UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER

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

For the month of May, 2005

Commission File Number: 000-31092

MEDICURE INC.

(Translation of registrant s name into English)

4-1200 Waverley Street Winnipeg, MB Canada R3T 0P4

(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 x Form 40-F "

(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 x

If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-

SUBMITTED HEREWITH

Exhibits

99.1 Press Release dated May 5, 2005

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.

MEDICURE INC.

Date: May 5, 2005

By: /s/ Dr. Albert D. Friesen Dr. Albert D. Friesen *President & CEO*