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

Report of Foreign Issuer

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

For the Month of July, 2009

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: July 27, 2009

By: /s/ "Elizabeth Williams"
Elizabeth Williams
Director of Finance and Controller

EXHIBIT INDEX

99.1	News Release dated July 27, 2009 - Lorus Therapeutics Reports Results for Fiscal Year 2009

NEWS RELEASE

Lorus Therapeutics Reports Results for Fiscal Year 2009

TORONTO, CANADA - July 27, 2009 - Lorus Therapeutics Inc. (Lorus), 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, 2009. Unless specified otherwise, all amounts are in Canadian dollars.

2009 HIGHLIGHTS

Corporate Highlights

- In June 2009, the Company reached a settlement with TEMIC with respect to the purchase and settlement of the $15.0 million convertible debentures. Under the agreement, Lorus purchased all of the debentures from TEMIC for a $3.3 million cash payment on close of the transaction, 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. Under the agreement, Lorus will be 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.
- Completed a rights offering to eligible shareholders raising net proceeds of $3.2 million.
- Received US$150 thousand milestone payment from Zor Pharmaceuticals under our Exclusive License Agreement for Virulizin and announced extension of this license agreement to include Central America.
- Received $600 thousand originally held in escrow in connection with Lorus' corporate reorganization completed on July 10, 2007. Lorus has received total net proceeds of $6.9 million in non-dilutive financing as part of this transaction.

Drug Development Highlights

- LOR-2040 Program:
  - Successfully completed GLP toxicology studies exploring a novel route of administration for LOR-2040 when administered by direct) administration into the bladder.
  - Publication by Ohio State University investigators of studies relating to LOR-2040 clinical development in Acute Myeloid Leukemia (AML), including results of Phase I clinical study demonstrating encouraging results with LOR-2040 in combination with high dose ara-C in AML patients, studies on LOR-2040 metabolism, and new supportive data confirming drug activity of LOR-2040 and high dose ara-C in AML patient samples.
  - Received Orphan Drug status for the treatment of AML by the Committee for Orphan Medicinal Products of the European Medicines Agency.
  - Announced results from clinical studies showing activity of LOR-2040 combined with capecitabine and oxaliplatin in advanced solid tumors, and identification of a novel biomarker associated with LOR-2040 activity in breast cancer.

- Continued to advance therapeutic potential of LOR-2040 in cancer through preclinical studies and collaborations. Announced that researchers at Ohio State University received a $2 Million US National Institutes of Health grant to evaluate a novel nanoparticle delivery technology with Lorus' oncology drugs including LOR-2040. Published results of preclinical studies showing that LOR-2040 improved anticancer effects of interferon in renal cell carcinoma, and established a Cooperative Research and Development Agreement with the U.S. National Cancer Institute for preclinical evaluation of Lorus' RNA-targeted drugs in the treatment of renal cell carcinomas.

- LOR-253 Program:
  - Successfully completed IND-enabling toxicology studies for LOR-253.

  - Presented preclinical data on LOR-253 anticancer mechanism of action at the Annual Meeting of the American Association for Cancer Research (AACR).

- Other Programs:
  - Provided an update on Virulizin, including allowance of a new patent in Mexico and publication of preclinical studies on Virulizin mechanism of action.

FINANCIAL RESULTS

Our loss from operations for the year ended May 31, 2009 decreased to $9.3 million ($0.04 per share) compared to $12.6 million ($0.06 per share) during the same period in fiscal 2008. During the year ended May 31, 2009 the Company recorded a gain on sale of shares related to the Arrangement (described below) of $450 thousand that resulted in a net loss and other comprehensive loss of $8.9 million ($0.04 per share) compared to a gain on the sale of the shares related to the Arrangement in the amount of $6.3 million resulting in net loss and other comprehensive loss for the year ended May 31, 2008 of $6.3 million ($0.03 per share).

The decrease in net loss from operations for the year ended May 31, 2009 compared with the prior year is due primarily to lower research and development costs of $2.5 million resulting from less spending on GLP-toxicity studies as well as drug manufacturing costs, lower general and administrative costs of $757 thousand due to reduced legal costs as well as lower stock based compensation costs of $273 thousand as a result of one time option grants in the third quarter of 2008 and option modification costs incurred in the second quarter of 2008. Interest income decreased by $272 thousand in 2009 to $270 thousand as a result of lower cash and investment balances and lower interest rates.

We utilized cash of $7.2 million in our operating activities in the year ended May 31, 2009 compared with $10.2 million in the prior year. The decrease is primarily a result of a reduced net loss offset by lower accounts payable and accrued liabilities balances in the current year.

Research and development expenses totaled $3.8 million in the year ended May 31, 2009 compared to $6.3 million during the prior year. The decrease in spending during the year ended May 31, 2009 compared with the prior year on our ongoing research programs is due to the completion of GLP-toxicity studies for both our LOR-2040 bladder cancer and LOR-253 small molecule programs. In 2009, manufacturing costs were lower as we manufactured LOR-253 drug in the current year which is significantly less than LOR-2040 drug manufactured in the prior year.

At May 31, 2009, Lorus had cash, cash equivalents and short-term investments totaling $5.9 million compared to $9.4 million at May 31, 2008. Working capital (representing primarily cash, cash equivalents, short term investments and other current assets less current liabilities which included the secured convertible debenture which were due October 6, 2009) at May 31, 2009 was a deficiency of $9.1 million as compared to a surplus of $8.0 million at May 31, 2008. Subsequent to the year-end Lorus repurchased the entire 15.0 million of secured convertible debentures for $3.3 million in cash and other consideration described above.

Following the extinguishment of the secured convertible debentures, 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. The Company is currently in discussion with several parties with a view to obtaining additional funding. Management believes that it will complete one or more of these arrangements 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.

"This past year has been a very challenging one for us and most members of the biotech sector. We are excited by the progress that we have made on our pipeline, and we are excited at having resolved our convertible debentures that was a significant impediment in allowing Lorus to secure additional funding, partnerships and strategic alliances," said Aiping Young, Lorus' President and CEO. "In light of the current situation, we have further reduced our burn rate subsequent to the year end without significantly compromising our research programs. We are now actively seeking additional investment or other opportunities in order to fully execute on our business strategy and add value to our shareholders."

Lorus Therapeutics Inc.

Consolidated Statements of Loss
(amounts in 000's except for per common share data)

(Canadian dollars)	Years Ended May 31 **2009**	2008	2007
REVENUE	**$ 184**	$ 43	$ 107
EXPENSES			
Cost of sales	**-**	2	16
Research and development	**3,757**	6,260	3,384
General and administrative	**2,958**	3,715	3,848
Stock-based compensation	**446**	719	503
Depreciation and amortization of fixed assets	**189**	317	402
Operating expenses	**7,350**	11,013	8,153
Interest expense on convertible debentures	**707**	1,029	1,050
Accretion in carrying value of convertible debentures	**1,707**	1,176	935
Amortization of deferred financing charges	**-**	-	110
Interest income	**(270)**	(542)	(503)
Loss from operation for the period	**9,310**	12,633	9,638
(Gain) on sale of shares	**(450)**	(6,299)	-
Net (earnings)/loss and other comprehensive income for the period	**8,860**	6,334	9,638
Basic and diluted loss per common share	**$ 0.04**	$ 0.03	$ 0.05
Weighted average number of common shares outstanding used in the calculation of basic and diluted loss per share	**247,084**	215,084	204,860

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 reflect 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.

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 and corporate reorganizations, 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; 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:

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