

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 12)*

Enzon Pharmaceuticals, Inc.
(Name of Issuer)

Common Stock, Par Value \$0.01
(Title of Class of Securities)

293904108
(CUSIP Number)

Jesse Lynn, Esq.
Icahn Capital LP
16690 Collins Avenue, Suite PH-1
Sunny Isles Beach, FL 33160
(305) 422-4000

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

September 1, 2020
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Section 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box //.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

*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 disclosures provided in a prior cover page.

The information required on 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).

Item 1. Security and Issuer

This statement constitutes Amendment No. 12 to the Schedule 13D relating to the shares of Common Stock, par value \$0.01 per share (the “Shares”), issued by Enzon Pharmaceuticals, Inc., a Delaware corporation (the “Issuer”), and amends the Schedule 13D relating to the Shares filed on March 14, 2008 (as previously amended, the “Original 13D”), on behalf of the Reporting Persons (as defined in the Original 13D). Capitalized terms used herein and not otherwise defined have the respective meanings ascribed thereto in the Original 13D.

Item 4. Purpose of Transaction

Item 4 of the Original 13D is hereby amended by adding the following:

On September 1, 2020, Icahn Capital entered into an Investment Agreement with the Issuer in connection with the Issuer’s previously announced rights offering (the “Rights Offering”). Subject to the terms and conditions of the Investment Agreement, Icahn Capital agreed to subscribe for its pro-rata share of the units to be issued pursuant to the Rights Offering and to purchase all units that remain unsubscribed for at the expiration of the Rights Offering to the extent that other holders elect not to exercise all of their respective subscription rights.

In connection with the execution of the Investment Agreement, the Issuer agreed to (i) terminate the Standstill Agreement, dated December 18, 2016, by and among the Reporting Persons and the Issuer, (ii) waive the applicability of Section 203 of the Delaware General Corporation Law of the State of Delaware to the Reporting Persons and (iii) use its best efforts to register for resale all of the Shares held by the Reporting Persons following the closing of the Rights Offering.

The above description of the Investment Agreement is a summary and does not purport to be a complete description of all of the terms and conditions thereof and is qualified in its entirety by reference to the full text of the Investment Agreement, which is filed herewith as an exhibit and incorporated herein by reference.

Item 6. Contracts, Arrangements, Understandings or Relationship with Respect to Securities of the Issuer

Item 6 of the Schedule 13D is hereby amended by adding the following:

The disclosure set forth above in Item 4 is incorporated herein by reference.

Item 7. Material to be Filed as Exhibits

1. Investment Agreement dated as of September 1, 2020, between Icahn Capital and the Issuer (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Issuer with the Securities and Exchange Commission on September 1, 2020).
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SIGNATURE

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

Dated: September 1, 2020

ICAHN PARTNERS LP
ICAHN PARTNERS MASTER FUND LP
ICAHN ONSHORE LP
ICAHN OFFSHORE LP
ICAHN CAPITAL LP
IPH GP LLC

By: /s/ Irene March
Name: Irene March
Title: Executive Vice President

BECKTON CORP.

By: /s/ Irene March
Name: Irene March
Title: Executive Vice President

ICAHN ENTERPRISES HOLDINGS L.P.
By: Icahn Enterprises G.P. Inc., its general partner
ICAHN ENTERPRISES G.P. INC.

By: /s/ SungHwan Cho
Name: SungHwan Cho
Title: Chief Financial Officer

/s/ Carl C. Icahn
CARL C. ICAHN

[Signature Page of Amendment No. 12 to Schedule 13D – Enzon Pharmaceuticals, Inc.]