SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO § 240.13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED
PURSUANT TO § 240.13d-2.

(Amendment No. 1)*

# Tonix Pharmaceuticals Holding Corp.

(Name of Issuer)

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

890260706
(CUSIP Number)

December 31, 2020
(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 purposes 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: 890260706

| | | | | |
|---|---|---|---|---|
| (1) | NAMES OF REPORTING PERSONS<br><br>CVI Investments, Inc. | | | |
| (2) | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP<br>(SEE INSTRUCTIONS) | | (a)<br>(b) | ☐<br>☐ |
| (3) | SEC USE ONLY | | | |
| (4) | CITIZENSHIP OR PLACE OF ORGANIZATION<br><br>Cayman Islands | | | |

| NUMBER OF | (5) | SOLE VOTING POWER | |
|---|---|---|---|
| SHARES | | 0 | |
| BENEFICIALLY | (6) | SHARED VOTING POWER ** | |
| | | 111,250 | |
| OWNED BY | | | |
| EACH | (7) | SOLE DISPOSITIVE POWER | |
| REPORTING | | 0 | |
| PERSON WITH | (8) | SHARED DISPOSITIVE POWER ** | |

|        | 111,250 |
|--------|---------|

| (9) | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |
|-----|--------------------------------------------------------------|
|     | 111,250 |

| (10) | CHECK BOX IF THE AGGREGATE AMOUNT<br>IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | ☐ |
|------|--------------------------------------------------------------------------------------------|---|

| (11) | PERCENT OF CLASS REPRESENTED<br>BY AMOUNT IN ROW (9) |
|------|------------------------------------------------------|
|      | 0.1% |

| (12) | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)<br>CO |
|------|---------------------------------------------------|

** Heights Capital Management, Inc. is the investment manager to CVI Investments, Inc. and as such may exercise voting and dispositive power over these shares.

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CUSIP No: 890260706

| (1) | NAMES OF REPORTING PERSONS |
|-----|----------------------------|
|     | Heights Capital Management, Inc. |

| (2) | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP<br>(SEE INSTRUCTIONS) | (a) ☐<br>(b) ☐ |
|-----|-----------------------------------------------------------------------|----------------|

| (3) | SEC USE ONLY |
|-----|--------------|

| (4) | CITIZENSHIP OR PLACE OF ORGANIZATION |
|-----|--------------------------------------|
|     | Delaware |

| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH | (5) | SOLE VOTING POWER |
|------------------------------------------------------------------|-----|-------------------|
|  |  | 0 |
|  | (6) | SHARED VOTING POWER ** |
|  |  | 111,250 |
|  | (7) | SOLE DISPOSITIVE POWER |
|  |  | 0 |
|  | (8) | SHARED DISPOSITIVE POWER ** |
|  |  | 111,250 |

| (9) | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |
|-----|--------------------------------------------------------------|
|     | 111,250 |

| (10) | CHECK BOX IF THE AGGREGATE AMOUNT<br>IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) | ☐ |
|------|--------------------------------------------------------------------------------------------|---|

| (11) | PERCENT OF CLASS REPRESENTED<br>BY AMOUNT IN ROW (9) |
|------|------------------------------------------------------|
|      | 0.1% |

| (12) | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)<br>CO |
|------|---------------------------------------------------|

** Heights Capital Management, Inc. is the investment manager to CVI Investments, Inc. and as such may exercise voting and dispositive power over these shares.

Item 1.

(a)      Name of Issuer

Tonix Pharmaceuticals Holding Corp. (the "Company")

(b)      Address of Issuer's Principal Executive Offices

26 Main Street, Chatham, New Jersey 07928

Item 2(a).    Name of Person Filing

This statement is filed by the entities listed below, who are collectively referred to herein as "Reporting Persons," with respect to the shares of common stock of the Company, $0.001 par value per share (the "Shares").

(i)      CVI Investments, Inc.

(ii)     Heights Capital Management, Inc.

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

The address of the principal business office of CVI Investments, Inc. is:

P.O. Box 309GT
Ugland House
South Church Street
George Town
Grand Cayman
KY1-1104
Cayman Islands

The address of the principal business office of Heights Capital Management, Inc. is:

101 California Street, Suite 3250
San Francisco, California 94111

Item 2(c).    Citizenship

Citizenship is set forth in Row 4 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

Item 2(d)    Title of Class of Securities

Common stock, $0.001 par value per share

Item 2(e)    CUSIP Number

890260706

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:

(a)  ☐  Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o).

(b)  ☐  Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c).

(c)  ☐  Insurance company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c).

(d)  ☐  Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).

(e)  ☐  An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);

(f)  ☐  An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);

(g)  ☐  A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);

(h)  ☐  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);

(i)  ☐  A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);

(j)  ☐  A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);

(k) ☐ Group, in accordance with Rule 13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution: _____

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.

The information required by Items 4(a) – (c) is set forth in Rows 5 – 11 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

The number of Shares reported as beneficially owned consists of Shares issuable upon the exercise of warrants to purchase Shares.

The Company's Registration Statement on Form S-3, filed on December 18, 2020, indicates there were 191,648,251 Shares outstanding as of December 17, 2020.

Heights Capital Management, Inc., which serves as the investment manager to CVI Investments, Inc., may be deemed to be the beneficial owner of all Shares owned by CVI Investments, Inc. Each of the Reporting Persons hereby disclaims any beneficial ownership of any such Shares, except for their pecuniary interest therein.

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CUSIP No: 890260706

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: ☒

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

Not applicable.

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

Not applicable.

Item 8.      Identification and Classification of Members of the Group

Not applicable.

Item 9.      Notice of Dissolution of Group

Not applicable.

Item 10.      Certification

By signing below each of the undersigned certifies that, to the best of its 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.

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CUSIP No: 890260706

SIGNATURES

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

Dated: February 10, 2021

CVI INVESTMENTS, INC.

By: Heights Capital Management, Inc.
pursuant to a Limited Power of Attorney, a copy of which was previously filed

By:      /s/ Brian Sopinsky
Name:   Brian Sopinsky
Title:    Secretary

HEIGHTS CAPITAL MANAGEMENT, INC.

By:      /s/ Brian Sopinsky
Name:   Brian Sopinsky
Title:    Secretary

CUSIP No: 890260706

**EXHIBIT INDEX**

| EXHIBIT | DESCRIPTION |
| --- | --- |
| I | Limited Power of Attorney* |
| II | Joint Filing Agreement* |

*Previously filed