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 May, 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: May 19, 2010

By: /s/ "Elizabeth Williams"

Elizabeth Williams Director of Finance and Controller

EXHIBIT INDEX

99.1 Lorus Therapeutics Inc. - 2009 ALTERNATE COMPENSATION PLAN

2009 ALTERNATE COMPENSATION PLAN LORUS THERAPEUTICS INC.

ARTICLE 1 PURPOSE AND INTERPRETATION

1.1 Purpose

The purpose of this Plan is to advance the interests of Lorus by (i) encouraging its Plan Participants to acquire Shares thereby increasing the proprietary interests of such persons in Lorus and aligning the interests of such persons with the interests of Lorus' shareholders generally; and (ii) preserving Lorus' resources while meeting Lorus' obligations to Directors and Senior Management Employees.

1.2 Administration

- (a) The Board or a Committee of the Board duly appointed for this purpose by the Board and consisting of not less than 2 Directors will administer this Plan. If a Committee is appointed for this purpose, all references to the term "Board" will be deemed to be references to the Committee.
- (b) Subject to the limitations of this Plan, the Board in its sole and absolute discretion, but subject to applicable corporate securities and tax law requirements, has the authority:
 - (2) to grant Shares to Plan Participants under the Plan;
 - (3) to determine the terms, including the limitations, restrictions and conditions, if any, upon such grants;
 - (4) to interpret this Plan and to adopt, amend and rescind such administrative guidelines and other rules and regulations relating to this Plan as it may from time to time deem advisable, subject to required prior approval by any applicable regulatory authority; and
 - (5) to make all other determinations and to take all other actions in connection with the implementation and administration of this Plan as it may deem necessary or advisable. The Board's guidelines, rules, regulations, interpretations and determinations will be conclusive and binding upon all parties.
- (c) The Board has the authority to appoint a Plan Administrator to administer the Plan and provide periodic updates and summaries to the Board.

1.3 Interpretation

- For the purposes herein, the following terms have the meanings ascribed thereto as follows:
 - (a) "Board of Directors" or "Board" means the board of Directors of Lorus;
 - (b) "Committee" means a committee of the Board of Lorus;
 - (c) "Shares" means the common shares in the capital of Lorus;



- (d) "Director" means a person who is elected or appointed as a director of Lorus from time to time;
- (e) **"Insider"** means:
 - (i) an insider as defined in the Securities Act (Ontario), other than a person who falls within that definition solely by virtue of being a director or senior officer of a Subsidiary; and
 - (ii) an associate, as defined in the Securities Act (Ontario), of any person who is an Insider by virtue of (i) above;
- (f) "Lorus" means Lorus Therapeutics Inc.;
- (g) "Management Director" means a Director of Lorus who is also a Senior Management Employee;
- (h) "Non-Management Director" means a Director who is not otherwise an officer or employee of Lorus;
- (i) "Options" means an option to purchase securities of Lorus issued by Lorus from treasury;
- (j) "Plan" means this incentive compensation plan;
- (k) "Plan Administrator" means the Director of Finance or other such employee of Lorus having the authority of the Board to administer the Plan and received "Notice of Intention to Receive Shares in lieu of Cash" or "Notice to Receive Shares from the Plan" and cause to be issued such shares;
- (1) "Plan Participant" means a Director or Senior Management Employee of Lorus;
- (m) "Remuneration" means amounts paid to Plan Participants defined in paragraph 2.2 Plan Participants' Remuneration that is not an Option;
 - (n) "Senior Management Employee" means an employee of Lorus who is an officer of Lorus, holds the title "Director" as is currently defined in Lorus' job descriptions or determined at the discretion of Lorus' President and Chief Executive Officer; and
 - (o) "Share Compensation Arrangement" means any stock option, stock option plan, employee stock purchase plan, restricted share plan or any other compensation or incentive mechanism involving the issuance or potential issuance of Shares to one or more Participants;

Words importing the singular number include the plural and vice versa and words importing the masculine gender include the feminine.

This Plan is to be governed by and interpreted in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

1.4 Shares Available for Issuance

The maximum number of Shares available to be issued under the Plan when combined with all other Share Compensation Arrangements is 15% of Lorus' issued and outstanding Shares at any given time.

ARTICLE 2 ALTERNATIVE COMPENSATION PLAN

2.1 Voluntary Plan Participation

Participation and the Plan is voluntary at the option of the Director or Senior Management Employee and, should they become a Plan Participant, the amount of Remuneration to be received in Shares in lieu of cash is solely at their discretion.

2.2 Plan Participants' Remuneration

The Compensation Committee of the Board has approved remuneration for each Non-Management Director whereby Each Non-Management Director receives an annual retainer and fees for providing services on a quarterly or per-meeting basis that is paid in cash and is granted Options to purchase Shares. Non-Management Directors also receive reimbursement for any out-of-pocket travel expenses incurred in order to attend meetings and may, with Board approval, provide consulting services for a fee to Lorus from time-to-time. Management Directors of Lorus are not currently entitled to compensation for attending meetings of the Board or Committees. Senior Management Employees are remunerated through a combination of salary, performance-based Options and an annual bonus.

2.3 Issuance of Shares

The Plan Participants may elect to receive up to 100% of their Remuneration in Shares in lieu of cash compensation.

2.4 Calculation of Number of Shares to be Issued

The number of Shares to be issued in lieu of cash compensation shall be determined based on the following

Remuneration to be received in Shares in lieu of cash divided by the closing weighted average Share price for the five (5) trading days prior to payment date.

The payment date shall be the later of: (a) the date prescribed in the Notice to Receive Shares in Lieu of Cash, as defined below, and (b) the day following any blackout or quiet period as defined the Lorus' Disclosure and Trading Policy or subject to any trading restrictions there under.

2.5 Notice to Receive Shares in Lieu of Cash Remuneration

Plan Participants may at anytime provide notice to the Plan Administrator of their intention to receive some or all of their Remuneration in Shares. Such notice as provided in Appendix A and may provide for a one-time or ongoing receipt of Remuneration in Shares. An ongoing receipt shall define the frequency and amount of Remuneration to be received in Shares and may be revoked by the Plan Participant at any time by providing written notice to the Plan Administrator.

3

2.6 Notice to Withdraw Shares

Plan Participants may at anytime provide notice of their desire to receive some or all of their Shares accumulated under the Plan upon providing written notice to the Plan Administrator. Such notice as provided in Appendix B. Upon receipt of notice, the Plan Administrator shall provide such shares on the latter of five (5) business days following receipt of notice or the date specified in the notice.

2.7 First Trade of Shares

Shares received by Plan Participants under the Plan shall be subject to blackout, quite period or trading restrictions as defined in Lorus' Disclosure and Trading Policy and subject to any hold or other restricted periods set out in securities and other legislation.

2.8 Fluctuation in Share Price

No amount will be paid to, or in respect of, a Plan Participant under the Plan to compensate for a downward fluctuation in the price of the Shares nor will any other form of benefit be conferred upon, or in respect of, a Plan Participant for such purposes.

ARTICLE 3 GENERAL AND ADMINISTRATION

3.1 Non-Exclusivity

Nothing contained herein will prevent the Board from adopting other or additional compensation arrangements for the benefit of any Director or Senior Management Employee of Lorus, subject to any required regulatory or shareholder approval.

3.2 Cessation of Entitlement under the Plan

Upon ceasing to become a Director or Senior Management Employee such Plan Participant will no longer be eligible to receive Shares under this Plan and any amounts owing to such Director shall be paid without reference to the Plan.

3.3 Amendment and Termination

- (a) The Board may, at any time and from time to time, amend, suspend or terminate the Plan without shareholder approval, provided that no such amendment, suspension or termination may be made without obtaining any required approval of any regulatory authority or stock exchange.
- (b) Notwithstanding the provisions of Section 3.3(a), the Board may not, without the approval of the shareholders of the Corporation, make amendments to the Plan for any of the following purposes:
 - (i) to increase the maximum number of Shares issuable under the Plan; or
 - (ii) to amend the provisions of this Section 3.3(b).

3.4 Limits with respect to Insiders

For the purposes of this Section 3.4,

- (a) a share compensation arrangement ("Share Compensation Arrangement") means any stock option, stock plan, employee stock purchase plan or any other compensation or incentive mechanism involving the issuance or potential issuance of Shares, including a share purchase from treasury which is financially assisted by the Corporation by way of a loan, guarantee or otherwise;
- (b) holders of non-voting and subordinate voting shares, must be entitled to vote with the holders of any class of shares of the Corporation which otherwise carry greater voting rights, on a basis proportionate to their respective residual equity interests in the Corporation;
- (c) any entitlement to acquire Shares granted pursuant to the Plan or any other Share Compensation Arrangement prior to the grantee becoming an Insider is to be excluded;
- (d) the number of Shares outstanding is to be determined on the basis of the number of Shares outstanding at the time of the reservation or issuance, as the case may be, excluding Shares issued under the Plan or under any other Share Compensation Arrangement over the preceding one-year period.



- (a) the maximum number of Shares that may be reserved for issuance to Insiders pursuant to the Plan and any other previously established or proposed Share Compensation Arrangement is 10% of the number of Shares outstanding;
- (b) the maximum number of Shares that may be issued to Insiders under the Plan and any other previously established or proposed Share Compensation Arrangement within a one-year period is 10% of the number of Shares outstanding;
- (c) the total number of Shares which may be reserved for issuance to any one individual under the Plan shall not exceed 5% of the total number of issued and outstanding Shares (on a non-diluted basis), including Shares reserved for issuance under employee stock option plans, options for services and employee stock purchase plans.

If a proposed Share Compensation Arrangement, together with all of the Corporation's other previously established or proposed Share Compensation Arrangements, could result, at any time, in the number of shares reserved for issuance pursuant to stock options granted to Insiders exceeding 10% of the outstanding issue, the Share Compensation Arrangement must be approved by a majority of the votes cast at the shareholders' meeting other than votes attaching to securities beneficially owned by Insiders.

3.5 Compliance with Legislation; Governing Law

The obligation of Lorus to issue and deliver Shares in accordance with this Alternative Compensation Plan is subject to applicable securities law, stock exchange or market on which the Shares trade, any trading black-out periods prescribed by Lorus and the receipt of any approvals that may be required from any regulator or market having jurisdiction over the securities of Lorus. If Shares cannot be issued by Lorus hereunder for any reason whatsoever, the obligation of Lorus to issue such Shares shall be suspended until such time as it is practicable for Lorus to issue such Shares. The Plan shall be governed by and construed in accordance with the laws of the Province of Ontario.

3.6 Effective Date

This Plan will become effective immediately upon approval of the Board, subject to any required regulatory and shareholder approval.

3.7 Record Keeping

The Plan Administrator shall maintain a register in which shall be recorded:

- (a) the name and address of each Plan Participant; and
- (b) the number of Shares issued to all Plan Participants in this Plan.

A summary of the transactions under the Plan shall be provided to the Board at each quarterly meeting of the Board and the Board shall, confirm, ratify and approve the issuance of such shares at each meeting.



APPENDIX A LORUS THERAPEUTICS INC. 2009 ALTERNATIVE COMPENSATION PLAN

NOTICE TO RECEIVE SHARES IN LIEU OF CASH REMUNERATION

TO: Lorus Therapeutics Inc. (the "Corporation") 2 Meridian Road Toronto, Ontario M9W 4Z7 Attention: Plan Administrator

RE: Notice to receives Share in lieu of cash Remuneration

I, hereby, give notice that I wish to participate in the 2009 Alternative Compensation Plan (the "Plan") as follows:

1. One-time receipt of Shares in lieu of cash:

In accordance with the Plan, I would like to receive the following Remuneration amount in Shares of the Corporation:

Remuneration Type:	Amount of Remuneration	Expected payment date	Amount in lieu of cash (\$ or %)

OR

2. Ongoing receipt of Shares in lieu of cash

In accordance with the Plan, I would like to receive the following the following Remuneration amounts in Shares of the Corporation:

Remuneration Type:	Amount of Remuneration	Expected payment dates/frequency	Amount in lieu of cash (\$ or %)

I am resident at the address set out below; I have received a copy of the Plan; I confirm that I am eligible under the Plan and am agreeing to be bound by all terms of those agreements. I understand that I may revoke my ongoing receipt of Shares in lieu of cash at any time.

All capitalized terms used in this exercise and subscription form and not otherwise defined have the meanings given to them in the Plan.

Signature:	
Name (print):	
Address:	
Date:	

APPENDIX B LORUS THERAPEUTICS INC. 2009 ALTERNATIVE COMPENSATION PLAN

NOTICE TO WITHDRAW SHARES

TO: Lorus Therapeutics Inc. (the "Corporation") 2 Meridian Road Toronto, Ontario M9W 4Z7 Attention: Plan Administrator

RE: Notice to withdraw Share from the Alternative Compensation Plan

I, hereby, give notice that I wish to withdraw Share to which I am entitled under the 2009 Alternative Compensation Plan (the "Plan") as follows:

In accordance with the Plan, I would like to receive the following Remuneration amount in Shares of the Corporation:

Number of Shares to withdraw	Requested Receipt Date
(All or specify an amount)	(If not immediate)

I am resident at the address set out below; I have received a copy of the Plan; I confirm that I am eligible under the Plan and am bound by all terms of those agreements. I understand that my receipt of Shares and ability to trade such shares are subject to the terms of the Corporation's Disclosure and Trading Policy.

9

Article I. All capitalized terms used in this exercise and subscription form and not otherwise defined have the meanings given to them in the Plan.

Signature:

Name (print):

Address:

Date:

Article II.

Share delivery instructions: