to GAAP and reporting and the transactions may not be recorded correctly, potentially resulting in material misstatement of our financial statements.

To address this risk, we consult with our third-party expert advisors as needed in connection with the recording and reporting of complex and non-routine transactions. At a future date, we may consider expanding the technical expertise within our accounting function. In the meantime, we will continue to work closely with our third party advisors.

UPDATED SHARE INFORMATION

As at August 30, 2010, the Company had 9.9 million common shares issued and outstanding and 622 thousand common share purchase warrants convertible into an equal number of common shares. In addition, the Company had issued and outstanding 650 thousand stock options to purchase an equal number of common shares.

ADDITIONAL INFORMATION

Additional information relating to Lorus, including Lorus' 2010 annual information form and other disclosure documents, is available on SEDAR at www.sedar.com. For any information filed prior to July 10, 2007 please access the information on SEDAR for Global Summit Real Estate Inc. (Old Lorus).

ANNUAL INFORMATION FORM

Fiscal year ended May 31, 2010

August 30, 2010

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

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CAUTION REGARDING FORWARD-LOOKING STATEMENTS

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

- *our ability to obtain the substantial capital required to fund research and operations;*
- *our plans to obtain partners to assist in the further development of our product candidates;*
- *our expectations with respect to existing and future corporate alliances and licensing transactions with third parties, and the receipt and timing of any payments to be made by us or to us in respect of such arrangements;*
- *our expectations regarding future financings;*
- *our plans to conduct clinical trials and pre-clinical programs;*
- *the length of clinical trials;*
- *the partnering potential of our products;*
- *our business strategy;*
- *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; and*
- *other statements including words such as "anticipate", "contemplate", "continue", "believe", "plan", "estimate", "expect", "intend", "will", "should", "may", and other similar expressions.*

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

- *our ability to continue to operate as a going concern;*
- *our ability to obtain the substantial capital required to fund research and operations;*
- *our lack of product revenues and history of operating losses;*
- *our early stage of development, particularly the inherent risks and uncertainties associated with (i) developing new drug candidates generally, (ii) demonstrating the safety and efficacy of these drug candidates in clinical studies in humans, and (iii) obtaining regulatory approval to commercialize these drug candidates;*
- *our 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 described in "The Corporation - Corporate History";*
- *our ability to find and enter into agreements with potential partners;*
- *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 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 on-going quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the SEC, and those which are discussed under the heading "Risk Factors" in our annual information form for the fiscal year ended May 31, 2010*

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

Unless otherwise indicated, or the context requires otherwise, the information appearing in this annual information form is stated as at May 31, 2010 and references in this annual information form to "$" or "dollars" are to Canadian dollars.

In this Annual Information Form, the terms "Company" and "Lorus" refer to Lorus Therapeutics Inc.

For ease of reference, a glossary of terms used in this annual information form can be found beginning on page 31.

THE COMPANY

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

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

Lorus' subsidiary is NuChem Pharmaceuticals Inc. ("NuChem"), 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. ("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. ("Pharma Immune"), a corporation incorporated under the laws of Delaware, at which time it disposed of these shares (See "The Company - Secured Convertible Debentures").

Our common shares are listed on the Toronto Stock Exchange ("TSX") under the symbol "LOR" and as of April 26, 2010, on the Over The Counter Bulletin Board ("OTCBB") under the symbol "LRUSF".

Going concern

Management has forecasted that the Company's current level of cash and cash equivalents and short-term investments will not be sufficient to execute its current planned expenditures for the next twelve months without further investment &/or strategic alliances. The Company is currently in discussion with several potential investors and potential corporate 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 expenditure, 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 significant 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 become due.

GENERAL DEVELOPMENT OF THE BUSINESS

Lorus Therapeutics Inc. 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 preparation for initiation of 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".

RNA-Targeted Therapies

Lorus' RNA-targeted therapeutics include LOR-2040, which has recently completed an advanced Phase II clinical trial, and LOR-1284, which is in the pre-clinical stage of development. See "-- Clinical Development" and "Business of the Company - DNA/RNA-based Therapeutics".

Small Molecules

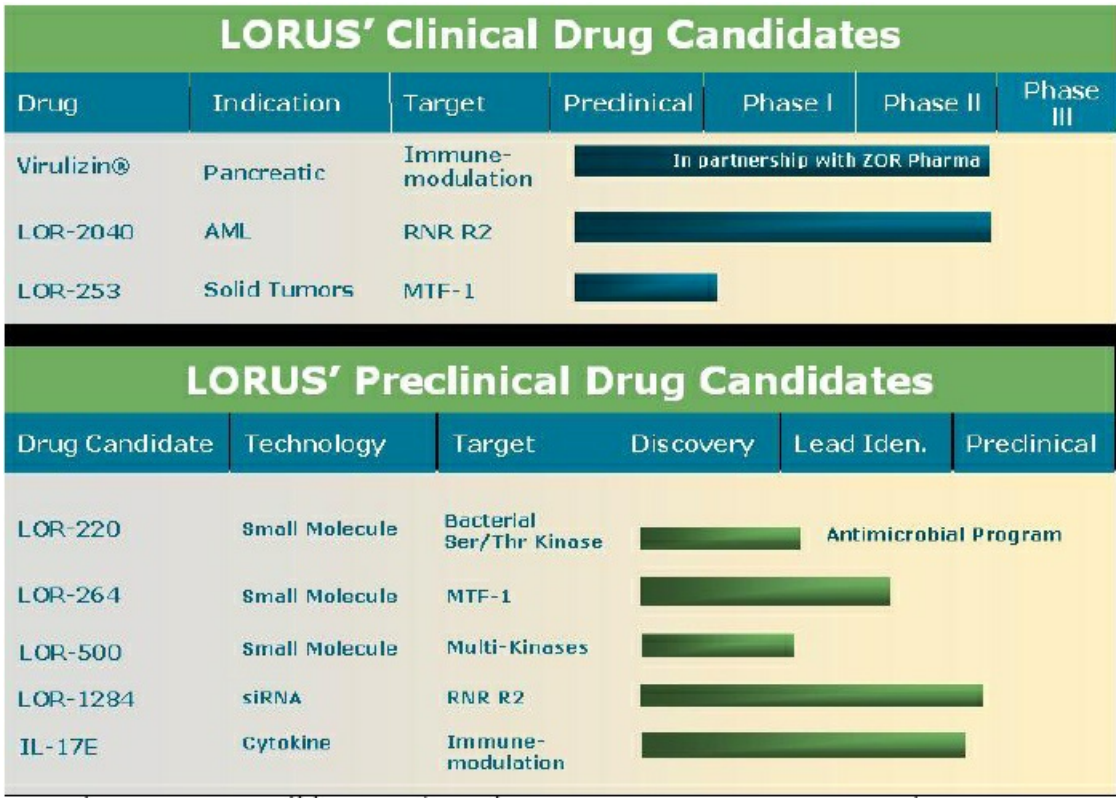
We have small molecule drug screening technologies and preclinical scientific expertise, which we are using to create a drug candidate pipeline. Our proprietary group of small molecule compounds, which include the lead compound LOR-253, have unique structures and modes of action, and are promising candidates for the development of novel, targeted anticancer agents with high safety profiles. See "-- Clinical Development" and "Business of the Company - Small Molecule Therapies".

Immunotherapy

In June 2009, as part of the consideration for the repurchase of the secured convertible debentures from TEMIC, Lorus' assigned to TEMIC its rights under the license agreement with ZOR Pharmaceuticals, LLC, and sold to TEMIC its intellectual property rights associated with Virulizin®. See "-- Business of the Company - Immunotherapy" and "The Company - Secured Convertible Debentures" for more details. Lorus also has a drug candidate Interleukin-17E which is a protein-based therapeutic that Lorus is developing as an immunotherapy for cancer treatment.

Clinical Development

The chart below illustrates our current view of the clinical 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 information form.



Business Strategy

Our business strategy is based on the identification and development of novel therapies aimed at novel as well as validated cancer targets. We believe that these target-based approaches hold the promise of more effective therapies with fewer side effects. A target-based approach is increasingly recognized as several targeted agents are already approved by regulatory authorities around the globe. In order to minimize single technology-related risks, we have adopted three different technology approaches:

1. RNA-targeted technologies such as antisense and siRNA.

2. Development of small molecules that recognize specific targets in cancer cells.

3. Immunotherapy using safe and efficacious products to stimulate the natural anticancer properties of the immune system.

The first two approaches utilize selection strategies for identification and development of highly specific targeted drug candidates, capitalizing on proprietary libraries of compounds developed in-house.

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 clinical development process and consider commercialization opportunities when appropriate. In the next fiscal year, we intend to pursue partnerships for our lead compounds and further the development of our promising pipeline. More specifically, our main objectives are (i) to maximize the therapeutic value and potential commercial success of LOR-2040 by initiating a Phase III registration clinical trial in AML in collaboration with co-development or licensing partners (such partners or collaborators have not yet been secured); (ii) to conduct a Phase I clinical trial of our lead small molecule drug, LOR-253; and (iii) to commit resources to advancing our in-house pipeline of novel preclinical drug candidates.

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.

Proposed Rights Offering and Financing Commitment

Subsequent to the year ended May 31, 2010, due to unfavourable market conditions, the Company withdrew a previously announced equity issue, and is proposing a shareholder rights issue with a financing commitment for an investment of $4 million by Herbert Abramson, one of Lorus' directors by way of standby purchase arrangements for the proposed rights offering, such that that the minimum gross proceeds of the proposed rights offering are $4 million. Mr. Abramson is also providing the Company with interim financing by way of three $500,000 monthly loans, the first of which was advanced on August 11, 2010, which are unsecured, have a six month term (or the earlier of the closing of the rights issue) and bear interest at the annual rate of 10%.

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, and were quoted on the OTCBB on a post-consolidation basis beginning on June 1, 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 information form, 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

In April 2010, the Company entered into a loan agreement with a company related to a member of its Board of Directors 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 the annual rate of 10%. The principal and interest amount are due in on October 14, 2010. The funds are being used for general working capital purposes.

In October 2009, the Company entered into a loan agreement with the same member of our Board of Directors 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 the 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.

Share Issuances

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 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.

Secured 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 $15.0 million of secured convertible debentures (the "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, the Company reached a settlement with TEMIC with respect to the purchase and settlement of the $15.0 million the Debentures.

Under the settlement agreement, Lorus 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 Pharmaceuticals, LLC ("ZOR"), sale of intellectual property associated with Virulizin and sale of Lorus' shares in its wholly owned subsidiary Pharma Immune Inc. which holds an equity interest in ZOR (the "Consideration"). Under the agreement, Lorus is 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. Lorus also retains 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. Lorus will assist TEMIC with certain agreed upon services.

For receipt of the Consideration TEMIC released all security interest in the assets of Lorus.

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 July 9, 2008 (the "Record Date") received one right for each common share held as of the Record Date. Each four rights entitled the holder thereof to purchase a unit of Lorus ("Unit"). Each Unit consisted of one common share of Lorus at $0.13 (pre-consolidation) and a one-half common share purchase warrant to purchase additional common shares of Lorus at $0.18 (pre-consolidation) which expired on August 7, 2010.

Pursuant to the rights offering the Company issued 28.5 million (pre-consolidation) common shares and 14.3 million (pre-consolidation) common share purchase warrants in exchange for cash consideration of $3.7 million.

Plan of Arrangement and Corporate Reorganization

On November 1, 2006, Lorus Therapeutics Inc. ("Lorus", the "Company" or "New Lorus") was incorporated as 6650309 Canada Inc. pursuant to the provisions of the *Canada Business Corporation Act* and did not carry out any active business from the date of incorporation to July 10, 2007. From its incorporation to July 10, 2007, the Company was a wholly owned subsidiary of 4325231 Canada Inc., formerly Lorus Therapeutics Inc. ("Old Lorus").

On July 10, 2007, the Company and Old Lorus completed a plan of arrangement and corporate reorganization (the "Arrangement"). 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 (the "Exchange") and the board of directors and management of Old Lorus continued as the board of directors and management of New Lorus.

In connection with the Arrangement, New Lorus received cash consideration of approximately $8.5 million less an escrowed amount of $600,000 related to the indemnification (received in July 2008), before transaction costs. After completion of the Arrangement, New Lorus is not related to Old Lorus, which was subsequently renamed Global Summit Real Estate Inc. Under the Arrangement, New Lorus and its subsidiaries 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 various matters.

REGULATORY APPROVAL PROCESS

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

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

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

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

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

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

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

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

BUSINESS OF THE COMPANY

Overview

Chemotherapeutic drugs have been the mainstay medical treatment option for cancer, particularly metastatic cancer, for the past 30 years. More recently, a range of novel cancer drugs have been developed that are efficacious while improving patient quality of life. Unlike chemotherapies, which are typically based on chemical synthesis, these new drugs may be of biological origin, based on naturally occurring molecules, proteins or genetic material. While conventional chemotherapy drugs are relatively non-specific and as a result toxic to normal cells, these new generation agents specifically target individual molecules or genes that are involved in disease and are therefore preferentially toxic to tumor cells. The increased targeted specificity of these drugs may result in fewer and milder side effects, meaning that, in theory, larger and therefore, more effective doses can be administered. The current paradigm in cancer management is a multi-modal approach that combines multiple treatment options tailored to the specific indication and individual patient. As a result, targeted drug regimens that combine novel small molecule therapies with biological agents, based on emerging understanding of cancer development, are of considerable and growing interest.

Since cancer progression is a complex process involving the accumulation of multiple genetic alterations leading to changes in many specialized cell functions, Lorus believes that no single drug will emerge as a cure for all cancers. Instead, we believe that cancer will continue to be treated by many different drugs with a variety of mechanisms of action. Since Lorus takes a multi-mechanistic approach for the treatment of cancer, we concentrate on the discovery and the development of different classes of anticancer compounds.

All of the drugs being developed by the research team at Lorus have one similar characteristic: they are designed with the goal of being well tolerated by patients. These drugs may not only provide effective cancer treatment and contribute to an improved quality of life for cancer patients, but may also be commercially attractive as they could more easily be combined with other leading therapies without significantly adding to the current side effect profiles of existing drugs.

Lorus has product candidates in three classes of anticancer therapies: (i) RNA-targeted therapies; (ii) small molecule therapies; and (iii) immunotherapeutics. Lorus has certain commercial rights in Virulizin as described in “Immunotherapy”.

RNA-Targeted Therapies

Introduction

Metabolism, cell growth and cell division are tightly controlled by complex protein signalling pathways in response to specific conditions, thereby maintaining normal function. Many human diseases, including cancer, can be traced to faulty protein production and/or regulation. As a result, traditional therapeutics are designed to interact with disease-causing proteins and modify their function. A significant number of current anticancer drugs act by damaging either DNA or proteins within cells (*e.g*., chemotherapy) or by inhibiting the function of proteins using small molecules (*e.g.* estrogen blockers, such as Tamoxifen). RNA-targeted therapeutics offer a novel approach to treatment in that they are designed to prevent the production of proteins causing disease.

Our RNA-targeted drugs consist of antisense drugs and short-interfering RNA (siRNA). The premise of this therapeutic approach is to target an earlier stage of the biochemical process than is usually possible with conventional drugs. The blueprint for protein production is encoded in the DNA of each cell. To translate this code into protein the cell first produces mRNAs (messenger ribonucleic acids) specific to each protein and these act as intermediaries between the information encoded in DNA and production of the corresponding protein. Most traditional therapies interact with the final synthesized or processed protein. Often this interaction lacks specificity that would allow for interaction with only the intended target, resulting in undesired side effects. In contrast, RNA-targeted therapies are based on altering gene expression at the mRNA level, prior to protein synthesis, and are intended to achieve better drug specificity towards the biochemical target. We believe that drugs based on this approach may have broad applicability, greater efficacy and fewer side effects than conventional drugs.

We have developed a number of antisense drugs, of which our lead product is LOR-2040 (formerly GTI-2040). LOR-2040 targets the R2 component of ribonucleotide reductase (“RNR”). RNR is a highly regulated, cell cycle-controlled protein required for DNA synthesis and repair. RNR is made up of two components, R1 and R2, encoded by different genes. RNR is essential for the formation of deoxyribonucleotides, which are the building blocks of DNA. Since RNR activity is highly elevated in tumor cell populations and is associated with tumor cell proliferation, we have developed antisense molecules specific for the mRNA of the R2 component of RNR. Furthermore, the R2 component also appears to be capable of acting as a signal molecule in cancer cells and its elevation is believed to modify a biochemical pathway that can increase the malignant properties of tumor cells. Consequently, reducing the expression of the RNR components in a tumor cell with antisense drugs is expected to have antitumor effects.

LOR-2040

Our lead antisense drug candidate is LOR-2040, which targets the R2 component of RNR and has exhibited antitumor properties against over a dozen different human cancers, including xenograft tumor growth, metastasis and survival models. Additional studies have demonstrated combination drug efficacy in xenograft tumor growth studies for human cancer cells, including drug resistant tumor cell lines. We have completed a Phase I/II clinical trial of LOR-2040 in advanced or metastatic renal cell carcinoma. We have also completed multiple Phase I and/or II clinical trial programs in cooperation with the US National Cancer Institute ("NCI"), for the study of LOR-2040 for the treatment of Acute Myeloid Leukemia ("AML"), breast cancer, lung cancer, colon cancer, prostate cancer, a series of solid tumors and myelodysplastic syndrome and acute leukemia.

In June 2009, we announced the publication of an article entitled, "A LC-MS/MS Method for the Analysis of Intracellular Nucleoside Triphosphate Levels" in the peer-reviewed journal Pharmaceutical Research. In the article investigators at the Ohio State University (OSU) presented data showing the pharmacological activity of LOR-2040 in five leukemia cell lines and in bone marrow samples of a patient with AML treated with LOR-2040 in a Phase II clinical trial. The tumor cells examined with the novel analytical method showed a significant decrease in intracellular deoxynucleoside triphosphate levels required for DNA synthesis, confirming the target inhibition effect of LOR-2040.

In November 2009, we announced that a Phase II clinical trial in refractory and relapsed AML with LOR-2040 in combination with cytarabine had been successfully completed to the end-of-stage assessment time point, with favorable results. The Steering Committee review required at this stage determined that the Phase II efficacy and safety results fulfilled the protocol criteria for continued patient enrolment and were consistent with the promising Phase Ib clinical findings in relapsed and refractory AML. It was further agreed that based on the strength of the Phase Ib and II clinical data in a total of 48 patients treated in this indication, expansion to a definitive comparative trial was the most appropriate next step to support registration. On this basis we are proceeding with protocol development for the expanded development program. It is notable that the current preliminary evaluation found the response rate to be twice that expected from a risk-matched historical control, and that this is consistent with a further similar analysis of the findings from the prior Phase Ib clinical study.

LOR-1284

In 2003, Lorus began development of an anticancer therapeutic based on siRNA-mediated inhibition of R2 expression. Early screening experiments have identified lead compounds and preliminary *in vitro* and *in vivo* characterization of these compounds has yielded promising results. LOR-1284 (formerly siRNA-1284), the lead compound identified from the screening study, specifically targets R2 expression. In *in vitro* studies, down-regulation of R2 expression by LOR-1284 resulted in decreased tumor cell growth (proliferation) with a concomitant block in cell cycle progression. Furthermore, LOR-1284 demonstrates anti-tumor activity against human kidney, skin and colon cancers in mouse experimental models of tumor growth. We feel that the results of these studies warrant further development of LOR-1284 as well as expansion of siRNA research to other cancer targets. Although in published reports LOR-1284 has shown significant in vivo anti-tumor activity on its own, we are collaborating with investigators at OSU to develop a novel nanotechnology formulation based on LOR-1284 to enhance uptake of the drug in tissues and to provide a selective affinity for specific tumors. Research is continuing to optimize delivery of siRNA in vivo, and is expected to be the key to the future therapeutic promise of siRNA therapeutics to effectively target specific genes associated with cancer.

Clinical Development

NCI Sponsored Trials

Program in Solid Tumors and Other Indications:

Following completion by Lorus in the prior period of a Phase I dose escalation trial in solid tumors and a Phase I/II trial of LOR-2040 in combination with capecitabine in renal cell carcinoma, much of the clinical development for LOR-2040 was performed in conjunction with the NCI, which paid for the cost of the sponsored clinical trials. See "-- Agreements - Collaboration Agreements - National Cancer Institute". To date we have completed six clinical trials with the NCI for LOR-2040 in patients with AML, metastatic breast cancer, non-small cell lung cancer, solid tumors, unresectable colon cancer, hormone refractory prostate cancer and have one study ongoing in MDS and acute leukemia. These indications were selected based on the most promising results from our preclinical studies. Upon evaluation of the final clinical data emerging from the completed NCI clinical trials, Lorus will analyze and make decisions regarding the strategic direction of our antisense portfolio. We do not believe that the data obtained from these trials will be material nor impact our current development plan of focusing on LOR-2040 in AML. Lorus continues to search for partnerships for the future development of LOR-2040.

High Grade Myelodysplastic Syndrome and Acute Leukemia:

Lorus announced in June 2006 a plan for a new clinical investigation of LOR-2040 as a single-agent in patients with high grade myelodysplastic syndrome and acute leukemia as an additional NCI-sponsored initiative. This trial was initiated in mid 2007. This clinical study is designed to evaluate the safety and activity of LOR-2040 as a single agent for acute leukemia and MDS using a novel treatment schedule. The effect on leukemic blasts and blood count recovery will be assessed as part of a detailed investigation of the pharmacodynamic and pharmacokinetic effects, dose-response relationships and tolerability of LOR-2040 during multiple courses of treatment. This clinical trial is now ongoing but fully enrolled and pending analysis and final reporting.

Other Research Initiatives

In May 2009 Lorus announced the extension of a cooperative research agreement with the NCI for preclinical evaluation of LOR-2040 and other Lorus RNA-targeted drugs as part of a novel combination therapeutic strategy to target the renal tumor and not the normal regenerating kidney.

Acute Myeloid Leukemia: NCI Sponsored Trial Program
In July 2003, we announced the FDA's approval of the NCI-sponsored IND application for a clinical trial of LOR-2040 in combination with cytarabine, in patients with refractory or relapsed AML. Cytarabine is the current established drug for treating AML patients. The study is part of a Phase II clinical program to be conducted under the sponsorship of the Cancer Treatment Evaluation Program of the NCI pursuant to a clinical trial agreement between Lorus and the NCI.

In August 2007, we announced the completion of this study. This clinical trial demonstrated safety and appropriate dosing of the combination regimen and showed promising clinical responses in patients under 60 years of age. Moreover, the clinical responses correlated with downregulation of R2, the cellular target of LOR-2040, and were further supported by demonstration of intracellular LOR-2040 in circulating and bone marrow leukemic cells. In July 2008, we announced publication of the final results of this clinical trial by the investigators in the journal *Clinical Cancer Research 14(12) 2008* . The results demonstrated safety and appropriate dosing of the combination regimen. Notably, promising clinical responses in patients under 60 years of age were obtained which included complete responses in 35% of the 23 patients and significant cytoreduction of the leukemic blasts in two others. Moreover, the clinical responses correlated with down regulation of R2, the cellular target of LOR-2040 in circulating and bone marrow leukemic cells. Additionally, outcomes of complete response were associated with high pre-treatment levels of R2, suggesting that pre-treatment R2 may be a predictor of response and a possible basis for treatment stratification to this LOR-2040 and cytarabine combination. This proof of concept study provided the basis for proceeding to the larger Phase II study with the same regimen in patients less than 60 years of age with refractory and relapsed AML.

Additional research in this program has continued to add scientific support for action of LOR-2040 in AML. In September 2008, Lorus announced a further publication by the investigators presenting results on the metabolism of LOR-2040 in these AML patients along with supporting experiments. This identified factors including activity of liver microsomes that together predicted the circulating drug levels and clearance rates. The investigators also performed additional studies to further elucidate the intracellular activity of LOR-2040 in AML which were announced by Lorus in April 2009 following the presentation to the American Association for Cancer Research, and in June 2009 following their final publication of this data in *Pharmaceutical Research 26(6) 2009*. A novel analytical method was used to monitor the intracellular activity of LOR-2040 in both preclinical models and in a patient's samples and confirm an important mechanism of action of the drug to reduce the dNTP molecules in tumor cells that are required for DNA synthesis.

Acute Myeloid Leukemia: Lorus Sponsored Trial Program

In August 2007, we announced an expansion of the LOR-2040 development program in the AML indication with initiation of a more advanced Phase II clinical trial with LOR-2040 and high dose Ara-C (HiDAC) in refractory and relapsed AML. The decision to advance clinical development of LOR-2040 into Phase II was based on the encouraging results from our completed proof of concept NCI-sponsored study of LOR-2040 in combination with HiDAC in patients with refractory and relapsed AML. This Phase II study included both an efficacy study and a novel additional study to measure intracellular target activities and pharmacological synergies between the two agents. In the first stage of the 60 patient trial, the pharmacologic and target related activity of LOR-2040 and HiDAC was evaluated in two groups, to determine the contribution of each agent alone and in combination. The second stage of the trial was to provide efficacy evaluation in a larger patient population.

On November 30, 2009, we announced successful completion of the Phase II end of stage assessment of LOR-2040 in combination with high dose Ara-C (HiDAC) as salvage therapy in refractory/relapsed AML patients of 60 years of age or younger with favorable results. The Steering Committee review required at this stage determined that the Phase II efficacy and safety results fulfilled the protocol criteria and are consistent with the promising Phase Ib clinical findings. It was further determined on the strength of the Phase Ib and II clinical data that expansion to a definitive comparative trial is the appropriate next step to support registration. A preliminary evaluation found the response rate to be twice that expected from a risk-matched historical control.

On June 14, 2010, we announced presentation of Phase II clinical trial data for LOR-2040 in combination with high dose cytarabine in the treatment of AML at the 15th Annual Congress of the European Hematology Association in Barcelona, Spain. This showed in patients under 60 years of age with relapsed and refractory AML that 28% achieved complete remission ("CR") or CR with incomplete blood count recovery ("CRi") and an additional 4% achieved partial remission. The investigators noted that this compares favorably with the expected risk-matched historical CR rate of approximately 14% in this high risk AML patient group. In addition, 12-month overall survival of 41% was shown with median overall survival of 10.3 months, assessed as favorable in this predominantly high risk population, and merits further development in a larger randomized clinical trial.

Based on the data from two completed Phase Ib and II clinical trials, Lorus plans to move this clinical program to a larger, randomized, comparative trial in a multinational setting in order to achieve rapid enrolment.

On August 5, 2009, we announced the allowance of a patent from the Japan Patent Office for LOR-2040 which protects LOR-2040 composition and its use in treatment of cancer. On May 3, 2010, we announced allowance of a new patent in Australia for LOR-2040 in treatment of AML as a single agent and in combination therapies with cytarabine, which extends the patent life in Australia to 2024.

Orphan Drug Status

In May 2005, Lorus received Orphan Drug designation from the FDA for LOR-2040 in the treatment of AML. In June 2008, Lorus announced that the European Medicines Agency ("EMEA") had granted orphan drug designation to LOR-2040 for development in AML.

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

Lorus has selected two leading small molecule compounds from a series of novel small molecules discovered by our scientists that exhibit potent anticancer activity in *in vitro* screens. The results of characterization studies on one of these compounds were published in *Cancer Chemotherapy and Pharmacology*. From these two compounds, LOR-253 was selected as the lead compound for development as a drug candidate for the treatment of colon carcinoma and non-small cell lung cancer. This decision was based on its potent *in vitro* anti-proliferative activity, its efficacy in *in vivo* xenograft models of human colon and lung cancer, and on its safety profile.

In September 2009, we announced the publication from our research team of an article entitled "A Novel Small Molecule with Potent Anticancer Activity Inhibits Cell Growth by Modulating Intracellular Labile Zinc Homeostasis" in the peer-reviewed journal Molecular Cancer Therapeutics. The article presented data from the preclinical evaluation of ML-133, a parent compound that was a precursor in the development of LOR-253. The studies demonstrated potent anticancer activity in cancer cell lines and in an animal model of human colon cancer. Further examinations on the mechanism of action confirmed target dependent induction of the novel tumor suppressor called Krüppel-like factor 4, a critical checkpoint protein that inhibits cell cycle progression in several cancer types. The mechanism of activity of this promising new class of antitumor agent described in the publication suggested a novel method for treating several different types of cancer.

Lorus has completed formal GLP toxicology studies for LOR-253 and in April 2010, we announced that the production of the first clinical batch of LOR-253 had been successfully completed. The clinical batch of LOR-253 was manufactured in full compliance with current Good Manufacturing Practice ("cGMP") and is to be used in the Phase I study.

In June 1, 2010, Lorus announced the filing of an IND application with the FDA which was for a first-in-man Phase I dose escalation trial in advanced or metastatic solid tumors.

Lorus is also pursuing other candidates at earlier stages of development. These include:

- LOR-264, a second generation LOR-253 derivative, is being developed for oral administration. Like LOR-253, LOR-264 has demonstrated potent anticancer activity in animal studies and represents the lead oral drug in this development platform. Derivatives of LOR-264 are currently being assessed for anticancer activity and oral bioavailability as part of our lead optimization process.

- LOR-500 platform. LOR-500 targets multikinases including tyrosine kinase family members and a member of the calcium/calmodulin dependent protein kinase family. Hit-to-lead optimization of LOR-500 is being currently conducted to identify a lead drug candidate.

- LOR-220 platform. LOR-220 is a novel compound that targets novel bacterial Ser/Thr kinases. Structural optimization of LOR-220 is currently underway to identify several novel drug candidates that show potent antimicrobial activity in animal models.

Immunotherapy

Immunotherapy is a form of treatment that stimulates the body's immune system to fight diseases including cancer. 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.

Interleukin-17E

Interleukin-17E ("IL-17E") is a protein-based therapeutic that Lorus is developing as an immunotherapy for cancer treatment. We have shown that IL-17E has anticancer activity against a range of human cancers. 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.

Additional preclinical studies are being done to further evaluate the efficacy and toxicity profile of IL-17E in comparison to other cancer-approved cytokines, including interferon-alpha and IL-2, and further non-clinical studies are planned to assess toxicity and optimize the therapeutic dose.

Virulizin®

In April 2008, Lorus entered into an exclusive licensing deal with the Zoticon Bioventures' subsidiary, Zor, for Virulizin®. The license, covering North and South America, Europe and Israel, granted Lorus the right to receive in excess of US$10 million in upfront and milestone payments as well as royalties on sales of between 10 and 20%. In addition, Lorus' wholly-owned subsidiary received a 25% equity interest in Zor. Zor is responsible for all future clinical developments, regulatory submissions, and all commercial activities. As discussed above, in June 2009, Lorus assigned these rights and the rights to the intellectual property associated with Virulizin® to TEMIC as part of the consideration for Lorus' repurchase of the secured convertible debentures. (See "The Company - Secured Convertible Debentures")

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.

Licence Agreements

Ion Pharmaceuticals

In December 1997, Lorus, through NuChem, acquired certain patent rights and a sublicense from Ion to develop and commercialize the anticancer applications of CLT and new chemical entities related to CLT (the "NuChem Analogs"). To July 2006, NuChem had made cash payments totalling US $500,000 to Ion. The balance of up to US$3 million is payable upon the achievement of certain milestones based on the commencement and completion of clinical trials related to the NuChem Analogs. The company does not currently expect to achieve any of the above milestones in fiscal years ended May 31, 2011 or 2012 and cannot reasonably predict when such milestones will be achieved, if at all.

The NuChem Analog patents are ancillary to the Company's primary development activities and do not relate to our core research and development focus, namely LOR-2040, nor did they relate specifically to the development of Virulizin.

University of Manitoba

The University of Manitoba (the "University"), Dr. Jim Wright, Dr. Aiping Young and Cancer Care entered into an exclusive license agreement (the "License Agreement") with GeneSense dated June 20, 1997 pursuant to which GeneSense was granted an exclusive worldwide license to certain patent rights with the right to sub-license. Effective May 31, 2009 the agreement was assigned from GeneSense to Lorus. In consideration for the exclusive license to Lorus of the patent rights, the University and Cancer Care are 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. Lorus is solely responsible for the preparation, filing, prosecution and maintenance of all patent applications and patents included in the patent rights and all related expenses. Pursuant to the terms of the License Agreement, any and all improvements to any of the patent rights derived in whole or in part by Lorus after the date of the License Agreement are not included within the scope of the License Agreement and do not trigger any payment of royalties.

The University of Manitoba agreement relates specifically to antisense and related technologies described in patent applications that were pending at the time of the agreement. Subsequent patent amendments or advancements to these patents remain as the property of Lorus, without license rights accruing back to the University of Manitoba. The Company is currently pursuing its antisense development program, primarily as a function of advancements and amendments to the original patents. We have not yet earned any revenue from the products covered under the agreement and have not paid any royalties under this agreement and cannot reasonably predict the timing and amount of any future payment. We do not expect to make any royalty payments under this agreement in fiscal years ended May 31, 2011 or 2012.

Collaboration Agreements

Zoticon Bioventures Inc.

In April 2008, Lorus through its wholly owned subsidiary GeneSense Technologies Inc. signed an exclusive multinational license agreement with Zor formed as a subsidiary of Zoticon Bioventures Inc. ("Zoticon"), a research-driven biopharmaceutical group, to further develop and commercialize Virulizin® for human therapeutic applications. As discussed above, in June 2009, Lorus assigned these rights to TEMIC. (See "The Company - Secured Convertible Debentures")

As part of the Zoticon agreement, we entered into a service agreement in which we agreed to provide Zor with 120 hours of consulting service at its own expense and thereafter will provide services at an agreed upon rate. This agreement expired in October 2009.

National Cancer Institute

In February 2003, Lorus and the NCI approved clinical protocols to conduct a series of clinical trials in a Phase I/II program to investigate the safety and efficacy of LOR-2040. Lorus and the NCI signed a formal clinical trial agreement in which the NCI financially sponsors the LOR-2040 clinical trials, while Lorus provides the clinical trial drug. The agreement was renewed in October 2007 for an additional three years.

In May 2009, Lorus entered into an additional agreement with the NCI for the study of LOR-2501, LOR-2040, and LOR-1284 in combination with commercially-available drugs, to develop a drug cocktail(s) that is more effective for the treatment of Renal Cell Carcinoma tumors than for normal regenerating kidney.

In regards to future payment obligations, Lorus' obligations under these agreements are limited to the supply of drugs, the cost for which has been incurred. The company does not currently expect any significant costs associated with the supply of the drug in the future, depending on the outcome of the projects.

Other

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

Intellectual Property and Protection of Confidential Information and Technology

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

RNA-targeted Therapies

We have been issued two patents in Canada, nine patents in the United States and 12 patents in other jurisdictions around the world relating to our DNA/RNA-based therapeutics, which includes antisense and siRNA molecules. We also have 13 pending patents worldwide for this class of therapies. These patents include composition of matter and method claims.

Small Molecule

We have been issued two patents and have 24 pending patents worldwide for our in-house small molecules. These patents cover composition of matter and method claims.

Immunotherapy

We have three pending patents for our IL-17E immunotherapy program.

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-2040, and small molecules 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.

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, biologics and immunotherapies with novel mechanisms of action. These are drugs that are delivered by specific means for treatment of cancer patients, with a 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. There are many 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.

Human Resources

As at May 31, 2010, we employed 17 full-time persons and three part-time people in research and drug development and administration activities. Of our employees, seven hold Ph.D.s. 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.

Properties

Our head office, which occupies 20,500 square feet, is located at 2 Meridian Road, Toronto, Ontario. The leased premises include approximately 8,000 square feet of laboratory and research space. We believe that our existing facilities are adequate to meet our requirements for the near term. Our current lease expires on March 31, 2011.

RISK FACTORS

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

We 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 will not be sufficient to execute our current planned expenditures for the next 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 a significant 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 need to raise additional capital.

We need to raise additional capital. To obtain the necessary capital, we must rely on some or all of the following: grants and tax credits, additional share issues and collaboration agreements or corporate partnerships 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.

If we cannot obtain the necessary capital on acceptable terms, we will have 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 Canadian generally accepted accounting principles, we reported net (earnings) losses of ($5.3 million),$8.9 million and $6.3 million for the years ended May 31, 2010, 2009 and 2008, respectively, and as of May 31, 2010, we had an accumulated deficit of $184.1 million.

To date we have only generated nominal revenues from the sale of Virulizin ™ in Mexico and revenues associated with the license agreement with Zor. We stopped selling Virulizin™ in Mexico in July 2005 and assigned the rights under the Zor Agreement to TEMIC, as part of the consideration for our repurchase of secured convertible debentures in June 2009. We have not generated any other 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 candidate, LOR-2040, 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 are an early stage development company.

We are at an early stage of development. Significant additional investment will be necessary to complete the development of any of our products. Pre-clinical and clinical trial work must be completed before our products could be ready for use within the market that we have identified. We may fail to develop any products, to obtain regulatory approvals, to enter clinical trials or to 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.

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. 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 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 he 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.

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 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. 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. For example, results of our Phase III clinical trial of Virulizin™ did not meet the primary endpoint of the study despite promising preclinical and early stage clinical data. All of our potential drug candidates are 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 such as acute myeloid leukemia. 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.

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 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 and the medical community. 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 heavily 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.

Until recently, patent applications in the United States were maintained in secrecy until the patents issued, and publication of discoveries in scientific or patent literature often lags behind actual discoveries. Patent applications filed in the United States after November 2000 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.

Trademark protection:

In order to protect goodwill associated with our company and product names, we rely on trademark protection for our marks. For example, we have an application to register the Virulizin™ trademark with the United States Patent and Trademark Office. A third party may assert a claim that the Virulizin ™ mark is confusingly similar to its mark and such claims or the failure to timely register the Virulizin™ mark or objections by the FDA could force us to select a new name for Virulizin™, which could cause us to incur additional expense.

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, 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-2040 and small molecules. 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.

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. Further, liability insurance coverage is becoming increasingly expensive and we might not be able to obtain or maintain product liability insurance in the future on acceptable terms or in sufficient amounts to protect us against 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.

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-2040, small molecule 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 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.

Our interest income is subject to fluctuations of interest rates in our investment portfolio.

Our investments are held to maturity and have staggered maturities to minimize interest rate risk. We cannot assure you that interest income fluctuations will not have an adverse impact on our financial condition. We maintain all our accounts in Canadian dollars, but a portion of our expenditures are in foreign currencies. We do not currently engage in hedging our foreign currency requirements to reduce exchange rate risk.

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. 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 and our collaborators' clinical trials, including our and our collaborators' ability to produce clinical supplies of our product candidates on a timely basis and in sufficient quantities to meet our clinical trial requirements;
- announcements of technological innovations or new product candidates by us, our collaborators or our competitors;
- fluctuations in our operating results;
- published reports by securities analysts;
- developments in patent or other intellectual property rights;
- publicity concerning discovery and development activities by our licensees;
- 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;
- governmental regulation and changes in medical and pharmaceutical product reimbursement policies; and
- general market conditions.

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.

DIVIDENDS

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

SHARE CAPITAL AND MARKET FOR SECURITIES

Share Capital

We are authorized to issue an unlimited number of common shares. As of August 27, 2010, there were 9.9 million common shares issued and outstanding. In addition, as of August 27, 2010, there were 650,000 common shares issuable upon the exercise of outstanding stock options and 755,000 common shares issuable upon the exercise of common share purchase warrants priced at $2.40 and expiring May 27, 2011. The holders of common shares are entitled to one vote per share at meetings of shareholders, to receive such dividends as declared by us and to receive our remaining property and assets upon our dissolution or winding up. Our common shares are not subject to any future call or assessment and there are no pre-emptive, conversion or redemption rights attached to such shares.

Market for Securities

Our common shares are currently listed on TSX under the symbol “LOR” and as of April 26, 2010 on the OTCBB under the symbol “LRUSF”.

The following table sets out the price ranges and trading volumes of our common shares on the TSX for the periods indicated (prices have been adjusted to reflect the 1:30 consolidation of Lorus’ common shares effective May 25, 2010:

	High ($)	Low ($)	Volume (#)
2010			
May	3.30	2.04	210,000
April	3.60	2.10	521,700
March	3.60	3.00	256,400
February	3.90	1.80	542,400
January	2.40	1.80	68,000
2009			
December	2.70	1.80	98,700
November	2.70	1.80	181,500
October	3.00	2.40	54,700
September	3.00	2.40	114,300
August	2.70	2.10	106,000
July	2.70	2.10	117,600
June	2.70	1.80	133,400

Principal Shareholders

To our knowledge, based on publicly available information, the only persons or entities that own more than 5% of our issued and outstanding common shares are Technifund Inc. and its related parties, which currently owns approximately 14.4% of our issued and outstanding common shares, High Tech that holds, approximately 13.2% of the issued and outstanding shares of the company and TEMIC which holds approximately 7.3%. See Business of the Company - Financial Strategy”.

DIRECTORS AND OFFICERS

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

Each director has been elected or appointed to serve until the next annual meeting or until a successor is elected or appointed. We have an Audit Committee, a Corporate Governance and Nominating Committee and a Compensation Committee the members of each such committee are shown below. As at May 31, 2010, our directors and executive officers, as a group, beneficially owned, directly or indirectly, or exercised control over approximately 1.6 million common shares or approximately 16% of our outstanding common shares.

Name and Province/State Country of Residence	**Position**	**Director or Officer Since**
Directors:		
Herbert Abramson[3] [1] Ontario, Canada	Director	July 2007
Denis Burger[1][2] Oregon, United States	Chairman, Director	September 2007
Dr. Mark Vincent[3] Ontario, Canada	Director	September 2007
Dr. Jim Wright[2] Ontario, Canada	Director, former President and Chief Executive Officer,	October 1999
Officers:		
Dr. Aiping Young Ontario, Canada	President and Chief Executive Officer, Director,	October 1999
Dr. Saeid Babaei Ontario, Canada	Vice President, Business Development	May 2008
Dr. Yoon Lee Ontario, Canada	Vice President Research	May 2008
Elizabeth Williams Ontario, Canada	Acting Chief Financial Officer and Director of Finance	November 2005

(1) Member of Audit Committee.
(2) Member of the Compensation Committee.
(3) Member of the Corporate Governance and Nominating Committee.

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

Herbert Abramson: Mr. Abramson is a co-founder and Chairman of Trapeze Capital Corp., an investment dealer and portfolio management company and is also Chairman 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.

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. Mark Vincent: Dr. Mark Vincent is the co-founder and Chief Executive Officer of Sarissa, Inc. since 2000. Dr. Vincent is an Associate Professor of Oncology at the University of Western Ontario and a staff medical oncologist at the London Regional Cancer Program.

Dr. Jim Wright: Dr. Wright is presently Chief Executive Officer of NuQuest Bio Inc and has been since 2006. As of July 1, 2010 Dr. Wright has accepted a position as 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.

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.

Dr. Saeid Babaei: Dr. Babaei is currently Vice-President of Business Development. Dr Babaei joined Lorus in 2006 and has held progressive positions as Associate Director of Corporate Affairs and Director of Corporate Development. Prior to his employment with Lorus, Dr. Babaei was the Director of Corporate Development at Northern Therapeutics Inc.

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.

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

AUDIT COMMITTEE INFORMATION

Audit Committee

The charter of our audit committee is attached as Schedule A. The current members of the audit committee are Herb Abramson and Denis Burger. Mr. Ludwig was also a member of the Audit Committee prior to resigning in March 2010. The Board intends to add a member to the Committee following the 2010 Annual General Meeting. Pursuant to Canadian securities laws, our board of directors has determined that Messrs. Abramson and Burger 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. Additionally, we believe that the members of the audit committee qualify as "independent" as that term is defined in the relevant securities laws relating to the composition of the audit committee.

Independent Auditors

Auditor's Fees

The total fees billed for professional services by KPMG LLP (our independent auditors) for the years ended May 31, 2010 and 2009 are as follows:

	2010	2009
Audit Fees	$ 379,500	$ 252,000
Tax Fees	$ 19,150	$ 39,000
All Other Fees	$ 36,638	$ 19,000
Total	$ 435,288	$ 310,000

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 associated with the filing of a United States F1 filing and Canadian Prospectus in 2010 and other regulatory assistance. 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 auditors, currently KPMG LLP. Our charter requires audit committee pre-approval of all permitted audit and audit-related services. Any non-audit services must be submitted to the audit committee for review and approval. Under the charter, all permitted services to be provided by KPMG LLP must be pre-approved by the audit committee.

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

No services were provided by KPMG LLP under a *de minimus* exemption for our fiscal years ended May 31, 2010 and 2009.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

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

INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

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

TRANSACTIONS WITH RELATED PARTIES

As described above under 'Financial Strategy - Proposed Rights Offering and Financing Commitment' the Company received a financing commitment subsequent to year end with respect to a proposed rights offering, interim financing and two loans during the year as described under 'Financial Strategy - Promissory Notes' from a Director and a Company associated with the Director of the Corporation.

During the year ended May 31, 2009, the Company expensed consulting fees of $25,000 to a director of the Company. At May 31, 2009, no amounts remained unpaid and included in Accrued Liabilities. This transaction was in the normal course of business and has been measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties

TRANSFER AGENT AND REGISTRAR

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

MATERIAL CONTRACTS

Other than the agreements described below, we have not, during our financial year ending May 31, 2010, entered into any material agreements other than contracts in the ordinary course of business. Agreements completed prior to July 10, 2007 are filed on SEDAR under Global Summit Real Estate and those completed after July 10, 2007 are filed on SEDAR under Lorus.

1. 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. 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.

3. Supply and Services Agreement dated June 19, 2009 between the Company and Erin Mills Biotech Inc. under which the Company agreed to provide certain business development services associated with the Virulizin intellectual property sold.

4. Share Purchase Agreement dated June 19, 2009 between the Company and The Erin Mills Investment Corporation under which the Company sold the sale of Lorus' shares in its wholly-owned subsidiary Pharma Immune Inc.

5. Animal Rights License Agreement dated June 19, 2009 between the Company and Erin Mills Biotech Inc. under which the Company is granted certain rights to develop and market Virulizin for use in animals.

6. 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 under which the Company assigned its rights under the licence agreement with Zor Pharmaceuticals, LLC.

INTERESTS OF EXPERTS

KPMG LLP, the Company's external auditor, has reported on the consolidated financial statements of the Company for each of the years in the three-year period ended May 31, 2010. KPMG LLP is independent of Lorus in accordance with the applicable Rules of Professional Conduct/Code of Ethics of the Institute of Chartered Accountants of Ontario.

ADDITIONAL INFORMATION

Additional information relating to Lorus may be found on SEDAR at www.sedar.com. Certain additional information, including directors' and officers' remuneration and indebtedness, principal holders of our securities, and securities authorized for issuance under our stock option plan, will be contained in the Company's management information circular which will be filed on SEDAR at www.sedar.com in respect of the Company's annual meeting of shareholders for the fiscal year ended May 31, 2010. Additional financial information is provided in our financial statements and management's discussion and analysis for the financial year ended May 31, 2010 (the "2010 Financial Statements"). Copies of:

- the 2010 Financial Statements and our most recent unaudited financial statements that have been filed, if any, for any period subsequent to the year ended May 31, 2010;

- this annual information form and any document or the pertinent pages of any document incorporated by reference in this annual information form; and

- any other documents that are incorporated by reference into a short form prospectus or preliminary short form prospectus otherwise not referred to therein when our securities are in the course of a distribution pursuant to a short form prospectus or a preliminary short form prospectus,

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

GLOSSARY

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

Analog:	a chemical derivative or variation of a parent molecule
Anti-proliferative:	preventing cell division
Ara-C:	chemotherapy drug most commonly used in treatment of AML, chronic myeloid leukemia, acute lymphoid leukemia and lymphomas
Carcinoma:	any cancerous tumor that starts with the cells that cover the inner and outer body surfaces
Calmodulin:	a calcium-binding protein expressed in all eukaryotic cells
Complete response:	When all signs of cancer disappear in response to treatment. This is based on symptoms, physical exam, and radiology and lab tests. This does not always mean the cancer has been cured. Also called complete remission.
CLT:	clotrimazole
Cytokine:	a generic term for a non-antibody protein released by a cell population (e.g., activated macrophages) of the immune system on contact with chemical or biological stimuli
Cytoreduction:	to reduce the number of cancer cells
Cytotoxic:	pertaining to the destruction of cells
Deoxyribonucleotides:	a nucleotide having a purine or pyrimidine base bonded to deoxyribose, which in turn is bonded to a phosphate group.
Efficacy:	the ability of a drug to produce a desired result
GLP:	Good Laboratory Practises - a system of management controls for laboratories and research organizations to ensure the consistency and reliability of results
Immune system:	the totality of organs and cells involved in the body's immunologic response to foreign antigens and malignant tissue
IND:	investigational new drug
In vitro:	in the test tube; referring to chemical reactions, fermentation, etc., occurring therein e.g., in cell-free extracts
In vivo:	in the living body; referring to chemical processes occurring within cells, etc., as distinguished from those occurring in cell-free extracts (*in vitro*)
Malignant/ malignancy:	describes a tumor that is cancerous. Two important qualities of malignancies are the tendency to invade surrounding tissues and to break off and spread elsewhere (metastasis)

Metabolism:	the overall biochemical reactions that take place in a living organism including the building up of complex molecules or breakdown of molecules to provide energy
Metastasis:	the process by which tumor cells are spread to other parts of the body
Microsomes:	vesicle-like artifacts formed from the endoplasmic reticulum (ER) when eukaryotic cells are broken-up in the laboratory and a valuable tool for investigating the metabolism of compounds
mRNA:	messenger, or mRNA, is a copy of the information carried by a gene on the DNA. The role of mRNA is to move the information contained in DNA to the translation machinery.
NDA:	new drug application, the application to obtain marketing approval filed with the FDA or BCD after completion of human clinical trials
Nucleotide:	a compound consisting of a purine or pyrimidine base, a pentose sugar and a phosphoric acid; they are the building blocks from which nucleic acids (DNA or RNA) are constructed
Pharmacodynamic:	the division of pharmacology that studies the effects of drugs and their mechanisms of action in the body.
Pharmacokinetics:	the action of drugs in the body over a period of time, including the process of absorption, distribution, localization in tissues, biotransformation and excretion
Pre-clinical testing:	testing that is conducted in the laboratory (chemistry and pharmacology) and with animals to help determine a product's chemical, pharmacological and pharmaceutical characteristics (including mechanism of action), toxicity, efficacy and side effects
Proteins:	large molecules composed of long chains of sub-units of amino acids
R1 and R2:	components of ribonucleotide reductase
Ribonucleic acid (RNA):	a nucleic acid found in both the nucleus and the cytoplasm of all cells. It carries genetic information from the nucleus to the cytoplasm, where it also reacts as a template in association with ribosomes to synthesize proteins
ribonucleotide reductase (RNR):	a protein complex that converts ribonucleotide diphosphates (NDPs) into corresponding deoxyribonucleotide diphosphates (dNDPs).
siRNA:	a short sequence of RNA that can decrease gene expression in a highly specific manner (gene silencing).
Toxicity:	a condition that results from exposure to a substance at levels causing deleterious side effects which may be harmful to an organism
Tumor:	an abnormal swelling or lump in the body caused by the growth of new tissues which differ in structure from the part of the body in which they are growing. A tumor may be benign or malignant
Xenograft:	an implant of a foreign substance

SCHEDULE A

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

I. PURPOSE

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

1. Serve as an independent and objective party to oversee the integrity of the Company's financial reporting process, audits of the Company's financial statements and systems of internal controls regarding finance, accounting, and legal compliance;

2. Identify and monitor the management of the principal risks that could impact the financial reporting of the Company;

3. Monitor the independence and performance of the Company's independent auditors;

4. Provide an avenue of communication among the independent auditors, management, and the Board; and

5. Encourage continuous improvement of, and foster adherence to, the Company's policies, procedures and practices at all levels.

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

II. COMPOSITION AND MEETINGS

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

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

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

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

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

III RESPONSIBILITIES AND DUTIES

A. Review Procedures

1) Maintain a Charter that sets out the Audit Committees mandate and responsibilities. Review and reassess the adequacy of this Charter at least annually.

2) Review and discuss with management and the external auditors the Company's financial statements, MD&A and annual and interim results press releases prior to filing or distribution. The Audit Committee must be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements (other than public disclosure of financial statements, MD&A and annual and interim results press releases), and must periodically assess the adequacy of those procedures. Consider the independent auditors' judgements about the quality and appropriateness, not just the acceptability, of the Company's accounting principles and financial disclosure practices, as applied in its financial reporting, particularly about the degree of aggressiveness or conservatism of its accounting principles and underlying estimates and whether those principles are common practices or minority practices.

3) Consider and approve, if appropriate, major changes to the Company's accounting principles and practices as suggested by the independent auditors or management and assure that the reasoning is described in determining the appropriateness of changes in accounting principles and disclosures.

4) In consultation with the management and the independent auditors, consider the integrity of the Company's financial reporting processes and controls. Discuss significant financial risk exposures and the steps management has taken to monitor, control, and report such exposures. Review significant findings prepared by the independent auditors together with management's responses.

5) The Audit Committee is directly responsible for overseeing the work of the independent auditors including the review of any disagreements among management and the independent auditors in connection with financial statements, and overseeing the resolution of any such disagreements.

6) Annually review policies and procedures as well as audit results associated with directors' and officers expense accounts and perquisites. Annually review a summary of director and officers' related party transactions and potential conflicts of interest.

7) Annually conduct self-assessment of Audit Committee performance including a review and discussion of the Audit Committee roles and responsibilities, seeking input from senior management, the full Board and others if needed.

B. Independent Auditors

1) The independent auditors are accountable to the Audit Committee and the Board and shall report directly to the Audit Committee. The Audit Committee shall review the independence and performance of the auditors and annually recommend to the Board:

    1) The external auditor to be nominated for the purpose of preparing or issuing an auditor's report and performing other audit, review and attest services for the Company as required;

    2) The compensation of such external auditor; and

    3) To approve any discharge of such external auditors when circumstances warrant.

2) Pre-approve all audit fees and terms and all permitted non-audit services (including the fees and terms thereof) to be provided by the external auditor, and consider whether these services are compatible with the auditors' independence. Any member of the Audit Committee may approve additional proposed non-audit services that arise between Audit Committee meetings provided that the decision to pre-approve the services is presented at the next scheduled Audit Committee meeting. The approval of all non-audit services will be evidenced by the completion and approval of the Non-Audit Services Request Form (attached as Schedule "A" hereto).

3) On an annual basis, the Audit Committee should review and discuss with the external auditors all relationships they have with the Company that could impair the auditors' independence. In particular, the Audit Committee is responsible for ensuring its receipt from the external auditors of a formal written statement delineating all relationships between the external auditors and the Company, consistent with applicable regulations, actively engaging in a dialogue with the external auditors with respect to any disclosed relationships or services that may impact the objectivity and independence of the external auditors, and taking, or recommending that the full Board take, appropriate action to oversee the independence of the outside auditors.

4) Review the external auditors' audit plan - discuss scope, staffing, locations, reliance upon management and general audit approach.

5) Consider the external auditors' judgments about the quality and appropriateness of the Company's accounting principles as applied in its financial reporting.

6) Prior to releasing the year-end results, discuss the results of the audit with the external auditors. Discuss with management and the external auditors matters required to be communicated to audit committees in accordance with the standards established by the Canadian Institute of Chartered Accountants.

7) Review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and former independent auditors of the Company.

8) Review and discuss quarterly reports from the external auditors on:

    i. All critical accounting policies and practices to be used;

    ii. All alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the external auditor; and

    iii. Other material written communications between the external auditor and management, such as any management letter or schedule of unadjusted differences.

C. Ethical and Legal Compliance

1) On at least an annual basis, review with the Company's counsel, any legal matters that could have a significant impact on the organization's financial statements, the Company's compliance with applicable laws and regulations, and inquiries received from regulators or governmental agencies.

2) Perform any other activities consistent with this Charter, the Company's by-laws, and governing law, as the Audit Committee or the Board deems necessary or appropriate.

D. Whistle Blowing

The Audit Committee shall put in place procedures for:

1) The receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and

2) The confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

E. Other Audit Committee Responsibilities

1) Create an agenda for the ensuing year.

2) Describe in the Company's annual information form the Audit Committee's composition and responsibilities and how they were discharged in accordance with the requirements of 52-110F1.

3) Submit the minutes of all meetings of the Audit Committee to the Board.

4) Provide any other disclosure required to be included with respect to the Audit Committee or the Company's securities law filings.

FORM 52-109F1

CERTIFICATION OF ANNUAL FILINGS

FULL CERTIFICATE

I, *Aiping Young, Chief Executive Officer of Lorus Therapeutics Inc.*, certify the following:

1. ***Review:*** I have reviewed the AIF, if any, annual financial statements and annual MD&A, including, for greater certainty, all documents and information that are incorporated by reference in the AIF (together, the "annual filings") of Lorus Therapeutics Inc. (the "issuer") for the financial year ended *May 31, 2010*.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the annual filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, for the period covered by the annual filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the annual financial statements together with the other financial information included in the annual filings fairly present in all material respects the financial condition, results of operations and cash flows of the issuer, as of the date of and for the periods presented in the annual filings.

4. ***Responsibility:*** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the financial year end

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the annual filings are being prepared; and

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is the Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework.

5.2 ***ICFR - material weakness relating to design:*** The issuer has disclosed in its annual MD&A for each material weakness relating to design existing at the financial year end

(a) a description of the material weakness;

(b) the impact of the material weakness on the issuer's financial reporting and its ICFR; and

(c) the issuer's current plans, if any, or any actions already undertaken, for remediating the material weakness.

5.3 N/A

6. ***Evaluation:*** The issuer's other certifying officer(s) and I have

(a) evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's DC&P at the financial year end and the issuer has disclosed in its annual MD&A our conclusions about the effectiveness of DC&P at the financial year end based on that evaluation; and

(b) evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's ICFR at the financial year end and the issuer has disclosed in its annual MD&A

(i) our conclusions about the effectiveness of ICFR at the financial year end based on that evaluation; and

(ii) N/A

7. ***Reporting changes in ICFR:*** The issuer has disclosed in its annual MD&A any change in the issuer's ICFR that occurred during the period beginning on March 1, 2010 and ended on May 31, 2010 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

8. ***Reporting to the issuer's auditors and board of directors or audit committee:*** The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of ICFR, to the issuer's auditors, and the board of directors or the audit committee of the board of directors any fraud that involves management or other employees who have a significant role in the issuer's ICFR.

Date: ***August 30, 2010***

/s/ Aiping Young

Aiping Young
Chief Executive Officer

FORM 52-109F1

CERTIFICATION OF ANNUAL FILINGS

FULL CERTIFICATE

I, *Elizabeth Williams, acting Chief Financial Officer of Lorus Therapeutics Inc.* , certify the following:

1. ***Review:*** I have reviewed the AIF, if any, annual financial statements and annual MD&A, including, for greater certainty, all documents and information that are incorporated by reference in the AIF (together, the "annual filings") of Lorus Therapeutics Inc. (the "issuer") for the financial year ended *May 31, 2010*.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the annual filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, for the period covered by the annual filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the annual financial statements together with the other financial information included in the annual filings fairly present in all material respects the financial condition, results of operations and cash flows of the issuer, as of the date of and for the periods presented in the annual filings.

4. ***Responsibility:*** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the financial year end

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the annual filings are being prepared; and

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is the Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework.

5.2 ***ICFR - material weakness relating to design:*** The issuer has disclosed in its annual MD&A for each material weakness relating to design existing at the financial year end

(a) a description of the material weakness;

(b) the impact of the material weakness on the issuer's financial reporting and its ICFR; and

(c) the issuer's current plans, if any, or any actions already undertaken, for remediating the material weakness.

5.3 N/A

6. ***Evaluation:*** The issuer's other certifying officer(s) and I have

(a) evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's DC&P at the financial year end and the issuer has disclosed in its annual MD&A our conclusions about the effectiveness of DC&P at the financial year end based on that evaluation; and

(b) evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer's ICFR at the financial year end and the issuer has disclosed in its annual MD&A

(i) our conclusions about the effectiveness of ICFR at the financial year end based on that evaluation; and

(ii) N/A

7. ***Reporting changes in ICFR:*** The issuer has disclosed in its annual MD&A any change in the issuer's ICFR that occurred during the period beginning on March 1, 2010 and ended on May 31, 2010 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

8. ***Reporting to the issuer's auditors and board of directors or audit committee:*** The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of ICFR, to the issuer's auditors, and the board of directors or the audit committee of the board of directors any fraud that involves management or other employees who have a significant role in the issuer's ICFR.

Date: ***August 30, 2010***

/s/ Elizabeth Williams

_____

Elizabeth Williams
Acting Chief Financial Officer