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

| SCHEDULE 13G |
|---|
| Under the Securities Exchange Act of 1934 |
| Enzon Pharmaceuticals, Inc. |
| (Name of Issuer) |
| Common Stock, par value \$.01 per share |
| (Title of Class of Securities) |
| 293904108 |
| (CUSIP Number) |
| |
| April 11, 2011 |
| (Date of event which requires filing of this statement) |
| 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 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).

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|-------------------------------------|--------------------|---|-----------|--|
| | | | | |
| 1 | | REPORTING PERSONS dge International LLC | | |
| 2 | CHECK TH | E APPROPRIATE BOX IF A MEMBER OF A C | GROUP | (a) ⊠ (b) □ |
| 3 | SEC USE O | NLY | | |
| 4 | 0 | IP OR PLACE OF ORGANIZATION 1 Islands, British West Indies | | |
| NUMBER OF | 5 | SOLE VOTING POWER 0 | | |
| NUMBER OF SHARES BENEFICIALLY | 6 | SHARED VOTING POWER \$29,900,000 aggregate princi into 3,130,889 shares of Com | | of 4.0% Convertible Senior Notes, due 2013, convertible |
| OWNED BY EACH REPORTING | 7 | SOLE DISPOSITIVE POWER 0 | | |
| PERSON WITH | 8 | SHARED DISPOSITIVE POWER \$29,900,000 aggregate princi into 3,130,889 shares of Com | | of 4.0% Convertible Senior Notes, due 2013, convertible |
| 9 | \$29,900 | FE AMOUNT BENEFICIALLY OWNED BY E. 0,000 aggregate principal amount of 4.0% Con on Stock | | RTING PERSON for Notes, due 2013, convertible into 3,130,889 shares of |
| 10 | CHECK BO | X IF THE AGGREGATE AMOUNT IN ROW (9 |) EXCLUDI | ES CERTAIN SHARES (see instructions) |
| 11 | PERCENT (5.41% | OF CLASS REPRESENTED BY AMOUNT IN I | ROW (9) | |
| 12 | TYPE OF R | EPORTING PERSON (see instructions) | | |

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| | | | | |
| 1 | NAMES OF REPORTING PERSON STAR L.P. (a statistical arbitra | | | |
| 2 | CHECK THE APPROPRIATE BOX | X IF A MEMBER OF A GROUP | (a) ⊠ (b) □ | |
| 3 | SEC USE ONLY | | | |
| 4 | CITIZENSHIP OR PLACE OF ORG Cayman Islands, British West | | | |
| NUMBER OF | 5 SOLE VO | TING POWER | | |
| SHARES BENEFICIALLY OWNED BY | 0 | VOTING POWER hares of Common Stock | | |
| EACH REPORTING | 7 SOLE DIS | SPOSITIVE POWER | | |
| PERSON WITH | 490 s | DISPOSITIVE POWER hares of Common Stock | | |
| 9 | AGGREGATE AMOUNT BENEFI 490 shares of Common Stock | CIALLY OWNED BY EACH REPORT | ING PERSON | |
| 10 | CHECK BOX IF THE AGGREGAT | TE AMOUNT IN ROW (9) EXCLUDES | CERTAIN SHARES (see instructions) | |
| 11 | PERCENT OF CLASS REPRESEN 0.00% | TED BY AMOUNT IN ROW (9) | | |
| 12 | TYPE OF REPORTING PERSON (PN | see instructions) | | |
| | | | | |

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|---|--|---|---|
| | | _ | |
| 1 | NAMES OF REPORTING PERSON Highbridge Capital Manageme | | |
| 2 | CHECK THE APPROPRIATE BOX | X IF A MEMBER OF A GROUP | (a) ⊠ (b) □ |
| 3 | SEC USE ONLY | | |
| 4 | CITIZENSHIP OR PLACE OF ORG State of Delaware | GANIZATION | |
| | 5 SOLE VOT | TING POWER | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY | 490 sł \$29,90 | VOTING POWER hares of Common Stock 00,000 aggregate principal amount of ,130,889 shares of Common Stock | 4.0% Convertible Senior Notes, due 2013, convertible |
| EACH REPORTING | 7 SOLE DIS. | POSITIVE POWER | |
| PERSON WITH | 490 sl \$29,90 | DISPOSITIVE POWER hares of Common Stock 00,000 aggregate principal amount of ,130,889 shares of Common Stock | 4.0% Convertible Senior Notes, due 2013, convertible |
| 9 | 490 shares of Common Stock | CIALLY OWNED BY EACH REPORT oal amount of 4.0% Convertible Senio | TING PERSON r Notes, due 2013, convertible into 3,130,889 shares of |
| 10 | CHECK BOX IF THE AGGREGAT | E AMOUNT IN ROW (9) EXCLUDES | CERTAIN SHARES (see instructions) |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.41% | | |
| 12 | TYPE OF REPORTING PERSON (s OO | see instructions) | |

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| | | | |
| 1 | NAMES OF REPORTING PER Glenn Dubin | RSONS | |
| 2 | CHECK THE APPROPRIATE | BOX IF A MEMBER OF A GROUP | (a) ⊠ (b) □ |
| 3 | SEC USE ONLY | | |
| 4 | CITIZENSHIP OR PLACE OF United States | ORGANIZATION | |
| | 5 SOLI | E VOTING POWER) | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY | 2 | RED VOTING POWER 490 shares of Common Stock 529,900,000 aggregate principal amount o nto 3,130,889 shares of Common Stock | f 4.0% Convertible Senior Notes, due 2013, convertible |
| EACH REPORTING | , | E DISPOSITIVE POWER) | |
| PERSON WITH | 2 | RED DISPOSITIVE POWER 490 shares of Common Stock 529,900,000 aggregate principal amount o nto 3,130,889 shares of Common Stock | f 4.0% Convertible Senior Notes, due 2013, convertible |
| 9 | AGGREGATE AMOUNT BEN 490 shares of Common St | NEFICIALLY OWNED BY EACH REPORT tock | ΓING PERSON |

Common Stock

5.41%

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

TYPE OF REPORTING PERSON (see instructions)

10

11

12

\$29,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 2013, convertible into 3,130,889 shares of

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

| Item 1 (a). | NAME OF ISSUER |
|---|---|
| | Enzon Pharmaceuticals, Inc., a Delaware corporation (the "Company") |
| Item 1(b). | ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES |
| | 20 Kingsbridge Road Piscataway, New Jersey 08854 |
| Item 2 (a). Item 2(b). Item 2(c). | NAME OF PERSON FILING ADDRESS OF PRINCIPAL BUSINESS OFFICE CITIZENSHIP |
| | Highbridge International LLC c/o Harmonic Fund Services The Cayman Corporate Centre, 4th Floor 27 Hospital Road Grand Cayman, Cayman Islands, British West Indies Citizenship: Cayman Islands, British West Indies STAR, L.P. (a statistical arbitrage strategy) c/o Harmonic Fund Services The Cayman Corporate Centre, 4th Floor 27 Hospital Road Grand Cayman, Cayman Islands, British West Indies Citizenship: Cayman Islands, British West Indies Citizenship: Cayman Islands, British West Indies Highbridge Capital Management, LLC 40 West 57th Street, 33rd Floor New York, New York 10019 Citizenship: State of Delaware Glenn Dubin c/o Highbridge Capital Management, LLC 40 West 57th Street, 33rd Floor New York, New York 10019 Citizenship: United States |
| Item 2(d). | TITLE OF CLASS OF SECURITIES |
| | Common Stock, \$0.01 par value ("Common Stock") |
| Item 2(e). | CUSIP NUMBER |
| | 293904108 |
| Item 3. | IF THIS STATEMENT IS FILED PURSUANT TO §§ 240.13d-1(b) or 240.13d-2(b) OR (c), CHECK WHETHER THE PERSON FILING IS A: |
| | (a) □ Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o); (b) □ Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c); (c) □ Insurance company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c); (d) □ Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8); (e) □ Investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E); (f) □ Employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F); |

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| | | | | | |
| | (g) | | | any or control person in accordance | |
| | (h) (i) | | Church plan that is ex | xcluded from the definition of an i | deral Deposit Insurance Act (12 U.S.C. 1813); nvestment company under Section 3(c)(14) of the |
| | (j) | | Non-U.S. institution i | Act (15 U.S.C. 80a-3); in accordance with Rule 13d-1(b)(| 1)(ii)(J); |
| | (k) | | Group, in accordance | e with Rule 13d-1(b)(1)(ii)(K). | |
| | a non-U.S. institu | ution in acco | rdance with Rule 13d-1 | 1(b)(1)(ii)(J), please specify the typ | e of |
| Item 4. | OWNERSH | IP. | | | |
| (a) | Amount be | neficially ov | vned: | | |
| (the "Notes" (iii) each of upon convention. Hig strategy). G admission by Highbridge |), convertible int Highbridge Cap rsion of the Note shbridge Capital lenn Dubin is th y any Reporting Capital Manage | ital Managen s held by Hig Managemen e Chief Executes Person as to ment, LLC ar | shares of Common Stornent, LLC and Glenn D ghbridge International I t, LLC is the trading m utive Officer of Highbri beneficial ownership o | ck, (ii) STAR L.P. (a statistical arbitation may be deemed the beneficial LLC and 490 shares of Common Stanager of Highbridge International idge Capital Management, LLC. In shares of Common Stock owned | cipal amount of 4.0% Convertible Senior Notes, due 2013 trage strategy) holds 490 shares of Common Stock, and all owner of 3,130,889 shares of Common Stock issuable tock held by STAR L.P. I LLC and STAR L.P. (a statistical arbitrage The foregoing should not be construed in and of itself as an by another Reporting Person. In addition, each of of Common Stock issuable to Highbridge International |
| (b) | Percent of | class: | | | |
| outstanding 2011. There the Notes, (i STAR L.P. (a | as of April 6, 20 efore, as of the da) Highbridge Int a statistical arbit abridge Capital I | 11, as represente hereof, ba ernational LI rage strategy | ented in the Company's sed on the Company's of Company's of Comay be deemed to be maybe deemed to ben | s Schedule 14A, filed with the Secu outstanding shares of Common Sto teneficially own 5.41% of the outstanding own 0.00% of the outstanding the state of the security of the s | on 54,752,900 shares of Common Stock issued and arrities and Exchange Commission on April 8, ock and the Common Stock issuable upon the conversion of tanding shares of Common Stock of the Company, (ii) ading shares of Common Stock of the Company, and (iii) wn 5.41% of the outstanding shares of Common Stock of |
| (c) | Number of sl | nares as to wh | nich such person has: | | |
| | (i) Sole p | ower to vote | or direct the vote | | |

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- (ii) Shared power to vote or direct the vote See Item 4(a)
- (iii) Sole power to dispose or direct the disposition of
- (iv) Shared power to dispose or direct the disposition of See Item 4(a)

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

Not applicable.

Item 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON

Not applicable.

Item 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

See Exhibit I.

Item 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

Item 10. CERTIFICATION.

By signing below each of the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

EXHIBITS:

Exhibit I: Joint Filing Agreement, dated as of April 21, 2011, by and among Highbridge International LLC, STAR L.P. (a statistical arbitrage strategy), Highbridge Capital Management, LLC and Glenn Dubin.

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|---|-------------------------|---|---------------------|
| | SIGNATURES | S | |
| After reasonable inquiry and to the best of its knowled in this statement is true, complete, and correct. | dge and belief, each of | the undersigned certifies that the information with resp | ect to it set forth |
| DATED: April 21, 2011 | | | |
| HIGHBRIDGE INTERNATIONAL LLC | HIGHB | BRIDGE CAPITAL MANAGEMENT, LLC | |
| By: Highbridge Capital Management, LLC its Trading Manager By: /s/ John Oliva Name: John Oliva | | /s/ John Oliva John Oliva Managing Director | |
| Title: Managing Director | STAR, | L.P. (a statistical arbitrage strategy) | |
| /s/ Glenn Dubin GLENN DUBIN | Ву: | Highbridge Capital Management, LLC its Trading Manager | |
| | Ву: | /s/ John Oliva | |
| | - 101-1-01 | John Oliva Managing Director | |

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| | | |

EXHIBIT I

JOINT FILING AGREEMENT

This will confirm the agreement by and among the undersigned that the Schedule 13G filed with the Securities and Exchange Commission on or about the date hereof with respect to the beneficial ownership by the undersigned of the shares of Common Stock, \$0.01 par value, of Enzon Pharmaceuticals, Inc., is being filed, and all amendments thereto will be filed, on behalf of each of the persons and entities named below in accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

DATED as of April 21, 2011

HIGHBRIDGE INTERNATIONAL LLC

By: Highbridge Capital Management, LLC

its Trading Manager

By: /s/ John Oliva

Name: John Oliva

Title: Managing Director

/s/ Glenn Dubin

GLENN DUBIN

HIGHBRIDGE CAPITAL MANAGEMENT, LLC

/s/ John Oliva

Name: John Oliva Title: Managing Director

STAR, L.P. (a statistical arbitrage strategy)

By: Highbridge Capital Management, LLC its

Trading Manager

By: /s/ John Oliva

Name: John Oliva

Title: Managing Director