

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

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

APREA THERAPEUTICS, INC.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

03836J102

(CUSIP Number)

December 31, 2019

(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).

1 Name of Reporting Person
KDev Investments AB

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a) 0

(b) 0

3 SEC Use Only

4 Citizenship or Place of Organization
Sweden

5 Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6 Shared Voting Power
2,444,837 (1)

7 Sole Dispositive Power
0

8 Shared Dispositive Power
2,444,837 (1)

9 Aggregate Amount Beneficially Owned by Each Reporting Person
2,444,837 (1)

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11 Percent of Class Represented by Amount in Row (9)
11.6% (2)

12 Type of Reporting Person (See Instructions)
OO

(1) These shares reflect the beneficial ownership of the Issuer's common stock, par value \$0.001 ("Common Stock"), comprised of: (i) 1,992,591 shares of Common Stock held by KDev Investments AB, (ii) 283,693 shares of Common Stock held by Karolinska Development AB, and (iii) 168,553 shares of Common Stock held by KCIF Co-Investment Fund KB. Karolinska Development AB is the majority owner and co-manager of KDev Investments AB and a limited partner of KCIF Co-Investment Fund KB.

(2) Percentage based on 20,990,502 shares of Common Stock outstanding as of November 13, 2019, as disclosed in the Issuer's Quarterly Report on Form 10-Q ("Form 10-Q") filed with the U.S. Securities and Exchange Commission ("SEC") on November 14, 2019.

1 Name of Reporting Person
Karolinska Development AB

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization
Sweden

5 Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6 Shared Voting Power
2,444,837 (1)

7 Sole Dispositive Power
0

8 Shared Dispositive Power
2,444,837 (1)

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11 Percent of Class Represented by Amount in Row (9)
11.6% (2)

12 Type of Reporting Person (See Instructions)
OO

(1) These shares reflect the beneficial ownership of the Common Stock comprised of: (i) 1,992,591 shares of Common Stock held by KDev Investments AB, (ii) 283,693 shares of Common Stock held by Karolinska Development AB, and (iii) 168,553 shares of Common Stock held by KCIF Co-Investment Fund KB. Karolinska Development AB is the majority owner and co-manager of KDev Investments AB and a limited partner of KCIF Co-Investment Fund KB. (2) Percentage based on 20,990,502 shares of Common Stock outstanding as of November 13, 2019, as disclosed in the Issuer's Form 10-Q filed with the SEC on November 14, 2019.

1 Name of Reporting Person
KCIF Co-Investment Fund KB

2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization
Sweden

5 Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6 Shared Voting Power
2,444,837 (1)

7 Sole Dispositive Power
0

8 Shared Dispositive Power
2,444,837 (1)

9 Aggregate Amount Beneficially Owned by Each Reporting Person
2,444,837 (1)

10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11 Percent of Class Represented by Amount in Row (9)
11.6%(2)

12 Type of Reporting Person (See Instructions)
OO

(1) These shares reflect the beneficial ownership of the Common Stock comprised of: (i) 1,992,591 shares of Common Stock held by KDev Investments AB, (ii) 283,693 shares of Common Stock held by Karolinska Development AB, and (iii) 168,553 shares of Common Stock held by KCIF Co-Investment Fund KB. Karolinska Development AB is the majority owner and co-manager of KDev Investments AB and a limited partner of KCIF Co-Investment Fund KB. (2) Percentage based on 20,990,502 shares of Common Stock outstanding as of November 13, 2019, as disclosed in the Issuer's Form 10-Q filed with the SEC on November 14, 2019.

Item 1.

- (a) Name of Issuer
Aprea Therapeutics, Inc. (the "Issuer")
-
- (b) Address of Issuer's Principal Executive Offices
535 Boylston Street
Boston, MA 02116
-

Item 2.

- (a) Names of Persons Filing
KDev Investments AB
Karolinska Development AB
KCIF Co-Investment Fund KB
-
- (b) Address of Principal Business Office or, if none, Residence
KDev Investments AB
Tomtebodavägen 23A
171 65 Solna, Sweden

Karolinska Development AB
Tomtebodavägen 23A
171 65 Solna, Sweden

KCIF Co-Investment Fund KB
Tomtebodavägen 23A
171 65 Solna, Sweden
-
- (c) Citizenship
KDev Investments AB: Sweden
Karolinska Development AB: Sweden
KCIF Co-Investment Fund KB: Sweden
-
- (d) Title of Class of Securities
Common Stock, \$0.001 par value
-
- (e) CUSIP Number
03836J102
-

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);
- (k) Group, in accordance with § 240.13d-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.

(a) Amount beneficially owned:

KDev Investments AB — 2,444,837 (1)
Karolinska Development AB — 2,444,837 (1)
KCIF Co-Investment Fund KB — 2,444,837 (1)

(b) Percent of class:

KDev Investments AB — 11.6% (2)
Karolinska Development AB — 11.6% (2)
KCIF Co-Investment Fund KB — 11.6% (2)

(c) Number of shares as to which KDev Investments AB has:

(i) Sole power to vote or to direct the vote:
0

(ii) Shared power to vote or to direct the vote:
2,444,837 (1)

(iii) Sole power to dispose or to direct the disposition of:
0

(iv) Shared power to dispose or to direct the disposition of:
2,444,837 (1)

Number of shares as to which Karolinska Development AB has:

(i) Sole power to vote or to direct the vote:
0

(ii) Shared power to vote or to direct the vote:
2,444,837 (1)

(iii) Sole power to dispose or to direct the disposition of:
0

(iv) Shared power to dispose or to direct the disposition of:
2,444,837 (1)

Number of shares as to which KCIF Co-Investment Fund KB has:

(i) Sole power to vote or to direct the vote:
0

(ii) Shared power to vote or to direct the vote:
2,444,837 (1)

(iii) Sole power to dispose or to direct the disposition of:
0

(iv) Shared power to dispose or to direct the disposition of:
2,444,837 (1)

(1) KDev Investments AB's, Karolinska Development AB's and KCIF Co-Investment Fund's beneficial ownership of Common Stock is comprised of: (i) 1,992,591 shares of Common Stock held by KDev Investments AB, (ii) 283,693 shares of Common Stock held by Karolinska Development AB and (iii) 168,553 shares of Common Stock held by KCIF Co-Investment Fund KB. Karolinska Development AB is the majority owner and co-manager of KDev Investments AB and a limited partner of KCIF Co-Investment Fund KB.

(2) Percentage based on 20,990,502 shares of Common Stock outstanding as of November 13, 2019, as disclosed in the Issuer's Form 10-Q filed with the SEC on November 14, 2019.

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 5 percent of the class of securities, check the following

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

N/A

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

N/A

Item 8. Identification and Classification of Members of the Group.

N/A

Item 9. Notice of Dissolution of Group.

N/A

Item 10. Certifications.

N/A

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.

Date: February 14, 2020

Karolinska Development AB

By: /s/ Viktor Drvota
Name: Viktor Drvota
Title: Board Director

KDev Investments AB

By: Karolinska Development AB, Majority Owner and Co-Manager

By: /s/ Viktor Drvota
Name: Viktor Drvota
Title: Board Director

KCIF Co-Investment Fund KB

By: KCIF Fund Management AB

By: /s/ Ulf Richenberg
Name: Ulf Richenberg
Title: Board Director

Joint Filing Agreement

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the undersigned hereby agree to the joint filing on behalf of each of them of a Statement on Schedule 13G (including any and all amendments thereto, the "Schedule 13G") relating to the Common Stock, \$0.001 par value per share, of Aprea Therapeutics, Inc., which may be deemed necessary pursuant to Regulation 13D or 13G promulgated under the Exchange Act.

The undersigned further agree that each party hereto is responsible for the timely filing of the Schedule 13G, and for the accuracy and completeness of the information concerning such party contained therein; provided, however, that no party is responsible for the accuracy or completeness of the information concerning any other party, unless such party knows or has a reason to believe that such information is inaccurate.

It is understood and agreed that a copy of this Joint Filing Agreement shall be attached as an exhibit to the Schedule 13G, filed on behalf of each of the parties hereto.

IN WITNESS WHEREOF, each of the undersigned has executed this Joint Filing Agreement as of the 14th day of February, 2020.

KDEV INVESTMENTS AB

/s/ Viktor Drvota

Name: Viktor Drvota

Title: Board Director

KAROLINSKA DEVELOPMENT AB

/s/ Viktor Drvota

Name: Viktor Drvota

Title: Board Director

KCIF CO-INVESTMENT FUND KB

/s/ Ulf Richenberg

Name: Ulf Richenberg

Title: Board Director
