

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

SCHEDULE 13G  
Under the Securities Exchange Act of 1934

Amendment No.:

Name of Issuer: ENZON PHARMACEUTICALS INC

Title of Class of Securities: COMMON STOCK \$.01 PAR VALUE

CUSIP Number: 293904108

Date of Event Which Requires Filing of This Statement: September 22, 2005

Check the appropriate box to designate the rule pursuant to  
which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1. Name of Reporting Person and S.S. or I.R.S. Identification No of Above Person: Pequot Capital Management, Inc. Tax ID: 06-1524885
  2. Check the Appropriate Box if a Member of a Group
    - a.
    - b.
  3. SEC Use Only
  4. Citizenship or Place of Organization:  
Connecticut
- Number of Shares Beneficially Owned by Each Reporting Person With:
5. Sole Voting Power: 4,218,300
  6. Shared Voting Power: 0
  7. Sole Dispositive Power: 4,494,600
  8. Shared Dispositive Power: 0
  9. Aggregate Amount Beneficially Owned by Each Reporting Person: 4,494,600
  10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares:
  11. Percent of Class Represented by Amount in Row (9): 10.16%
  12. Type of Reporting Person: IA, CO

Item 1(a) Name of Issuer: ENZON PHARMACEUTICALS INC

1(b) Address of Issuer's Principal Executive Offices:  
685 Route 202/206, Bridgewater, New Jersey 08807

Item 2(a)-(c). Name, Principal Business Address, and Citizenship of Persons Filing:

Pequot Capital Management, Inc., 500 Nyala Farm Road, Westport, CT, 06880, which is a Connecticut corporation.

(d) Title of Class of Securities: COMMON STOCK \$.01 PAR VALUE

(e) CUSIP Number: 293904108

Item 3. This statement is filed pursuant to Rule 13d-1(b)(1)(ii)(E). Pequot Capital Management, Inc. is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940.

Item 4. Ownership.  
Ownership as of September 22, 2005 is incorporated herein by reference from items (5) - (9) and (11) of the cover page of the Reporting Person.

Item 5. Ownership of Five Percent or Less of a Class.  
Not applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.  
The reporting person is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 and, as such, has beneficial ownership of the shares which are the subject of this filing through the investment discretion the reporting person exercises over its clients' accounts.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported by the Parent Holding Company.  
Not applicable.

Item 8. Identification and Classification of Members of the Group.  
Not applicable.

Item 9. Notice of Dissolution of the Group.  
Not applicable.

Item 10.

By signing below, I certify that, to the best of my knowledge and belief, the Securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect.

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: October 11, 2005

By: /s/ Aryeh Davis

Title: Chief Operating Officer, General Counsel and Secretary