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 February, 2013

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-_____

SIGNATURE

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

Lorus Therapeutics Inc.

Date: February 13, 2013

By: /s/ "Elizabeth Williams" Elizabeth Williams

Elizabeth Williams Director of Finance and Controller

EXHIBIT INDEX

99.1 News Release Dated February 12, 2013 - Lorus Therapeutics to Present LOR-253 Data at 2013 AACR Annual Meeting

Exhibit 99.1



NEWS RELEASE

Lorus Therapeutics to Present LOR-253 Data at 2013 AACR Annual Meeting

TORONTO, CANADA, February 12, 2013 - Lorus Therapeutics Inc. (TSX: LOR) ("Lorus"), a biopharmaceutical company specializing in the discovery, research and development of pharmaceutical products and technologies for the management of cancer, today announced that biomarker data for its lead cancer therapy, LOR-253, will be presented at the 2013 Annual Meeting of the American Association for Cancer Research (AACR). The AACR Annual Meeting 2013 will be held in Washington, DC from April 6 - 10, 2013.

Lorus will present the results of new studies designed to validate Kruppel-like Factor 4 (KLF4) as a tumor biomarker of LOR-253 activity in non-small cell lung cancer (NSCLC). The study results demonstrate that tumor levels of KLF4 increase with anticancer activity of LOR-253 in animal models of human NSCLC. The studies, which were conducted with the same dosing schedule for LOR-253 used in the Phase I clinical trial, provide support for the use of KLF4 as a marker for tumor response to this drug.

This research is important in conjunction with the biomarker study that Lorus announced was initiated in January of this year following successful dose escalation to the target dose level without limitation by toxicity. The additional 10 patient biomarker study, conducted at Memorial Sloan Kettering Cancer Center and MD Anderson Cancer Center is focusing on the same indications of NSCLC and colon cancer that have achieved excellent target related antitumor activity in the preclinical program.

About LOR-253

LOR-253 represents a new class of anticancer agent, which we believe may offer a competitive advantage over conventional drugs. This drug candidate has shown selective and potent antitumor activity in preclinical investigations with a variety of human cancers, including colon cancer and non-small cell lung cancer, and has demonstrated an excellent therapeutic window due to its low toxicity. LOR-253 is a first-in-class small molecule that has been optimized to induce the novel tumor suppressor Krüppel-like factor 4 (KLF4), leading to cancer cell cycle arrest and apoptosis as well as inhibition of metastasis.

About Lorus

Lorus is a biopharmaceutical company focused on the discovery, 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. The Company also has expertise in antimicrobial drug discovery. Lorus Therapeutics Inc. is listed on the Toronto Stock Exchange under the symbol LOR.

Forward Looking Statements

This press release may contain forward-looking statements within the meaning of Canadian and U.S. securities laws. Such statements include, but are not limited to, statements relating to: our research program plans, the successful and timely completion of clinical studies and the regulatory approval process, our ability to continue as a going concern, our ability to fund future research, the Company's plans, objectives, expectations and intentions and other statements including words such as "continue", "believe", "plan", "expect", "intend", "will", "should", "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 that may be expressed or implied by such forward-looking statements, including, among others: our ability to continue 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 Annual Information Form 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 the Company's website at www.lorusthera.com. For Lorus' regulatory filings on SEDAR, please go to www.Sedar.com.

Enquiries:

For further information, please contact:

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