UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934 (Amendment No. 1)*

Applied Therapeutics, Inc. (Name of Issuer)

Common Stock, \$0.0001 par value per share (Title of Class of Securities)

> 03828A 101 (CUSIP Number)

December 31, 2023 (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 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).

CUSIP No. 03828A 101

| 1 | NAMES OF REPORTING PERSONS Perceptive Advisors LLC | | | | | |
|----|---|------|--|--|--|--|
| 2 | | | PPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) | | | |
| 2 | |) [| | | | |
| | (a) 🗆 (t | ,, L | | | | |
| | | | | | | |
| 3 | SEC USE O | NLY | | | | |
| | | | | | | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | | | | | |
| | | | | | | |
| | Delaware | | | | | |
| | | 5 | SOLE VOTING POWER | | | |
| | | 3 | SOLE VOINGTOWER | | | |
| | | | | | | |
| N | UMBER OF | | 0 | | | |
| | SHARES | 6 | SHARED VOTING POWER | | | |
| BE | NEFICIALLY | | | | | |
| C | WNED BY | | 4,580,249 | | | |
| | EACH | 7 | SOLE DISPOSITIVE POWER | | | |
| R | EPORTING | | | | | |
| | PERSON | | | | | |
| | WITH: | 8 | SHARED DISPOSITIVE POWER | | | |
| | | Ů | | | | |
| | | | 4,580,249 | | | |
| 9 | ACCDECAT | TE A | MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | |
| 9 | AUUKEUAI | EA | WIOUNT DENEFICIALLY OWNED BY EACH REPORTING PERSON | | | |
| | 4 500 240 | | | | | |
| | 4,580,249 | | | | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | | | | | |
| | | | | | | |
| | | | | | | |
| 11 | PERCENT C | F C | LASS REPRESENTED BY AMOUNT IN ROW 9 | | | |
| | | | | | | |
| | 5.9% | | | | | |
| 12 | | | | | | |
| | TITE OF REA ONTHIO PERSON (DEED INDINGOCTIONS) | | | | | |
| | IA | | | | | |
| | 1A | | | | | |

CUSIP No. 03828A 101

| 1 | NAMES OF REPORTING PERSONS | | | | | | |
|--------------------------|---|--------------|---|--|--|--|--|
| | Joseph Edeln | nan | | | | | |
| 2 | (| | | | | | |
| | (a) \Box (b) \Box | | | | | | |
| 3 | SECTION OF | | | | | | |
| 3 | SEC USE OF | SEC USE ONLY | | | | | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | | | | | | |
| United States of America | | | America | | | | |
| | | 5 | SOLE VOTING POWER | | | | |
| N | NUMBER OF | | 0 | | | | |
| 1 | SHARES | 6 | SHARED VOTING POWER | | | | |
| | NEFICIALLY | | 4.500.040 | | | | |
| (| OWNED BY EACH | 7 | 4,580,249 SOLE DISPOSITIVE POWER | | | | |
| R | EPORTING | , | SOLE DISPOSITIVE FOWER | | | | |
| | PERSON | | 0 | | | | |
| | WITH: | 8 | SHARED DISPOSITIVE POWER | | | | |
| | | | 4,580,249 | | | | |
| 9 | AGGREGAT | ΈA | MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | | |
| | 4.500.510 | | | | | | |
| 10 | 4,580,249 | | | | | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | | | | | | |
| | | | | | | | |
| 11 | PERCENT C | OF C | LASS REPRESENTED BY AMOUNT IN ROW 9 | | | | |
| | | | | | | | |
| 12 | 5.9% | | | | | | |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) | | | | | | |
| | IN | | | | | | |
| | | | | | | | |

CUSIP No. 03828A 101

| 1 | NAMES OF REPORTING PERSONS Perceptive Life Sciences Master Fund, Ltd. | | | | | | |
|----|---|--------------|---|--|--|--|--|
| 2 | CHECK TH | FAF | PPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) | | | | |
| _ | |) 🗆 | | | | | |
| | (u) <u> </u> | <i>,</i> , – | | | | | |
| 3 | CEC LICE OF | TT 37 | | | | | |
| 3 | SEC USE ONLY | | | | | | |
| | | | | | | | |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION | | | | | | |
| | | | | | | | |
| | Cayman Isla | nds | | | | | |
| | | 5 | SOLE VOTING POWER | | | | |
| | | | | | | | |
| N | UMBER OF | | | | | | |
| 11 | SHARES | 6 | SHARED VOTING POWER | | | | |
| RE | NEFICIALLY | | | | | | |
| | WNED BY | | 4,580,249 | | | | |
| | EACH | 7 | SOLE DISPOSITIVE POWER | | | | |
| R | EPORTING | , | SOLE DISTOSTITUE TO WER | | | | |
| | PERSON | | | | | | |
| | WITH: | 8 | SHARED DISPOSITIVE POWER | | | | |
| | | o | SHARED DISPOSITIVE FOWER | | | | |
| | | | 4.500.240 | | | | |
| _ | A CODEC AT | T . | 4,580,249 MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | | |
| 9 | AGGREGAI | ΕA | MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON | | | | |
| | 4 500 240 | | | | | | |
| | 4,580,249 | | | | | | |
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | | | | | | |
| | _ | | | | | | |
| | | | | | | | |
| 11 | PERCENT C | OF C | LASS REPRESENTED BY AMOUNT IN ROW 9 | | | | |
| | | | | | | | |
| | 5.9% | | | | | | |
| 12 | 2 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) | | | | | | |
| | | | | | | | |
| | CO | | | | | | |
| | | | | | | | |

Item 1(a). Name of Issuer:

Applied Therapeutics, Inc. (the "Issuer")

Item 1(b). Address of Issuer's Principal Executive Offices:

545 Fifth Avenue, Suite 1400 New York, N.Y. 10017

Item 2(a). Names of Persons Filing:

The names of the persons filing this report (collectively, the "Reporting Persons") are:

Perceptive Advisors LLC ("Perceptive Advisors")
Joseph Edelman ("Mr. Edelman")
Perceptive Life Sciences Master Fund, Ltd. (the "Master Fund")

Item 2(b). Address of Principal Business Office or, if None, Residence:

The address of the principal business office of each of the Reporting Persons is:

51 Astor Place, 10th Floor New York, NY 10003

Item 2(c). <u>Citizenship</u>:

Perceptive Advisors is a Delaware limited liability company Mr. Edelman is a United States citizen The Master Fund is a Cayman Islands corporation

Item 2(d). <u>Title of Class of Securities</u>:

Common Stock, \$0.0001 par value per share ("Common Stock")

Item 2(e). CUSIP Number:

03828A 101

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:

Not applicable.

Item 4. Ownership.

The information required by this item with respect to each Reporting Person is set forth in Rows 5 through 9 and 11 of the cover page to this Schedule 13G. The ownership percentages reported are based on 77,229,207 shares of Common Stock outstanding as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2023, and gives effect to the exercise of the Call Options (as defined below) held by the Master Fund.

The Master Fund directly holds 4,080,249 shares of Common Stock and call options exercisable for 500,000 shares of Common Stock (the "Call Options"). Perceptive Advisors serves as the investment manager to the Master Fund and may be deemed to beneficially own shares held by the Master Fund. Mr. Edelman is the managing member of Perceptive Advisors and may be deemed to beneficially own the shares held by the Master Fund.

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 Persons have ceased to be the beneficial owner of more than five percent of the class of securities, check the following \Box .

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. <u>Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.</u>

Not applicable.

Item 8. <u>Identification and Classification of Members of the Group.</u>

Not applicable.

Item 9. <u>Notice of Dissolution of Group.</u>

Not applicable.

Item 10. <u>Certification</u>.

By signing below I certify that, to the best of my 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, other than activities solely in connection with a nomination under § 240.14a-11.

SIGNATURE

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

Date: February 14, 2024

PERCEPTIVE ADVISORS LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member

/s/ Joseph Edelman

JOSEPH EDELMAN

PERCEPTIVE LIFE SCIENCES MASTER FUND, LTD.

By: Perceptive Advisors LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member

AGREEMENT

The persons below hereby agree that the Schedule 13G to which this agreement is attached as an exhibit, as well as all future amendments to such Schedule 13G, shall be filed on behalf of each of them. This agreement is intended to satisfy the requirements of Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934.

Date: February 14, 2024

PERCEPTIVE ADVISORS LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member

/s/ Joseph Edelman

JOSEPH EDELMAN

PERCEPTIVE LIFE SCIENCES MASTER FUND, LTD.

By: Perceptive Advisors LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member