#### SCHEDULE 13G/A

Under the Securities Exchange Act of 1934 (Amendment No. 4)\*

Enzon Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

293904108

(CUSIP Number)

December 31, 2010

(Date of event which requires filing of this statement)

Check the appropriate box to designate the rule pursuant to which this Schedule 13G is filed:

 $\Box Rule 13d-1(b)$  $\Box Rule 13d-1(c)$  $\Box Rule 13d-1(d)$ 

(Page 1 of 7 Pages)

\*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).

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1	NAMES OF REPORTING PERSONS				
		TIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)			
2	Highbridge International LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP**				
2	ender m		(a) ⊠ (b) □		
3	SEC USE ON	NLY	(0)		
4	CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands, British West Indies				
	5	SOLE VOTING POWER 0			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER \$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 20 shares of Common Stock	013, convertible into 2,188,481		
	7	SOLE DISPOSITIVE POWER 0			
	8	SHARED DISPOSITIVE POWER \$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 20 shares of Common Stock	013, convertible into 2,188,481		
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON \$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 2013, convertible into 2,188,481 shares of Common Stock				
10	CHECK BO	X IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES**			
11	PERCENT C 3.53%	OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	TYPE OF RE OO	EPORTING PERSON**			

\*\* SEE INSTRUCTIONS BEFORE FILLING OUT!

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	NAMEGOE				
1	NAMES OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)				
	Highbridge Capital Management, LLC				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP**				
			(b) <b>□</b>		
3	SEC USE ONLY				
4	CITIZENSH	IIP OR PLACE OF ORGANIZATION			
	State of Delaware				
NUMBER OF -	5	SOLE VOTING POWER			
		0			
SHARES	6	SHARED VOTING POWER			
BENEFICIALLY OWNED BY – EACH REPORTING – PERSON WITH		\$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 20	)13, convertible into 2,188,481		
		shares of Common Stock			
	7	SOLE DISPOSITIVE POWER			
	-	~			
	8	SHARED DISPOSITIVE POWER	12		
	\$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 2013, convertible int shares of Common Stock				
9	AGGREGAT	TE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
,	\$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 2013, convertible into 2,188,481 shares of Common				
	Stock				
10	CHECK BO	X IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES**			
11	PERCENT C	OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
	3.53%				
12		EPORTING PERSON**			
	OO				

\*\* SEE INSTRUCTIONS BEFORE FILLING OUT!

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1	NAMES OF REPORTING PERSONS					
	I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)					
	Glenn Dubin					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP** (a) $\boxtimes$					
			(b) 🗆			
3	SEC US	SEC USE ONLY				
4	CITIZE	CITIZENSHIP OR PLACE OF ORGANIZATION				
	United States					
	5	SOLE VOTING POWER				
NUMBER OF - SHARES BENEFICIALLY OWNED BY - EACH REPORTING - PERSON WITH		0				
	6	SHARED VOTING POWER				
		\$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 201	3, convertible into 2,188,481			
		shares of Common Stock				
	7	SOLE DISPOSITIVE POWER				
	-					
	8	SHARED DISPOSITIVE POWER \$20,000,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 201	2 convertible into 2 199 491			
		\$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 201 shares of Common Stock	5, conventible into 2,188,481			
9	AGGRE	GATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
9	\$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 2013, convertible into 2,188,481 shares of Common					
	Stock					
10	CHECK	BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES**				
11	PERCE	NT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)				
-	3.5	3%				
12		OF REPORTING PERSON**				
	IN					

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This Amendment No. 4 (this "Amendment") amends the statement on Schedule 13G filed on May 26, 2006 (the "Original Schedule 13G"), as amended by Amendment No. 1 filed on February 14, 2007, as further amended by Amendment No. 2 filed on February 12, 2009, and as further amended by Amendment No. 3 filed on February 12, 2010 (the Original Schedule 13G as amended, the "Schedule 13G"), with respect to shares of common stock, par value \$0.01 per share (the "Common Stock"), of Enzon Pharmaceuticals, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined in this Amendment have the meanings set forth in the Schedule 13G. This Amendment amends and restates Items 4 and 5 in their entirety as set forth below.

### Item 4. OWNERSHIP.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

As of the date hereof, (i) Highbridge International LLC beneficially owns \$20,900,000 aggregate principal amount of 4.0% Convertible Senior Notes, due 2013 (the "Notes"), convertible into 2,188,481 shares of Common Stock and (ii) each of Highbridge Capital Management, LLC and Glenn Dubin may be deemed the beneficial owner of \$20,900,000 aggregate principal amount Notes, convertible into 2,188,481 shares of Common Stock issuable to Highbridge International LLC.

Highbridge Capital Management, LLC is the trading manager of Highbridge International LLC. Glenn Dubin is the Chief Executive Officer of Highbridge Capital Management, LLC. The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of shares of Common Stock owned by another Reporting Person. In addition, each of Highbridge Capital Management, LLC and Glenn Dubin disclaims beneficial ownership of shares of Common Stock owned by Highbridge International LLC.

(b) Percent of class:

The percentages used herein and in the rest of this Amendment are calculated based upon 59,750,326 shares of Common Stock issued and outstanding as of November 2, 2010, as represented in the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2010, filed with the Securities and Exchange Commission on November 4, 2010. Therefore, as of the date hereof, based on the Company's outstanding shares of Common Stock and the Common Stock issuable upon the conversion of the Notes, (i) Highbridge International LLC may be deemed to beneficially own approximately 3.53% of the outstanding shares of Common Stock of the Company and (ii) each of Highbridge Capital Management, LLC and Glenn Dubin may be deemed to beneficially own approximately 3.53% of the outstanding shares of Common Stock of the Company. The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of shares of Common Stock owned by another Reporting Person.

(c) Number of shares as to which such person has:

- (i) Sole power to vote or direct the vote: 0
- (ii) Shared power to vote or direct the vote: See Item 4(a)
- (iii) Sole power to dispose or direct the disposition: 0
- (iv) Shared power to dispose or direct the disposition:

## See Item 4(a)

# Item 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [X]

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## SIGNATURES

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

DATED: February 10, 2011

HIGHBRIDGE INTERNATIONAL LLC

By: Highbridge Capital Management, LLC its Trading Manager HIGHBRIDGE CAPITAL MANAGEMENT, LLC

/s/ John Oliva

By: Name: Title:

John Oliva Managing Director

By: /s/ John Oliva Name: John Oliva Title: Managing Director

/s/ Glenn Dubin

GLENN DUBIN