

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 News Release dated August 30, 2010 - Lorus Therapeutics Reports Results for Fiscal Year 2010
- 99.2 News Release dated August 30, 2010 - Lorus Therapeutics Announces Proposed Rights Offering and Financing Commitment



NEWS RELEASE

Lorus Therapeutics Reports Results for Fiscal Year 2010

TORONTO, CANADA – August 30, 2010 – Lorus Therapeutics Inc. (TSX: LOR; OTCBB: LRUSF) (“Lorus” or the “Company”) a biopharmaceutical company specializing in the research and development of pharmaceutical products and technologies for the management of cancer, today reported financial results for twelve months ended May 31, 2010. Unless specified otherwise, all amounts are in Canadian dollars.

2010 HIGHLIGHTS

Corporate Highlights

- 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 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%.
- In November 2009 successfully raised \$2.46 million in an equity financing by way of a private placement of units, each unit consisting of one common share of Lorus and one-half common share purchase warrant. Each full warrant entitles the holder to purchase one common share of Lorus at \$2.40 until May 27, 2011.
- In June 2009, the Company reached a settlement with The Erin Mills Investment Corporation (TEMIC) with respect to the purchase and settlement of the \$15 million convertible debentures.
- Completed a 1 for 30 share consolidation effective May 25, 2010.

Drug Development Highlights

- LOR-2040 Program:
 - Announced positive results in a Phase II clinical study in refractory and relapsed Acute Myeloid Leukemia with LOR-2040 in combination with cytarabine. The Steering Committee review determined that the Phase II efficacy and safety results fulfilled the clinical trial protocol criteria for continued patient enrolment and are consistent with the promising Phase Ib clinical findings, previously reported by Lorus. 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 is the most appropriate next step to support registration. On this basis Lorus is proceeding with protocol development for the expanded development program.
 - LOR-253 Program:
 - Received approval of the Investigation New Drug (IND) application for Lorus’ anticancer drug candidate LOR-253 by the U.S. Food & Drug Administration (FDA). Based on the approval of the IND by the FDA, Lorus plans to proceed with a first-in-man Phase I dose escalation trial with LOR-253 in advanced or metastatic solid tumors.
 - Completed successful production of first clinical batch of anticancer drug LOR-253.
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- Other Programs:
 - Announced a publication demonstrating the potent antitumor activity of a novel cytokine interleukin 17E (IL-17E) in a number of solid tumors, including melanoma, breast, colon, pancreatic, and nonsmall cell lung cancers. In combination studies, IL-17E was compatible with a wide variety of approved anticancer drugs.

FINANCIAL RESULTS

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) as well as a gain on sale of shares related to the corporate reorganization completed in July 2007 of \$50 thousand. 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 net loss and increased accounts payable and accrued liabilities balances in the current year.

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 LOR-253 conducted and 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 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 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 offset by financing costs of \$569 thousand associated with a financing terminated subsequent to year end. 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.

In June 2009 the Company repurchased the outstanding \$15 million debentures, which were originally due on October 6, 2009. Under the agreement, Lorus repurchased the debentures from TEMIC for consideration that included a cash payment of \$3.3 million, the assignment of the rights under the license agreement with ZOR Pharmaceuticals 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. As a result of the transaction, the Company recognized a gain on the repurchase of the debentures of \$11.0 million reflecting the difference between the fair value of the debentures at the repurchase date, net of transaction costs of approximately \$221 thousand, and the cash payment amount of \$3.3 million. The gain on repurchase of the debentures did not result in income taxes payable as the Company has sufficient capital loss and non-capital loss carryforwards to shelter these gains.

At May 31, 2010, Lorus had cash, cash equivalents and short-term investments totaling \$914 thousand compared to \$5.9 million at May 31, 2009. Working capital (representing primarily cash, cash equivalents, short-term investments and other current assets less current liabilities which included the secured convertible debentures which were due October 6, 2009 and the promissory note payable in fiscal 2011) at May 31, 2010 was a deficiency of \$1.3 million as compared to a deficiency of \$9.2 million at May 31, 2009. Subsequent to the year-end Lorus secured a commitment to invest \$4.0 million as described above.

Management has forecasted that the Company's current level of cash, cash equivalents and short-term investments, including the \$4.0 million investment described above, 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 parties with a view to obtaining additional funding. Management believes that it will complete an arrangement in sufficient time to continue to execute its planned expenditures. 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.

"Throughout 2010 we have continued to make significant progress on the development of our drug candidates despite our limited cash resources," said Aiping Young, Lorus' President and CEO. "We look forward to 2011 and the initiation of a LOR-253 Phase I clinical trial and the increase in value that will bring to our shareholders as well as working towards securing partnership agreements that will allow for the further development of LOR-2040 in a Phase III registration trial."

Lorus Therapeutics Inc.
Consolidated Statements of Operations
(amounts in 000's except for per common share data)

(Canadian dollars)	Years Ended May 31		
	2010	2009	2008
REVENUE	\$ 131	\$ 184	\$ 43
EXPENSES			
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 of fixed assets	86	189	317
Cost of sales	--	--	2
	5,743	7,350	11,013
Interest expense	54	707	1,029
Accretion in carrying value of convertible debentures	80	1,707	1,176
Interest income	(21)	(270)	(542)
Loss from operation 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 for the period	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

Note re the financial statement information above:

On July 10, 2007 (the "Arrangement Date"), the Company completed a plan of arrangement and corporate reorganization with 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 assets and related valuation allowance) and liabilities of Old Lorus were transferred to the Company and/or its subsidiaries. The Company continued the business of Old Lorus after the Arrangement Date with the same officers and employees and continued to be governed by the same Board of Directors as Old Lorus prior to the Arrangement Date. Therefore, the Company's operations have been accounted for on a continuity of interest basis and accordingly, the consolidated financial statement information above reflects that of the Company as if it had always carried on the business formerly carried on by Old Lorus.

About Lorus

Lorus is a biopharmaceutical company focused on the research and development of novel therapeutics in cancer. Lorus' goal is to capitalize on its research, preclinical, clinical and regulatory expertise by developing new drug candidates that can be used, either alone, or in combination with other drugs, to successfully manage cancer. Through its own discovery efforts and an acquisition and in-licensing program, Lorus is building a portfolio of promising anticancer drugs. Lorus Therapeutics Inc. is listed on the Toronto Stock Exchange under the symbol LOR and the Over the Counter Bulletin Board under the symbol LRUSF.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of Canadian and U.S. securities laws. Such statements include, but are not limited to, statements relating to: financings, the establishment of corporate alliances, the Company's plans, objectives, expectations and intentions and other statements including words such as "continue", "expect", "intend", "will", "should", "would", "may", and other similar expressions. Such statements reflect our current views with respect to future events and are subject to risks and uncertainties and are necessarily 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 described in this press release. Such expressed or implied forward-looking statements could include, among others: our ability to continue to operate as a going concern; our ability to obtain the capital required for research and operations; our ability to complete the proposed rights offering; the inherent risks in early stage drug development including demonstrating efficacy; development time/cost and the regulatory approval process; the progress of our clinical trials; our ability to find and enter into agreements with potential partners; our ability to attract and retain key personnel; changing market conditions; and other risks detailed from time-to-time in our ongoing quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the United States Securities and Exchange Commission.

Should one or more of these risks or uncertainties materialize, or should the assumptions set out in the section entitled "Risk Factors" in our filings with Canadian securities regulators and the United States Securities and Exchange Commission 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 press release 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.

Lorus Therapeutics Inc.'s recent press releases are available through its website at www.lorusthera.com. For Lorus' regulatory filings on SEDAR, please go to www.Sedar.com. For SEDAR filings prior to July 10, 2007 you will find these under the company profile for Global Summit Real Estate Inc. (Old Lorus).

For further information, please contact:

Enquiries:

For further information, please contact:

Company Contact:

Elizabeth Williams, 416-798-1200 ext. 372; ewilliams@lorusthera.com

Investor Contact:

Stephen Kilmer, 905-906-6908, stephen@kilmerlucas.com

Media Contact:

Leonard Zehr, 905-690-2400 ext. 41; len@kilmerlucas.com

**NEWS RELEASE****Lorus Therapeutics Announces
Proposed Rights Offering and Financing Commitment**

TORONTO, CANADA, August 30, 2010 – Lorus Therapeutics Inc. (TSX: LOR; OTCBB: LRUSF) (“Lorus” or the “Company”) today announced that due to unfavorable market conditions the board of directors of Lorus has decided that the Company will not be proceeding with its previously announced public equity offering. In lieu thereof Lorus is intending to do a shareholder rights offering.

Under the proposed terms of the rights offering, shareholders of Lorus will receive one right for each common share held. The Company expects that two rights will enable the holder to purchase one unit, each unit consisting of one common share and one common share purchase warrant. The expected price per unit will be a 10% discount from the 20 day average trading price of the Lorus common shares at the time a final prospectus is filed with the Canadian securities commissions.

Each warrant will enable the holder to acquire one common share of Lorus at an exercise price (the “Exercise Price”) equal to 120% of the unit price for a period of 18 months after the closing of the proposed rights offering. If at any time from or after the initial six month period after closing of the rights offering the trading price of the common shares exceeds 175% of the Exercise Price for a period of 5 trading days, Lorus will have the right to cause the warrants to expire after a 30 day notice period.

The terms of the proposed rights offering may change and the proposed rights offering is subject to regulatory approval, including the approval of the Toronto Stock Exchange.

The Company has secured 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. Mr. Abramson has agreed to make an investment such that the minimum gross proceeds of the proposed rights offering are \$4 million.

Prior to the completion of the rights offering, Mr. Abramson has also agreed to provide the Company with interim financing by way of three \$500,000 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%. These funds will be used for general and working capital purposes. Pursuant to the requirements of Multilateral Instrument 61-101, Lorus is relying on an exemption to sections 5.5 and 5.7 of MI61-101, specifically, that the aggregate amount of loans received and committed does not exceed 25% of Lorus’s market capitalization of approximately \$13 million.

This news release shall not constitute an offer to sell or the solicitation of an offer to buy any securities of Lorus in any jurisdiction in which such offer, solicitation or sale would be unlawful. The securities referenced herein have not been and will not be registered under the United States Securities Act of 1933, as amended, or any state securities laws, and may not be offered or sold within the United States absent registration or an applicable exemption from the registration requirements of such Act or laws.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of Canadian and U.S. securities laws. Such statements include, but are not limited to, statements relating to the proposed rights offering (including the standby commitment) and interim financing described herein and other statements including words such as "continue", "expect", "intend", "will", "should", "would", "may", and other similar expressions. Such statements reflect our current views with respect to future events and are subject to risks and uncertainties and are necessarily 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 described in this press release. Such expressed or implied risk factors and assumptions could include, among others: our ability to continue to operate as a going concern; the failure of Mr. Abramson to advance loans, the failure to close the rights offering; the terms of the rights offering; the timing for closing of the rights offering, failure to obtain regulatory approval of the rights offering, our ability to obtain the capital required for research and operations; the possible adverse affect of continuing negative market conditions; and other risks detailed from time-to-time in our ongoing quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the United States Securities and Exchange Commission.

Should one or more of these risks or uncertainties materialize, or should the assumptions set out in the section entitled "Risk Factors" in our filings with Canadian securities regulators and the United States Securities and Exchange Commission 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 press release 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.

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