

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES  
PURSUANT TO SECTION 12(b) OR 12(g) OF THE  
SECURITIES EXCHANGE ACT OF 1934

LORUS THERAPEUTICS INC.

(Exact name of the Registrant as specified in its charter)

ONTARIO, CANADA

N/A

(State of incorporation or organization)

(I.R.S. Employer Identification No.)

2 MERIDIAN ROAD, TORONTO, ONTARIO, CANADA

M9W 4Z7

(Address of principal executive offices)

(Zip Code)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box. [X]

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), please check the following box. [ ]

Securities Act registration statement file number to which this form relates:  
None

Securities to be registered pursuant to Section 12(b) of the Act:

Title of Each Class To be so Registered	Name of Each Exchange on Which Each Class is to be Registered
Common Shares, without par value	American Stock Exchange

Securities to be registered pursuant to Section 12(g) of the Act:

NONE  
(Title of Class)

INFORMATION REQUIRED IN REGISTRATION STATEMENT

ITEM 1. DESCRIPTION OF REGISTRANT'S SECURITIES TO BE REGISTERED.

This Registrant Statement relates to the Common Shares, without par value, of the registrant. A complete description of the Common Shares is set forth in the Registration Statement on Form 20-F of the registrant, filed by the registrant in December 1991 under the Securities Exchange Act of 1934. By this reference, such description is incorporated herein and made a part hereof.

ITEM 2. EXHIBITS.

None.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereto duly authorized.

LORUS THERAPEUTICS INC.

By: /s/ Shane A. Ellis

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Name: Shane A. Ellis  
Title: V.P., Legal Affairs and  
Corporate Secretary

Dated: February 16, 2004