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): October 22, 2004

ENZON PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware 0-12957 22-2372868 (State or other jurisdiction of incorporation) File Number) 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)

- |_| Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- |_| Soliciting material pursuant to Rule 14a-12 under the Securities Act (17 CFR 240.14a-12)
- |_| Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- |_| Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events

Enzon Pharmaceuticals, Inc. (Nasdaq: ENZN) reported today that Schering-Plough Corporation (NYSE: SGP) announced today that its subsidiary in Japan, has received marketing approval for PEG-INTRON(R) (peginterferon alfa-2b) Powder for Injection for use in combination with REBETOL(R) (ribavirin) Capsules for the treatment of chronic hepatitis C. PEG-INTRON and REBETOL combination therapy is the first and only pegylated interferon-based combination therapy approved in Japan. An estimated 1 to 2 million Japanese are chronically infected with hepatitis C. PEG-INTRON is a longer-acting form of INTRON(R) A (interferon alfa-2b, recombinant) Injection that uses proprietary PEG technology developed by Enzon. Under the Company's licensing agreement with Schering-Plough, Enzon is entitled to royalties on worldwide sales of PEG-INTRON. Schering-Plough holds an exclusive worldwide license to PEG-INTRON.

The approval by the Ministry of Health, Labor and Welfare (MHLW) follows a priority review. PEG-INTRON will become available in Japan upon National Health Insurance Reimbursement price listing.

PEG-INTRON, which is administered once weekly in combination with REBETOL daily for 48 weeks, is indicated in patients chronically infected with hepatitis C virus (HCV) genotype 1 (genotype 1a or 1b) and high viral load. HCV genotype 1 is considered the most difficult-to-treat form of hepatitis C and is the most common form in Japan, accounting for approximately 60 percent of all HCV infections there.

Importantly, PEG-INTRON is the only peginterferon product approved in Japan for which a blood test is not required before every injection.

In the Japanese clinical study supporting the approval, 48 weeks of PEG-INTRON and REBETOL combination therapy achieved a sustained virologic response (SVR)(1) rate of 48% in patients with HCV genotype 1 and high viral loads. An SVR rate of 63 percent was achieved with PEG-INTRON and REBETOL in the portion of these

patients who had relapsed following previous interferon treatment.

Hepatitis C is the leading cause in Japan of chronic liver disease, cirrhosis, and hepatocellular carcinoma, which is associated with more than 30,000 deaths there annually. Hepatitis C is the most common reason for liver transplant in major world markets, including Japan, according to the World Health Organization (WHO).

PEG-INTRON, recombinant interferon alfa-2b linked to a 12,000 dalton polyethylene glycol (PEG) molecule, is a once-weekly therapy dosed according to patient body weight that is designed to achieve an effective balance between antiviral activity and elimination half-life. PEG-INTRON is a longer-acting form of INTRON(R) A (interferon alfa-2b, recombinant) Injection.

REBETOL is an oral formulation of ribavirin, a synthetic nucleoside analog with broad-spectrum antiviral activity. Schering-Plough K.K. currently markets REBETOL in Japan for use in combination with INTRON A for chronic hepatitis C.

In the United States, PEG-INTRON and REBETOL combination therapy is indicated for the treatment of chronic hepatitis C in patients with compensated liver disease who have not been previously treated with interferon alpha and are at least 18 years of age.

About Enzon

Enzon Pharmaceuticals is a biopharmaceutical company dedicated to the discovery, development and commercialization of therapeutics to treat life-threatening diseases. The Company has developed or acquired a number of marketed products, including PEG-INTRON(R), marketed by Schering-Plough, and ABELCET(R), $\mathsf{ONCASPAR}(R)$, $\mathsf{ADAGEN}(R)$, and $\mathsf{DEPOCYT}(R)$, marketed in North America by $\mathsf{Enzon's}$ specialized sales force. Enzon's science-driven strategy includes an extensive drug development program that leverages the Company's macromolecular engineering technology platforms, including PEG modification and single-chain antibody (SCA(R)) technologies. Internal research and development efforts are complemented by strategic transactions that provide access to additional marketed products and promising clinical compounds. Enzon has several drug candidates in various stages of development, independently and with partners, including Margibo(R) (formerly referred to as Onco TCS), for which a U.S. marketing application is currently being reviewed by the FDA for the treatment of relapsed aggressive non-Hodgkin's lymphoma. Further information about Enzon can be found on the Company's web site at www.enzon.com.

The statements above regarding the regulatory process in Japan and the availability of PEG-INTRON in Japan are forward looking statements, not based on historical or current fact. Such forward-looking statement are subject to known and unknown risks, uncertainties and other factors that may cause actual results, events or developments to be materially different from the future results, events or developments discussed above.

All information in this press release is as of October 22, 2004 and the Company undertakes no duty to update this information.

(1) SVR is defined as the sustained undetectability of the hepatitis ${\tt C}$ virus for six months following therapy.

Item 9.01 Financial Statements and Exhibits

Exhibit 99.1 Press Release dated October 22, 2004

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: October 22, 2004

Kenneth J. Zuerblis Vice President, Finance and Chief Financial Officer ENZON PHARMACEUTICALS

PHARMACEUTICALS For Immediate Release

PRESS RELEASE

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Director, Investor Relations

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ENZON REPORTS THAT SCHERING-PLOUGH ANNOUNCES PEG-INTRON(R)
APPROVED IN JAPAN FOR USE IN COMBINATION WITH REBETOL(R) FOR
CHRONIC HEPATITIS C

First and Only Peginterferon Combination Therapy Approved in Japan More Than 1 Million Japanese Infected With Hepatitis C Virus

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Japan PEG-INTRON/Page 2

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Japan PEG-INTRON/Page 3

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