

PERNIX THERAPEUTICS HOLDINGS, INC.  
Form SC 13D/A  
July 27, 2015

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, DC 20549**

**SCHEDULE 13D**  
**Under the Securities Exchange Act of 1934**  
**(Amendment No. 3)\***

**Pernix Therapeutics Holdings, Inc.**

**(Name of Issuer)**

**Common Stock, par value \$0.01 per share**

**(Title of Class of Securities)**

**71426V108**

**(CUSIP Number)**

**Andrew C. Hyman, Esq.**

**Athyrium Capital Management, LP**

**530 Fifth Avenue, Floor 25**

**New York, New York 10036**

**(212) 402-6925**

**(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)**

**July 22, 2015**

**(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 §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. "

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

\* 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.

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).

CUSIP No. 71426V108

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1 Name of reporting person

Athyrium Opportunities Fund (A) LP

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

reporting 9 Sole dispositive power  
2,447,239

person

with 0

10 Shared dispositive power

2,447,239

11 Aggregate amount beneficially owned by each reporting person

2,447,239

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

4.91%

14 Type of reporting person

PN

1 Name of reporting person

Athyrium Opportunities Fund (B) LP

2 Check the appropriate box if a member of a group\*

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

1,341,763

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

1,341,763

11 Aggregate amount beneficially owned by each reporting person

1,341,763

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

2.69%

14 Type of reporting person

PN

1 Name of reporting person

Athyrium Opportunities Associates LP

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

PN

1 Name of reporting person

Athyrium Opportunities Associates GP LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO

1 Name of reporting person

Athyrium Capital Management, LP

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

PN / IA

1 Name of reporting person

Athyrium Capital Holdings, LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO

1 Name of reporting person

Jeffrey A. Ferrell

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

United States

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

IN

1 Name of reporting person

Athyrium Opportunities Advisers LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO / IA

1 Name of reporting person

NB Alternatives Advisers LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO / IA

1 Name of reporting person

NB Alternatives GP Holdings LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO

1 Name of reporting person

NB Alternatives Holdings LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO

1 Name of reporting person

Neuberger Berman AA LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO

1 Name of reporting person

Neuberger Berman Group LLC

2 Check the appropriate box if a member of a group

(a)  (b)

3 SEC use only

4 Source of funds

OO

5 Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

..

6 Citizenship or place of organization

Delaware

Number of 7 Sole voting power

shares

beneficially 0

8 Shared voting power

owned by

each

3,789,002

reporting 9 Sole dispositive power

person

with 0

10 Shared dispositive power

3,789,002

11 Aggregate amount beneficially owned by each reporting person

3,789,002

12 Check box if the aggregate amount in Row (11) excludes certain shares

..

13 Percent of class represented by amount in Row (11)

7.6%

14 Type of reporting person

OO

This Amendment No. 3 amends the Schedule 13D filed with the SEC on May 1, 2015 by the Reporting Persons, as amended by Amendment No. 1 filed with the SEC on May 14, 2015 and as amended by Amendment No. 2 filed with the SEC on June 19, 2015, in respect of the common stock, par value \$0.01 per share ( Common Stock ), of Pernix Therapeutics Holdings, Inc., a Maryland corporation (the Company ). Unless otherwise indicated, each capitalized term used but not defined in this Amendment No. 3 shall have the meaning assigned to such term in the initial Schedule 13D.

#### **Item 5. Interest in Securities of the Issuer.**

Item 5 is hereby amended and restated in its entirety with the following:

**(a)-(b)** All calculations of percentage ownership in this Schedule 13D are based on 43,540,098 shares outstanding as of April 24, 2015, as reported in the Company's Form 10-Q for the fiscal quarter ending on March 31, 2015 filed with the SEC on May 1, 2015, plus (i) the 2,842,289 shares of Common Stock received by the Funds on May 1, 2015; (ii) the 1,855,556 shares of Common Stock received by the Funds on May 27, 2015; (iii) the 1,430,965 shares of Common Stock received by the Funds on June 26, 2015 and (iv) an additional 181,781 shares of Common Stock which the Funds have the right to receive.

(1) Fund A directly beneficially owns or has a right to receive 2,447,239 shares of Common Stock (approximately 4.91% of the total number of shares of Common Stock outstanding). Fund A has the shared power to vote or direct the vote, and the shared power to dispose or direct the disposition of, all such 2,447,239 shares of Common Stock.

(2) Fund B directly beneficially owns or has a right to receive 1,341,763 shares of Common Stock (approximately 2.69% of the total number of shares of Common Stock outstanding). Fund B has the shared power to vote or direct the vote, and the shared power to dispose or direct the disposition of, all such 1,341,763 shares of Common Stock.

(3) Associates LP, in its capacity as the general partner of the Funds, has the ability to direct the management of the Funds' business, including the power to vote and dispose of securities held by the Funds; therefore, Associates LP may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(4) Associates GP, in its capacity as the general partner of Associates LP, has the ability to direct the management of Associates LP's business and, as such, may indirectly control the decisions of Associates LP regarding the vote and disposition of securities beneficially owned by the Funds; therefore, Associates GP may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(5) ACM, in its capacity as a member of Associates GP and an investment adviser to Opportunities Advisers, has the shared ability to direct the voting and disposal of securities held by the Funds; therefore, ACM may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(6) ACH, in its capacity as the general partner of ACM has the ability to direct the management of ACM's business and, as such, may indirectly control the decisions of ACM regarding the vote and disposition of securities held by the Funds; therefore, ACH may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(7) Jeffrey A. Ferrell, in his capacity as the Managing Member of ACH, has the ability to direct the management of ACM's business, including the power to vote and dispose of securities held by the Funds; therefore, Mr. Ferrell may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(8) Opportunities Advisers, in its capacity as an investment adviser to Associates GP, may have the shared ability to direct the voting and disposal of securities held by the Funds; therefore, Opportunities Advisers may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(9) Alternatives Advisers, in its capacity as the sole member of Opportunities Advisers, may have the shared ability to direct the voting and disposal of securities held by the Funds; therefore, Alternatives Advisers may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(10) Alternatives GP, in its capacity as a member of Associates GP, has the shared ability to direct the voting and disposal of securities held by the Funds; therefore, Alternatives GP may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(11) Alternatives Holdings, in its capacity as the sole member of Alternatives GP and a member of Alternatives Advisers, has the shared ability to direct the voting and disposal of securities held by the Funds; therefore, Alternatives Holdings may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(12) NB AA, in its capacity as a member of Alternatives Holdings and of Alternatives Advisers, has the shared ability to direct the voting and disposal of securities held by the Funds; therefore, NB AA may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

(13) NB Group, in its capacity as a member of Alternatives Holdings and the sole member of NB AA, has the shared ability to direct the voting and disposal of securities held by the Funds; therefore, NB Group may be deemed to have indirect beneficial ownership of the 3,789,002 shares of Common Stock (approximately 7.6% of the total number of shares of Common Stock outstanding) beneficially owned by the Funds, collectively, and may be deemed to have shared voting and investment power over these shares of Common Stock.

To the knowledge of the Reporting Persons, none of the Covered Persons directly owns any shares of Common Stock; provided, however, that because of each Covered Person's status as a director, executive officer, manager, member or partner of a Reporting Person, a Covered Person may be deemed to be the beneficial owner of the shares of Common Stock beneficially owned by such Reporting Person. Except to the extent of their pecuniary interest, each of the Covered Persons disclaims beneficial ownership of the shares of the Common Stock reported herein and the filing of this Schedule 13D shall not be construed as an admission that any such Covered Person is the beneficial owner of any securities covered by this statement.

(c) Except as set forth below, none of the Reporting Persons or, to their knowledge, none of the Covered Persons, has had any transactions in the Common Stock since the filing of Amendment No. 2 to the initial Schedule 13D.

On June 26, 2015, Fund A received 921,440 additional shares of Common Stock and Fund B received 509,525 additional shares of Common Stock from the Company.

Since the filing of Amendment No. 2 to the initial Schedule 13D, the Funds have engaged in the following sales transactions on the NASDAQ Global Market:

<b>Date</b>	<b>Total Shares</b>	<b>Price</b>	<b>Fund A</b>	<b>Fund B</b>
7/7/2015	170,000	\$ 5.6868	109,468	60,532
7/8/2015	90,000	\$ 5.4373	57,954	32,046
7/9/2015	57,600	\$ 5.3979	37,090	20,510
7/10/2015	80,000	\$ 5.3792	51,514	28,486
7/13/2015	102,400	\$ 5.4039	65,938	36,462
7/14/2015	100,000	\$ 5.4498	64,393	35,607
7/15/2015	75,000	\$ 5.5127	48,295	26,705
7/16/2015	200,000	\$ 6.0035	128,786	71,214
7/17/2015	115,000	\$ 6.1051	74,052	40,948
7/20/2015	110,000	\$ 5.6830	70,832	39,168
7/21/2015	100,000	\$ 5.5649	64,393	35,607
7/22/2015	110,000	\$ 5.4074	70,832	39,168
<b>Total</b>	<b>1,310,000</b>	<b>\$ 5.6400</b>	<b>843,547</b>	<b>466,453</b>

As of the date of this Amendment No. 3, the Funds have a right to receive a total of 181,781 additional shares of Common Stock.

(d) Except as set forth herein, to the knowledge of the Reporting Persons, no other person has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, any shares of Common Stock.

(e) Not applicable.

**SIGNATURES**

After reasonable inquiry and to the best of his or its knowledge and belief, each of the undersigned certifies that the information set forth in this Amendment No. 3 to Schedule 13D is true, complete and correct.

Dated as of July 27, 2015.

ATHYRIUM OPPORTUNITIES FUND (A)  
LP

By: ATHYRIUM OPPORTUNITIES  
ASSOCIATES LP, its General  
Partner

By: ATHYRIUM  
OPPORTUNITIES  
ASSOCIATES GP LLC, its  
General Partner

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES FUND (B)  
LP

By: ATHYRIUM OPPORTUNITIES  
ASSOCIATES LP, its General  
Partner

By: ATHYRIUM  
OPPORTUNITIES  
ASSOCIATES GP LLC, its  
General Partner

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES ASSOCIATES  
LP

By: ATHYRIUM OPPORTUNITIES  
ASSOCIATES GP LLC, its General  
Partner

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

ATHYRIUM OPPORTUNITIES ASSOCIATES GP LP

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

ATHYRIUM CAPITAL MANAGEMENT, LP

By: /s/ Jeffrey A. Ferrell  
Name: Jeffrey A. Ferrell  
Title: Authorized Signatory

ATHYRIUM CAPITAL HOLDINGS, LLC

By: /s/ Jeffrey A. Ferrell  
Name: Jeffrey A. Ferrell  
Title: Authorized Signatory

/s/ Jeffrey A. Ferrell  
JEFFREY A. FERRELL

ATHYRIUM OPPORTUNITIES ADVISERS LLC

By: NB ALTERNATIVES ADVISERS  
its Sole Member

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

NB ALTERNATIVES ADVISERS LLC

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

NB ALTERNATIVES GP HOLDINGS LLC

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

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NB ALTERNATIVES HOLDINGS LLC

By: /s/ Christian Neira  
Name: Christian Neira  
Title: Authorized Signatory

NEUBERGER BERMAN AA LLC

By: /s/ Andrew Komaroff  
Name: Andrew Komaroff  
Title: Authorized Signatory

NEUBERGER BERMAN GROUP LLC

By: /s/ Andrew Komaroff  
Name: Andrew Komaroff  
Title: Authorized Signatory