SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 11)*

Soleno Therapeutics, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share (Title of Class of Securities)

834203200 (CUSIP Number)

Jeffrey Ferguson
The Carlyle Group
1001 Pennsylvania Avenue, NW
Suite 220 South
Washington, D.C. 20004
(202) 729-5626
(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

October 10, 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 Rule 13d-1(e), Rule 13d-1(f) or Rule 13d-1(g), check the following box. \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(b) for other parties to whom copies are to be sent.

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).

^{*} 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.

| 1 | Names of Reporting Persons | | | | | |
|----|----------------------------|---|--|--|--|--|
| | The Carlyle Group Inc. | | | | | |
| 2 | | ppropriate Box if a Member of a Group | | | | |
| | (a) ∐ (| (a) \square (b) \square | | | | |
| 3 | SEC Use O | alv | | | | |
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| 4 | Source of F | unds (See Instructions) | | | | |
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| 5 | Check if dis | closure of legal proceedings is required pursuant to Items 2(d) or 2(e) | | | | |
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| 6 | Citizenship | or Place of Organization | | | | |
| | Delaware | | | | | |
| | Delaware | 7 Sole Voting Power | | | | |
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| | UMBER OF SHARES | | | | | |
| | NEFICIALLY | 8 Shared Voting Power | | | | |
| C | WNED BY | 2,468,099 | | | | |
| D | EACH EPORTING | 9 Sole Dispositive Power | | | | |
| | PERSON | | | | | |
| | WITH | 0 | | | | |
| | | 10 Shared Dispositive Power | | | | |
| | | 2,468,099 | | | | |
| 11 | Aggregate A | mount Beneficially Owned by Each Reporting Person | | | | |
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| | 6.2% | | | | | |
| 14 | Type of Rep | orting Person | | | | |
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| 1 | Names of Reporting Persons | | | | | |
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| | Carlyle Holdings I GP Inc. | | | | | |
| 2 | | Approp (b) \square | oriate Box if a Member of a Group | | | |
| 3 | SEC Use O | nly | | | | |
| 4 | Source of F | unds (| See Instructions) | | | |
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| 5 | Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) | | | | | |
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| 6 | Citizenship | or Pla | ce of Organization | | | |
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| 14 | Type of Rep | orting | Person | | | |
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| 1 | Names of Reporting Persons | | | | | |
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| | Carlyle Holdings I GP Sub L.L.C. | | | | | |
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| 13 | Percent of C | Class F | Represented by Amount in Row (11) | | | |
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| 14 | Type of Rep | orting | Person | | | |
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| 1 | Names of Reporting Persons | | | | | |
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| | Carlyle Holdings I L.P. | | | | | |
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| 13 | Percent of Class Represented by Amount in Row (11) | | | | | |
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| 14 | Type of Rep | orting | Person | | | |
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| 1 | Names of Reporting Persons | | | | |
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| | CG Subsidiary Holdings L.L.C. | | | | |
| 2 | | | oriate Box if a Member of a Group | | |
| | (a) \square (b) \square | | | | |
| 3 | SEC Use O | nlsz | | | |
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| 4 | 4 Source of Funds (See Instructions) | | | | |
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| 14 | Type of Rep | orting | Person | | |
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| | OO (Limited Liability Company) | | | | |

| 1 | Names of Reporting Persons | | | | | |
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| | TC Group, L.L.C. | | | | | |
| 2 | | | oriate Box if a Member of a Group | | | |
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| 1.4 | 6.2% Type of Rep | | Damasa | | | |
| 14 | Type of Kep | orung | reison | | | |
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| 1 | Names of Reporting Persons | | | | |
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| | Carlyle Genesis UK LLC | | | | |
| 2 | | | oriate Box if a Member of a Group | | |
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| 3 | SEC Use O | nlsz | | | |
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| 14 | Type of Rep | orting | Person | | |
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| | OO (Limited Liability Company) | | | | |

| 1 | 1 Names of Reporting Persons | | | | | |
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| | Abingworth LLP | | | | | |
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| SHARES BENEFICIALLY | | 8 | Shared Voting Power | | | |
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| 13 | Percent of C | Class F | Represented by Amount in Row (11) | | | |
| | 6.2% | | | | | |
| 14 | Type of Rep | orting | Person | | | |
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| 1 | 1 Names of Reporting Persons | | | | | |
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| | Abingworth Bioventures VII LP | | | | | |
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| 3 | SEC Use O | nly | | | | |
| 4 | Source of Funds (See Instructions) | | | | | |
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| 5 | Check if dis | closu | re of legal proceedings is required pursuant to Items 2(d) or 2(e) | | | |
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| 14 | Type of Rep | orting | y Person | | | |
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CUSIP No. 834203200 13D Page 11 of 15 pages

Explanatory Note

This Amendment No. 11 to Schedule 13D ("Amendment No. 11") amends and supplements the Schedule 13D originally filed with the United States Securities and Exchange Commission on December 27, 2018 (as amended to date, the "Schedule 13D"), relating to the shares of common stock, par value \$0.001 per share (the "Common Stock"), of Soleno Therapeutics, Inc., a Delaware corporation (the "Issuer"). Capitalized terms used herein without definition shall have the meanings set forth in the Schedule 13D.

Item 5. Interest in Securities of the Issuer.

Item 5 of the Schedule 13D is hereby amended and restated in its entirety as follows:

(a) – (b) The following sets forth, as of the date of this Schedule 13D, the aggregate number of shares of Common Stock and percentage of Common Stock beneficially owned by each of the Reporting Persons, as well as the number of shares of Common Stock as to which each Reporting Person has the sole power to vote or to direct the vote, shared power to vote or to direct the vote, sole power to dispose or to direct the disposition of, or shared power to dispose or to direct the disposition of, as of the date hereof, based on 40,108,265 shares of Common Stock, which includes (i) 38,871,594 shares of Common Stock outstanding as of August 2, 2024, as disclosed in the Issuer's quarterly report on Form 10-Q filed on August 7, 2024, (ii) 22,913 shares of Common Stock underlying stock options exercisable within 60 days as of the date hereof and (iii) 1,213,758 shares of Common Stock underlying the Prefunded Warrants, all of which are currently exercisable.

| Reporting Person | Amount beneficially owned | Percent of class | Sole power to vote or to direct the vote | Shared power to vote or to direct the vote | Sole power to dispose or to direct the disposition | Shared power to dispose or to direct the disposition |
|--------------------------------------|---------------------------------|---------------------|--|--|--|--|
| The Carlyle Group Inc. | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| Carlyle Holdings I GP Inc. | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| Carlyle Holdings I GP Sub L.L.C. | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| Carlyle Holdings I L.P. | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| CG Subsidiary Holdings L.L.C. | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| TC Group, L.L.C. | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| Carlyle Investment Management L.L.C. | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| Carlyle Genesis UK LLC | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| Abingworth LLP | 2,468,099 | 6.2% | 0 | 2,468,099 | 0 | 2,468,099 |
| Abingworth Bioventures VII LP | 2,468,099 | 6.2% | 0 | 2.468.099 | 0 | 2.468.099 |

The amount of Common Stock reported as beneficially owned above includes (i) 1,224,928 shares of Common Stock held of record by Abingworth Bioventures VII LP, (ii) 6,500 shares of Common Stock held of record by Andrew Sinclair for the benefit of Abingworth Bioventures VII LP (iii) 22,913 shares of Common Stock underlying stock options exercisable within 60 days as of the date hereof and (iv) 1,213,758 shares of Common Stock underlying a portion of the Prefunded Warrants, which are currently exercisable.

The amount of securities disclosed excludes 514,666 shares of Common Stock underlying the March 2022 Warrants, which contain a provision prohibiting exercise to the extent that the holder, together with its affiliates, would beneficially own in excess of 4.99% of the total number of shares of Common Stock then issued and outstanding.

The Carlyle Group Inc., which is a publicly traded entity listed on Nasdaq, is the sole shareholder of Carlyle Holdings I GP Inc., which is the sole member of Carlyle Holdings I GP Sub L.L.C., which is the general partner of Carlyle Holdings I L.P., which, with respect to the securities reported herein, is the managing member of CG Subsidiary Holdings L.L.C., which is the managing member of TC Group, L.L.C., which is the managing member of Carlyle Investment Management L.L.C., which is the sole member of Carlyle Genesis UK LLC, which is the principal member of Abingworth Bioventures VII LP has delegated to Abingworth LLP all investment and dispositive power over the securities held of record by Abingworth Bioventures VII LP. Accordingly, each of the foregoing entities may be deemed to share beneficial ownership of the securities held of record by Abingworth Bioventures VII LP, but each disclaims beneficial ownership of such securities.

(c) From October 9, 2024 through October 11, 2024, Abingworth Bioventures VII LP disposed of 782,979 shares of Common Stock in a series of open market transactions pursuant to the 10b5-1 Plan. Details by date, listing the number of shares of Common Stock disposed of and the weighted average price per share, are provided below. The Reporting Persons undertake to provide, upon request by the staff of the SEC, the Issuer, or a security holder of the Issuer, full information regarding the number of shares sold at each separate price for each transaction.

| <u>Date</u> | Shares Disposed Of Price Ra | Weighted Average Price Per ange Share |
|------------------|-----------------------------------|--|
| October 9, 2024 | 255,963 \$50.355 to | \$52.00 \$51.0507 |
| October 10, 2024 | 182,489 \$49.585 to | \$51.76 \$50.6347 |
| October 11, 2024 | 344,527 \$50.85 to \$ | \$54.815 \$54.0930 |

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- (d) None.
- (e) Not applicable.

SIGNATURES

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 15, 2024

The Carlyle Group Inc.

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett Title: Chief Financial Officer

Carlyle Holdings I GP Inc.

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett

Title: Managing Director and Chief Financial Officer

Carlyle Holdings I GP Sub L.L.C.

By: Carlyle Holdings I GP Inc., its sole member

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett

Title: Managing Director and Chief Financial Officer

Carlyle Holdings I L.P.

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett Title: Managing Director

CG Subsidiary Holdings L.L.C.

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett Title: Managing Director

TC Group, L.L.C.

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett Title: Managing Director CUSIP No. 834203200 13D Page 15 of 15 pages

Carlyle Investment Management L.L.C.

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett
Title: Chief Financial Officer

Carlyle Genesis UK LLC

By: Carlyle Investment Management L.L.C., its sole

member

By: /s/ Anne Frederick, attorney-in-fact

Name: John C. Redett
Title: Chief Financial Officer

Abingworth LLP

By: /s/ John Heard

Name: John Heard

Title: Authorized Signatory

Abingworth Bioventures VII LP

/s/ John Heard

Name: John Heard

By:

Title: Authorized Signatory