

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Pasithea Therapeutics Corp.

(Name of Issuer)

Common Stock, \$0.0001 par value per share

(Title of Class of Securities)

70261F202

(CUSIP Number)

05/06/2025

(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)

SCHEDULE 13G

CUSIP No. 70261F202

| | |
|---|--|
| 1 | Names of Reporting Persons CVI Investments, Inc. |
| 2 | Check the appropriate box if a member of a Group (see instructions) <input type="checkbox"/> (a) <input type="checkbox"/> (b) |
| 3 | Sec Use Only |
| 4 | Citizenship or Place of Organization CAYMAN ISLANDS |

| | | |
|--|---|--|
| Number of Shares Beneficially Owned by Each Reporting Person With: | 5 | Sole Voting Power 0.00 |
| | 6 | Shared Voting Power 627,319.00 |
| | 7 | Sole Dispositive Power 0.00 |
| | 8 | Shared Dispositive Power 627,319.00 |
| 9 | Aggregate Amount Beneficially Owned by Each Reporting Person 627,319.00 | |
| 10 | Check box if the aggregate amount in row (9) excludes certain shares (See Instructions) <input type="checkbox"/> | |
| 11 | Percent of class represented by amount in row (9) 9.9 % | |
| 12 | Type of Reporting Person (See Instructions) CO | |

Comment for Type of Reporting Person: With respect to Row 6 and Row 8 above, Heights Capital Management, Inc. is the investment manager to CVI Investments, Inc. and as such may exercise voting and dispositive power over the shares reported as beneficially owned by CVI Investments, Inc. herein.

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|-----------|-----------|
| CUSIP No. | 70261F202 |
|-----------|-----------|

| | | |
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| 2 | Check the appropriate box if a member of a Group (see instructions) <input type="checkbox"/> (a) <input type="checkbox"/> (b) | |
| 3 | Sec Use Only | |
| 4 | Citizenship or Place of Organization DELAWARE | |
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SCHEDULE 13G

Item 1.

(a) **Name of issuer:**

Pasithea Therapeutics Corp.

(b) **Address of issuer's principal executive offices:**

1111 Lincoln Road, Suite 500, Miami Beach, FL 33139

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 Pasithea Therapeutics Corp. (the "Company"), \$0.0001 par value per share (the "Shares").

(i) CVI Investments, Inc.

(ii) Heights Capital Management, Inc.

(b) **Address or 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

(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.

(d) **Title of class of securities:**

Common Stock, \$0.0001 par value per share

(e) **CUSIP No.:**

70261F202

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

Item 4. Ownership

(a) Amount beneficially owned:

The information required by this Item 4(a) is set forth in Row 9 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 (i) 400,000 Shares, and (ii) Shares issuable upon the exercise of pre-funded warrants, Series C Common Warrants, and Series D Common Warrants to purchase Shares (together, the "Warrants"). The Warrants are not exercisable to the extent that the total number of Shares then beneficially owned by a Reporting Person and its affiliates and any other persons whose beneficial ownership of Shares would be aggregated with such Reporting Person for purposes of Section 13(d) of the Exchange Act, would exceed 9.99%.

The Company's Prospectus (Registration No. 333-286889), filed on May 7, 2025, indicates there were 6,052,147 Shares (excluding Shares underlying the Warrants) outstanding as of the completion of the offering of the Shares referred to therein.

(b) Percent of class:

9.9 %

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

The information required by this Item 4(c)(i) is set forth in Row 5 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

(ii) Shared power to vote or to direct the vote:

The information required by this Item 4(c)(ii) is set forth in Row 6 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

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.

(iii) Sole power to dispose or to direct the disposition of:

The information required by this Item 4(c)(iii) is set forth in Row 7 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

(iv) Shared power to dispose or to direct the disposition of:

The information required by this Item 4(c)(iv) is set forth in Row 8 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

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.

Item 5. Ownership of 5 Percent or Less of a Class.

Item 6. Ownership of more than 5 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. Certifications:

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 my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

CVI Investments, Inc.

Signature: /s/ Brian Sopinsky

Name/Title: Brian Sopinsky, Secretary of Heights Capital Management, Inc.

Date: 05/12/2025

Heights Capital Management, Inc.

Signature: /s/ Brian Sopinsky

Name/Title: Brian Sopinsky, Secretary

Date: 05/12/2025

Comments accompanying signature: Heights Capital Management, Inc. serves as authorized agent of CVI Investments, Inc. pursuant to a Limited Power of Attorney, a copy of which is attached as Exhibit I hereto.

Exhibit Information

EXHIBIT INDEX

EXHIBIT DESCRIPTION

- I Limited Power of Attorney
- II Joint Filing Agreement

LIMITED POWER OF ATTORNEY

THIS LIMITED POWER OF ATTORNEY given on the 16th day of July, 2015 by CVI Investments, Inc. (hereinafter called "the Company"), whose Registered Office is situated at PO Box 309GT, Ugland House, South Church Street, George Town, Grand Cayman, Cayman Islands.

WHEREAS, by agreement dated July 16, 2015, by and between the Company and Heights Capital Management, Inc., the Company expressly authorized Heights Capital Management, Inc. to enter into transactions in certain designated areas as defined in the Discretionary Investment Management Agreement attached hereto marked "Appendix I."

NOW THIS DEED WITNESSETH that William Walmsley, Director of the Company, hereby appoints on behalf of the Company the firm of HEIGHTS CAPITAL MANAGEMENT, INC., which through its officers, directors and employees is hereby formally granted limited power of attorney for the purpose of entering into transactions on behalf and for the account of the Company; and to take all actions on behalf of the Company as may be necessary to consummate such transactions, including but not limited to making, negotiating; signing, endorsing, executing, acknowledging and delivering in the name of the Company all applications, contracts, agreements, notes, statements, certificates, proxies and any other instruments of whatever kind and nature as may be necessary or proper in connection with the entering into of such transactions, instructing the transfer of funds where necessary with respect to such transactions, and performing all of the services specified under the Discretionary Investment Management Agreement with respect to such transactions.

IN WITNESS WHEREOF, the Company has caused this Limited Power of Attorney to take effect on the day and year above written.

CVI Investments, Inc.

By: /s/ William Walmsley
William Walmsley, Director

JOINT FILING AGREEMENT

This will confirm the agreement by and among the undersigned that the Schedule 13G filed with the Securities and Exchange Commission on or about the date hereof with respect to the beneficial ownership by the undersigned of the Common Stock, \$0.0001 par value per share, of Pasithea Therapeutics Corp., is being filed, and all amendments thereto will be filed, on behalf of each of the persons and entities named below in accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Dated as of May 12, 2025

CVI INVESTMENTS, INC.

By: Heights Capital Management, Inc.
pursuant to a Limited Power of Attorney

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

HEIGHTS CAPITAL MANAGEMENT, INC.

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