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)

December 21, 2010

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 No.) (IRS Identification No.)

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

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

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

Item 8.01 Other Events.

On December 21, 2010, Enzon Pharmaceuticals, Inc. (the "Company") issued a press release announcing the approval by the Company's board of directors of a stock repurchase program for the repurchase of up to \$200 million of the Company's common stock. There can be no assurance as to the number of shares the Company will repurchase, if any.

A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

99.1 Press Release Dated December 21, 2010

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: December 21, 2010

By: /s/ Andrew Rackear

Andrew Rackear

Vice President and General Counsel



Contact:

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Enzon Board Authorizes Share Repurchase Program

BRIDGEWATER, N.J. December 21, 2010 – Enzon Pharmaceuticals, Inc. (Nasdaq: ENZN) today announced that the Company's Board of Directors has authorized the purchase of up to \$200 million of outstanding shares of the Company's common stock. No date was established for completion of the share repurchase program. The expectation is that the program will extend over a number of calendar quarters. The Company also announced that its previously authorized \$50 million share repurchase program, announced in December 2009, was recently completed in full.

The \$200 million share repurchase program will be funded from the Company's available cash and investments. As of September 30, 2010, the Company had cash, cash equivalents, short-term investments and marketable securities of \$484.6 million.

"Enzon will use this program to return value to shareholders at times and at prices that reflect a disciplined approach to share repurchases, "stated Alexander J. Denner, Ph.D., Chairman of Enzon's Board of Directors. "The Board and management continue to explore ways of advancing Enzon's portfolio of novel oncology product candidates while improving operating efficiencies."

Stock repurchases under this program may be made through open market or privately negotiated transactions at such times and in such amounts as the Company deems appropriate, based on a variety of factors such as price, corporate and regulatory requirements and overall market conditions. There can be no assurance as to the number of shares the Company will purchase, if any. The stock repurchase program may be modified, suspended or terminated at any time without prior notice.

About Enzon

Enzon Pharmaceuticals, Inc. is a biopharmaceutical company dedicated to the research and development of innovative medicines for patients with cancer. Enzon's drug development programs utilize several approaches, including its cutting-edge proprietary Customized Linker technology utilizing PEGylation and mRNA antagonists using the Locked Nucleic Acid technology. Enzon receives a royalty revenue stream from licensing arrangements for other products developed using the proprietary Customized Linker Technology. Further information about Enzon and this press release can be found on the Company's web site at www.enzon.com.

Forward Looking Statements

There are forward-looking statements contained herein, which can be identified by the use of forward-looking terminology such as the words "believes," "expects," "may," "will," "should," "potential," "anticipates," "plans," or "intends" 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 the future results, events or developments indicated in such forward-looking statements. Such factors include, but are not limited to: whether Enzon will be able to successfully complete the stock repurchase program in a manner that complies with applicable laws and regulations, the time it may take for Enzon to complete the stock repurchase program, economic and market conditions, other corporate liquidity requirements and priorities, the timing, success and cost of clinical studies being conducted for Enzon's product candidates, the ability of Enzon or its partners to obtain regulatory approval of Enzon's product candidates and Enzon's ability to obtain the funding necessary to develop its product candidates, A more detailed discussion of these and other factors that could affect results is contained in our filings with the U.S. Securities and Exchange Commission, including our annual report on Form 10-K for the year ended December 31, 2009. These factors should be considered carefully and readers are cautioned not to place undue reliance on such forward-looking statements. No assurance can be given that the future results covered by the forward-looking statements will be achieved. All information in this press release is as of the date of this press release and Enzon does not intend to update this information.