

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

SCHEDULE 13D  
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO  
RULE 13d-2(a)

(Amendment No. \_\_\_\_)\*

**Pernix Therapeutics Holdings, Inc.**  
(Name of Issuer)

**Common Stock, par value \$0.01 per share**  
(Title of Class of Securities)

**71426V108**  
(CUSIP Number)

**Lloyd Appel**  
**Aisling Capital**  
**888 Seventh Avenue, 30<sup>th</sup> Floor**  
**New York, NY 10106**  
**(212) 651-6380**  
(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

**July 27, 2011**  
(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 (the "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).

---

## SCHEDULE 13D

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
	Aisling Capital III, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) <input type="radio"/> (b) <input checked="" type="radio"/>
3	SEC USE ONLY	
4	SOURCE OF FUNDS (see instructions)	
	OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	<input type="radio"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 2,000,000
	8	SHARED VOTING POWER 0
	9	SOLE DISPOSITIVE POWER 2,000,000
	10	SHARED DISPOSITIVE POWER 0
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,000,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)	<input type="radio"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.8% <sup>(1)</sup>	
14	TYPE OF REPORTING PERSON (see instructions) PN	

<sup>(1)</sup> Based on 25,705,730 shares of the Issuer's common stock issued and outstanding following the close of an underwritten offering of 4 million shares, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on July 21, 2011.

---

## SCHEDULE 13D

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
	Aisling Capital Partners III, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) <input type="radio"/> (b) <input checked="" type="radio"/>
3	SEC USE ONLY	
4	SOURCE OF FUNDS (see instructions)	
	OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	<input type="radio"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 2,000,000
	8	SHARED VOTING POWER 0
	9	SOLE DISPOSITIVE POWER 2,000,000
	10	SHARED DISPOSITIVE POWER 0
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,000,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)	<input type="radio"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.8% <sup>(1)</sup>	
14	TYPE OF REPORTING PERSON (see instructions) PN	

<sup>(1)</sup> Based on 25,705,730 shares of the Issuer's common stock issued and outstanding following the close of an underwritten

offering of 4 million shares, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on July 21, 2011.

---

## SCHEDULE 13D

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)  Aisling Capital Partners III LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) <input type="radio"/> (b) <input checked="" type="radio"/>
3	SEC USE ONLY	
4	SOURCE OF FUNDS (see instructions)  OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	<input type="radio"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION  Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER  2,000,000
	8	SHARED VOTING POWER  0
	9	SOLE DISPOSITIVE POWER  2,000,000
	10	SHARED DISPOSITIVE POWER  0
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  2,000,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)	<input type="radio"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  7.8% <sup>(1)</sup>	
14	TYPE OF REPORTING PERSON (see instructions)  OO	

<sup>(1)</sup> Based on 25,705,730 shares of the Issuer's common stock issued and outstanding following the close of an underwritten offering of 4 million shares, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on July 21, 2011.



## SCHEDULE 13D

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
	Steve Elms	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) <input type="radio"/> (b) <input checked="" type="radio"/>
3	SEC USE ONLY	
4	SOURCE OF FUNDS (see instructions)	
	OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	<input type="radio"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER
		0
	8	SHARED VOTING POWER
		2,000,000
	9	SOLE DISPOSITIVE POWER
		0
	10	SHARED DISPOSITIVE POWER
		2,000,000
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	2,000,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)	<input type="radio"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	7.8% <sup>(1)</sup>	
14	TYPE OF REPORTING PERSON (see instructions)	
	IN	

<sup>(1)</sup> Based on 25,705,730 shares of the Issuer's common stock issued and outstanding following the close of an underwritten offering of 4 million shares, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on July 21, 2011.



SCHEDULE 13D

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)  Dennis Purcell	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) <input type="radio"/> (b) <input checked="" type="radio"/>
3	SEC USE ONLY	
4	SOURCE OF FUNDS (see instructions)  OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e) <input type="radio"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION  United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER  0
	8	SHARED VOTING POWER  2,000,000
	9	SOLE DISPOSITIVE POWER  0
	10	SHARED DISPOSITIVE POWER  2,000,000
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  2,000,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions) <input type="radio"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  7.8% <sup>(1)</sup>	
14	TYPE OF REPORTING PERSON (see instructions)  IN	

(1) Based on 25,705,730 shares of the Issuer's common stock issued and outstanding following the close of an underwritten offering of 4 million shares, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on July 21, 2011.



## SCHEDULE 13D

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)	
	Andrew Schiff	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) <input type="radio"/> (b) <input checked="" type="radio"/>
3	SEC USE ONLY	
4	SOURCE OF FUNDS (see instructions)	
	OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	<input type="radio"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER
		0
	8	SHARED VOTING POWER
		2,000,000
	9	SOLE DISPOSITIVE POWER
		0
	10	SHARED DISPOSITIVE POWER
		2,000,000
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	2,000,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions)	<input type="radio"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	7.8% <sup>(1)</sup>	
14	TYPE OF REPORTING PERSON (see instructions)	
	IN	

<sup>(1)</sup> Based on 25,705,730 shares of the Issuer's common stock issued and outstanding following the close of an underwritten offering of 4 million shares, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on July 21, 2011.

---

Item 1. Security and Issuer.

The security to which this statement relates is common stock, par value \$0.01 per share (the “Common Stock”). The principal executive offices of Pernix Therapeutics Holdings, Inc. (the “Issuer”) are located at 10003 Woodloch Forest Drive, The Woodlands, TX 77380.

Item 2. Identity and Background.

(a) This Schedule 13D is being filed on behalf of the following persons (each, a “Reporting Person” and collectively, the “Reporting Persons”):

- (i) Aisling Capital III, LP (“Aisling”);
- (ii) Aisling Capital Partners III, LP (“Aisling Partners”), the general partner of Aisling;
- (iii) Aisling Capital Partners III LLC (“Aisling Partners GP”) the general partner of Aisling Partners;
- (v) Mr. Dennis Purcell, the managing member of Aisling Partners GP (“Managing Member”);
- (vi) Mr. Steven Elms, a principal of Aisling Partners GP;
- (vi) Mr. Andrew Schiff, a principal of Aisling Partners GP.

(b) The principal business address for each of the Reporting Persons is 888 Seventh Avenue, 30<sup>th</sup> Floor, New York, New York 10106.

(c) Aisling was formed in order to engage in the acquiring, holding and disposing of investments in various companies. Aisling Partners is the general partner of Aisling and was formed to act as the general partner of Aisling, to make investments on behalf of Aisling and to fulfill such other purposes as may be determined by Aisling from time to time. Aisling Partners GP is the general partner of Aisling Partners and was formed to act as the general partner of Aisling Partners. Dennis Purcell is the Managing Member of Aisling Partners GP. Steven Elms is a principal of Aisling Partners GP who may be deemed to share the power to direct the voting and disposition of the Common Stock beneficially owned by the Reporting Persons. Andrew Schiff is a principal of Aisling Partners GP who may be deemed to share the power to direct the voting and disposition of the Common Stock beneficially owned by the Reporting Persons. Accordingly, pursuant to the regulations promulgated under Section 13(d) of the Securities

---

Exchange Act of 1934, Aisling Partners, Aisling GP, Mr. Elms, Mr. Purcell and Mr. Schiff each may be deemed to be a beneficial owner of the Common Stock held for the account of Aisling.

(d) None of the Reporting Persons has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) None of the Reporting Persons has, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding were or are subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, Federal or state securities laws or finding any violation with respect to such laws.

(f) Each of Aisling and Aisling Partners is a Delaware limited partnership. Aisling Partners GP is a Delaware limited liability company. Each of Steven Elms, Dennis Purcell and Andrew Schiff is a United States citizen.

Item 3. Source and Amount of Funds or Other Consideration.

As of the date hereof, each of the Reporting Persons may be deemed to beneficially own 2,000,000 shares of Common Stock, which were acquired on July 27, 2011 with an aggregate purchase price of \$14,000,000 (the "Purchase"). The source of the purchase price for the Purchase was capital contributions from the partners of Aisling. No borrowed funds were used to purchase the Common Stock.

Item 4. Purpose of Transaction.

Each Reporting Person expects to evaluate on an ongoing basis the Issuer's financial condition and prospects and its interest in, and intentions with respect to, the Issuer and their investment in the securities of the Issuer, which review may be based on various factors, including the Issuer's business and financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's securities in particular, as well as other developments and other investment opportunities, which, if effected, could result in, among other things, any of the matters identified in Items 4(a)–(j) of Schedule 13D. Accordingly, each Reporting Person reserves the right to change its intentions and develop plans or proposals at any time, as it deems appropriate. In particular, each Reporting Person may at any time and from time to time, (i) in the open market, in privately negotiated transactions or otherwise, acquire additional Common Stock or other securities of the Issuer, including acquisitions from affiliates of the Reporting Persons; (ii) dispose or

---

transfer of all or a portion of the securities of the Issuer, including the Common Stock, that the Reporting Persons now own or may hereafter acquire to any person or entity, including dispositions to affiliates of the Reporting Persons; (iii) enter into derivative transactions with institutional counterparties with respect to the Issuer's securities; (iv) cause or seek to cause the Issuer or any of its subsidiaries to acquire all or a portion of another person's assets or business, including acquisitions from affiliates of the Reporting Persons; (v) cause or seek to cause the Issuer or any of its subsidiaries to enter into one or more acquisitions, business combinations or mergers or to sell, transfer or otherwise dispose of all or any portion of its assets or business to any person or entity, including acquisitions, business combinations, mergers, sales, transfers and other dispositions with or to affiliates of the Reporting Persons; (vi) restructure the Issuer's or any of its subsidiaries' capitalization, indebtedness or holding company arrangements; (vii) make personnel changes to the present management of the Issuer deemed necessary or desirable; (viii) change the identity of the directors of the Issuer; (ix) make or propose any other material change in the Issuer's or any of its subsidiaries' corporate structure or business; or (x) engage in communications with one or more stockholders, officers or directors of the Issuer and other persons regarding any of the matters described in clauses (i) through (ix) above.

Item 5. Interest in Securities of the Issuer.

(a) The aggregate percentage of shares of Common Stock reported as owned by each Reporting Person is based on 25,705,730 shares of the Issuer's common stock issued and outstanding following the close of an underwritten offering of 4 million shares, as reported in the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 21, 2011. Based on calculations made in accordance with Rule 13d-3(d), each Reporting Person may be deemed to beneficially own 2,000,000 shares of Common Stock, constituting approximately 7.8% of the outstanding shares of Common Stock.

(b) (i) Each of Aisling, Aisling Partners and Aisling Partners GP may be deemed to have sole power to direct the voting and disposition of the 2,000,000 shares of Common Stock that may be deemed to be beneficially owned by the Reporting Persons.

(ii) By virtue of the relationships between and among the Reporting Persons described in Item 2 of this Schedule 13D, each of the Messrs. Elms, Purcell and Schiff may be deemed to share the

---

power to direct the voting and disposition of the 2,000,000 shares of Common Stock beneficially owned by the Reporting Persons.

(c) No Reporting Person nor, to the best knowledge of each Reporting Person, any person identified in Item 2 of this Schedule 13D, has effected any transaction in shares of Common Stock during the preceding 60 days.

(d) The partners of Aisling have the right to participate in the receipt of dividends from, or proceeds from the sale of, the shares of Common Stock held for the account of Aisling in accordance with their ownership interests in Aisling.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

From time to time, each of the Reporting Persons may lend portfolio securities to brokers, banks or other financial institutions. These loans typically obligate the borrower to return the securities, or an equal amount of securities of the same class, to the lender and typically provide that the borrower is entitled to exercise voting rights and to retain dividends during the term of the loan. From time to time, to the extent permitted by applicable laws, each of the Reporting Persons may borrow securities, including the Common Stock, for the purpose of effecting, and may effect, short sale transactions, and may purchase securities for the purpose of closing out short positions in such securities.

On August 8, 2011, each of the Reporting Persons entered into an agreement (the "Joint Filing Agreement") in which the parties agreed to the joint filing on behalf of each of them of statements on Schedule 13D with respect to the securities of the Issuer to the extent required by applicable law. The Joint Filing Agreement is attached as an exhibit hereto and is incorporated herein by reference.

Item 7. Material to be Filed as Exhibits.

Exhibit 1: Joint Filing Agreement dated as of August 8, 2011, as required by Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended

---

**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: August 8, 2011

**AISLING CAPITAL III, LP**

By: Aisling Capital Partners III, LP  
General Partner

By: Aisling Capital Partners III LLC  
General Partner

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

**AISLING CAPITAL PARTNERS III, LP**

By: Aisling Capital Partners III LLC  
General Partner

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

**AISLING CAPITAL PARTNERS III LLC**

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

/s/ Steve Elms  
Steve Elms

/s/ Dennis Purcell  
Dennis Purcell

/s/ Andrew Schiff  
Andrew Schiff

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (*see* 18 U.S.C. 1001).

---

**EXHIBIT 1**

**JOINT FILING AGREEMENT**

Each of the undersigned hereby acknowledges and agrees, in compliance with the provisions of Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, that the Schedule 13D to which this Agreement is attached as an Exhibit (the "Schedule 13D"), and any amendments thereto, will be filed with the Securities and Exchange Commission jointly on behalf of the undersigned. This Agreement may be executed in one or more counterparts.

Date: August 8, 2011

**AIKLING CAPITAL III, LP**

By: Aisling Capital Partners III, LP  
General Partner

By: Aisling Capital Partners III LLC  
General Partner

By:                     /s/ Dennis Purcell                      
Name: Dennis Purcell  
Title: Managing Member

**AIKLING CAPITAL PARTNERS III, LP**

By: Aisling Capital Partners III LLC  
General Partner

By:                     /s/ Dennis Purcell                      
Name: Dennis Purcell  
Title: Managing Member

**AIKLING CAPITAL PARTNERS III LLC**

By:                     /s/ Dennis Purcell                      
Name: Dennis Purcell  
Title: Managing Member

                    /s/ Steve Elms                      
Steve Elms

                    /s/ Dennis Purcell                      
Dennis Purcell

                    /s/ Andrew Schiff                      
Andrew Schiff

---