

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

FORM 12b-25

NOTIFICATION OF LATE FILING

SEC FILE NUMBER
0-12957

CUSIP NUMBER

0000727510

(Check one): Form 10-K Form 20-F Form 11-K Form 10-Q Form N-SAR Form N-CSR
For Period Ended: June 30, 2005
 Transition Report on Form 10-K
 Transition Report on Form 20-F
 Transition Report on Form 11-K
 Transition Report on Form 10-Q
 Transition Report on Form N-SAR
For the Transition Period Ended: _____

Read Instruction (on back page) Before Preparing Form. Please Print or Type.
Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

If the notification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates:

PART I - REGISTRANT INFORMATION

Enzon Pharmaceuticals, Inc.

Full Name of Registrant

Not applicable

Former Name if Applicable

685 Route 202/206

Address of Principal Executive Office (Street and Number)

Bridgewater, NJ 08807

City, State and Zip Code

PART II - RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate)

- (a) The reasons described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense
- (b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report of transition report on Form 10-Q, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and
- (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III - NARRATIVE

State below in reasonable detail the reasons why Forms 10-K, 20-F, 11-K, 10-Q, N-SAR, N-CSR or the transition report or portion thereof, could not be filed within the prescribed time period.

The delay in filing is due to the extensive activities required by Enzon Pharmaceuticals, Inc. ("Enzon" or the "Company") in connection with the finalization and filing of restated financial statements for the quarter and

fiscal year to date periods ended September 30, 2003, December 31, 2003, March 31, 2004, June 30, 2004, September 30, 2004, December 31, 2004, and March 31, 2005, as previously reported in the Company's current reports on Form 8-K filed with the Securities and Exchange Commission on August 16, 2005 and September 1, 2005. In addition, the Company requires additional time to complete its report on internal control over financial reporting, required of the Company for the first time for the fiscal year ended June 30, 2005 pursuant to Section 404 of the Sarbanes-Oxley Act of 2002.

PART IV - OTHER INFORMATION

- (1) Name and telephone number of person to contact in regard to this notification

Craig Tooman, Executive Vice President,
Finance and 908 541-8759
Chief Financial Officer

(Name) (Area Code) (Telephone Number)

- (2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If answer is no, identify report(s). Yes No

- (3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof? Yes No

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

Please see Annex A attached hereto.

Enzon Pharmaceuticals, Inc.

(Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned hereunto duly authorized.

Date September 13, 2005 By /s/ Craig Tooman
Craig Tooman
Executive Vice President, Finance and Chief
Financial Officer

ANNEX A

As discussed under Part III herein, the Company is currently preparing restated financial statements for the quarter and fiscal year to date periods ended September 30, 2003, December 31, 2003, March 31, 2004, June 30, 2004, September 30, 2004, December 31, 2004, and March 31, 2005. In connection with the restatement process, Enzon has been undertaking a comprehensive review of its previously issued financial statements. Due to the extensive activities required by the Company in connection with finalizing and filing its restated financial statements for the aforementioned periods it has not yet finalized its financial results for the fourth quarter and fiscal year ended June 30, 2005. However, the following discussion represents the significant changes that the Company currently expects to impact the final results from operations that it will report in its annual report on Form 10-K for the year ended June 30, 2005.

As reported in the Company's press release and current report on Form 8-K furnished to the Securities and Exchange Commission (the "Commission") on

September 1, 2005, combined product sales for the Company's four internally marketed products decreased to \$23.4 million for the quarter ended June 30, 2005, as compared to \$27.3 million for the quarter ended June 30, 2004. This decrease was due to a decline in North American sales of the Company's antifungal product, ABELCET(R), due to the previously reported competitive conditions in the intravenous antifungal market. For the quarter ended June 30, 2005, ABELCET sales were \$11.3 million as compared to \$17.1 million for the quarter ended June 30, 2004. The Company expects to report a decrease in combined product sales for the fiscal year ended June 30, 2005, as compared to the fiscal year ended June 30, 2004 due to these competitive market conditions.

In its current report on Form 8-K filed with the Commission on September 1, 2005, the Company also reported that its financial results for the fiscal year ended June 30, 2005 will include a non-cash adjustment to increase the Company's valuation allowance associated with its deferred tax assets as of June 30, 2005. This adjustment is based on the Company's analysis of the continued decline in its ABELCET revenues, as well as the potential impact these conditions may have on its future financial performance. The Company has determined that it is not more likely than not that it would realize the tax benefits from its deferred tax assets. The Company currently expects this non-cash charge to approximate \$80 million.

The Company's financial results for the fiscal year ended June 30, 2005 will include restructuring charges totaling \$2.1 million. In its current report on Form 8-K filed with the Commission on April 21, 2005, Enzon reported its decision to realign its costs through a restructuring due to the aforementioned increasingly competitive conditions in the intravenous antifungal market, as well as the discontinuation of certain development projects in Enzon's research and development pipeline. The restructuring charges were primarily attributable to employee termination benefits.

The Company expects a substantial increase in its selling, general and administrative expenses for the fiscal year ended June 30, 2005, as compared to the fiscal year ended June 30, 2004. The increase is primarily attributable to increased sales and marketing costs related to the Company's oncology and hospital-based businesses, as well as increased general and administrative costs principally related to higher accounting fees related to the Company's Sarbanes-Oxley compliance activities, as well as increased personnel-related costs.

The Company's discussion of certain financial information for the fourth quarter and year ended June 30, 2005 discussed herein is preliminary and subject to change based on the ongoing review the Company is currently conducting. The Company is currently undergoing an audit of its FY 2005 financial results, and an audit of its internal controls over financial reporting as required by Section 404 of the Sarbanes-Oxley Act of 2002. These audit procedures are not yet complete as of the date of this Notification of Late Filing on Form 12b-25. There can be no assurance that the information disclosed in this filing will not change following the completion of the audits.