UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 15, 2004

ENZON PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

| Delaware | 0-12957 | 22-2372868 |
|---|---|---|
| (State or other jurisdiction of incorporation) | (Commission File Number) | (IRS Employer Identification) |

685 Route 202/206, Bridgewater, New Jersey 08807
(Address of principal executive offices) (Zip Code)

(Registrant's telephone number, including area code: (908) 541-8600

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(Former name or former address, if changed since last report)

Item 5. Other Events

INEX Pharmaceuticals Corporation ("INEX"; TSX: IEX) and Enzon Pharmaceuticals Inc. ("Enzon"; NASDAQ: ENZN) announced today that they have submitted the final section of a "rolling submission" of a New Drug Application (NDA) to the United States Food and Drug Administration (FDA). The NDA is seeking marketing approval for Onco TCS as a single-agent treatment for patients with relapsed aggressive non-Hodgkin's lymphoma (NHL) previously treated with at least two combination chemotherapy regimens. The final section contained data gathered from clinical trials conducted with Onco TCS.

INEX has requested that the Onco TCS NDA be granted a Priority Review as it is a product intended to address an unmet medical need. Applications that are granted Priority Review status are targeted for action by the FDA within six months from the date that the submission is complete.

INEX and Enzon will hear from the FDA within 60 days as to whether or not the submission has been accepted for review and given Priority Review status.

About Onco TCS

In the completed multi center pivotal phase II/III trial for Onco TCS, 119 patients with aggressive NHL were treated who had not responded to their previous therapy or had responded and subsequently relapsed. After treatment, an overall response rate of 25% was attained. Currently, there is no effective treatment for patients with aggressive NHL that have relapsed following at least two prior treatment regimens.

The results of this pivotal trial were released in June 2003 and presented in December 2003 at the American Society of Hematology annual conference along with interim results from two ongoing phase II trials in relapsed Hodgkin's disease and relapsed B-cell lymphoma.

Onco TCS is a proprietary drug comprised of the widely used off-patent anticancer drug vincristine encapsulated in INEX's TCS (liposomal) drug delivery technology. The TCS technology provides prolonged blood circulation, tumor accumulation and extended drug release at the cancer site. These characteristics are designed to increase the effectiveness and reduce the side effects of the encapsulated drug.

In addition to the lead indication, relapsed aggressive NHL, Enzon and INEX intend to develop Onco TCS for use as a single-agent therapy or in combination therapy for several cancers in which vincristine is now used.

Onco TCS is being evaluated in several phase II clinical trials as a treatment for first-line NHL, relapsed small cell lung cancer, relapsed Hodgkin's disease, relapsed acute lymphoblastic leukemia, relapsed pediatric malignancies, relapsed NHL in combination with the approved cancer drug Rituxan(R) (rituximab), and relapsed NHL in combination with the approved cancer drug etoposide.

In January 2004, Enzon and INEX announced a strategic partnership to develop and commercialize Onco TCS. Under the terms of the agreement, Enzon has the exclusive North

American commercialization rights for Onco TCS for all indications, subject to certain co-promotion rights of Inex. INEX retains commercialization rights outside North America.

INEX received a US$12 million up-front payment and will receive up to a US$20 million payment upon Onco TCS receiving approval from the FDA. Additional development milestones and sales-based bonus payments could total US$43.75 million. INEX will also receive a percentage of sales of Onco TCS and this percentage will increase as sales reach certain predetermined thresholds.

About Non-Hodgkin's Lymphoma (NHL)

NHL is the fifth-leading cause of cancer deaths in the United States (23,400 estimated in 2003) and the sixth-leading cause of cancer deaths in Canada (2,800 estimated in 2003), according to estimates of the American Cancer Society and the Canadian Cancer Society. Approximately 53,400 and 6,400 new cases were diagnosed in the U.S. and Canada respectively in 2003.

About INEX

INEX is a Canadian biopharmaceutical company developing and commercializing proprietary drugs and drug delivery systems to improve the treatment of cancer.

About Enzon

Enzon Pharmaceuticals is a biopharmaceutical company dedicated to the discovery, development and commercialization of therapeutics to treat life-threatening diseases.

There are forward-looking statements contained herein that are not based on historical fact, including without limitation statements containing the words "believes," "may," "plans," "will," "estimate," "continue," "anticipates," "intends," "expects," and similar expressions. Such forward looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, events or developments to be materially different from future results, events or developments described in the forward looking statements. Such factors include the risk that Onco TCS may not receive Priority Review status or regulatory approval from the FDA, as well as those described in Enzon's Form 10-K and Forms 10-Q on file with the SEC and INEX's publicly filed periodic reports and others, such as, (i) as to Enzon, Enzon's ability to successfully launch and market Onco TCS, Enzon's ability to sustain profitability, and positive cash flow; risks in obtaining and maintaining regulatory approval for indications and expanded indications for Enzon's products; market acceptance of and continuing demand for Enzon's products; timing and results of clinical trials and the impact of competitive products and pricing and (ii) as to INEX, INEX's stage of development, lack of product revenues, additional capital requirements, risks associated with the completion of clinical trials and obtaining regulatory approval to market INEX's products, risks associated with the failure to secure all necessary intellectual property from third parties, the ability to protect its intellectual property and dependence on collaborative partners. These factors should be considered carefully and readers are cautioned not to place undue reliance on such forward-looking statements. All information in this press release is as of March 15, 2004, and Enzon and INEX undertake no duty to update this information.

This release is also available at http://www.enzon.com and
http://www.inexpharm.com

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 hereunto duly authorized.

Dated: March 17, 2004

By: /s/ Kenneth J. Zuerblis
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Kenneth J. Zuerblis
Vice President, Finance and
Chief Financial Officer

Exhibit 99.1

[LOGO] ENZON PHARMACEUTICALS For Immediate Release

PRESS RELEASE

Contact: Susan Mesco
Director, Investor Relations
908-541-8678

Euro RSCG Life NRP
Mark R. Vincent, Media Relations
212-845-4239

INEX and Enzon Complete the Filing of a New Drug Application for Onco TCS

Bridgewater, NJ, and Vancouver, Canada - March 15, 2004 - INEX Pharmaceuticals Corporation ("INEX"; TSX: IEX) and Enzon Pharmaceuticals Inc. ("Enzon"; NASDAQ: ENZN) announced today that they have submitted the final section of a "rolling submission" of a New Drug Application (NDA) to the United States Food and Drug Administration (FDA). The NDA is seeking marketing approval for Onco TCS as a single-agent treatment for patients with relapsed aggressive non-Hodgkin's lymphoma (NHL) previously treated with at least two combination chemotherapy regimens. The final section contained data gathered from clinical trials conducted with Onco TCS.

INEX has requested that the Onco TCS NDA be granted a Priority Review as it is a product intended to address an unmet medical need. Applications that are granted Priority Review status are targeted for action by the FDA within six months from the date that the submission is complete.

David Main, President and CEO of INEX said, "The completion of the filing of the NDA is a significant achievement and signals the start of the six-month regulatory review phase to seek approval for Onco TCS as a treatment for relapsed aggressive NHL. This is an important step forward for these patients who have very few treatment options."

Arthur Higgins, Enzon's chairman and chief executive officer, said, "The submission of the third and final piece of this NDA supports our commitment to advance this important therapy to the market place. We are eager to continue to investigate this exciting product's potential in indications beyond relapsed aggressive NHL."

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