SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 14)*

Enzon Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, No par value (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)

August 19, 2024 (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(g), check the following box \square .

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).

SCHEDULE 13D

Item 1. Security and Issuer

This statement constitutes Amendment No. 14 to the Schedule 13D relating to the shares of Common Stock, no par value (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 2. Identity and Background

Item 2 of the Original 13D is hereby amended and supplemented as follows:

On August 19, 2024, Icahn Enterprises L.P. ("IEP") and Carl C. Icahn entered into settlement agreements with the U.S. Securities and Exchange Commission (the "SEC"), in connection with its inquiry previously disclosed by IEP. In connection with that settlement, the SEC entered an order in an administrative proceeding that contains non-scienter based findings that IEP failed to disclose in its Forms 10-K for the years 2018, 2019 and 2020 that Mr. Icahn pledged IEP securities as collateral to secure personal margin loans as required by Item 403(b) of Regulation S-K. The order relating to Mr. Icahn contains non-scienter based findings that, while Mr. Icahn's prior Schedule 13D filings generally disclosed that he had pledged IEP depository units as collateral for personal margin loans, subsequent Schedule 13D filings were not amended to describe loan agreements and amendments to loan agreements or to attach guarantees as required by Items 6 and 7 of Schedule 13D. Without admitting or denying the SEC's allegations (other than with respect to the SEC's jurisdiction), under the terms of the settlements, (i) IEP consented to the entry of an order requiring it to pay a civil penalty of \$1.5 million and to cease and desist from violations and any future violations of Section 13(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Rule 13a-1 thereunder, and (ii) Mr. Icahn consented to the entry of an order requiring him to pay a civil penalty of \$500,000 and to cease and desist from committing or causing any violations of Section 13(d)(2) of the Exchange Act and Rule 13d-2(a) thereunder.

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: August 19, 2024

ICAHN PARTNERS LP ICAHN PARTNERS MASTER FUND LP ICAHN ONSHORE LP

ICAHN OFFSHORE LP ICAHN CAPITAL LP

By: /s/ Jesse Lynn Name: Jesse Lynn

Title: Chief Operating Officer

IPH GP LLC

By: Icahn Enterprises Holdings L.P., its sole member By: Icahn Enterprises G.P. Inc., its general partner

ICAHN ENTERPRISES HOLDINGS L.P.

By: Icahn Enterprises G.P. Inc., its general partner

ICAHN ENTERPRISES G.P. INC.

By: /s/ Ted Papapostolou

Name: Ted Papapostolou Title: Chief Financial Officer

BECKTON CORP.

By: /s/ Ted Papapostolou

Name: Ted Papapostolou Title: Vice President

/s/ Carl C. Icahn

CARL C. ICAHN

[Signature Page of Amendment No. 14 to Schedule 13D - Enzon Pharmaceuticals, Inc.]