# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **SCHEDULE 13G**

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

# **OncoGenex Pharmaceuticals, Inc.**

(Name of issuer)

Common Stock, \$0.001 par value (Title of class of securities)

68230A106 (CUSIP number)

December 31, 2011 (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).

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(1)	Names of reporting persons		
	Boxer Capital, LLC		
(2)			
	(a) □ (b) ⊠		
(3)	SEC use only		
(4)	Citizenship or place of organization		
	Delaware		
		(5)	Sole voting power
Number of shares beneficially			-0-
		(6)	Shared voting power
owned by			629,801
each reporting		(7)	Sole dispositive power
pers	son		-0-
with:		(8)	Shared dispositive power
			629,801
(9)	Aggregate amount beneficially owned by each reporting person		
	629,801		
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) □		
(11)	Percent of class represented by amount in Row (9)		
	6.35%*		
(12)	Type of 1	epor	ting person (see instructions)
	СО		

<sup>\*</sup> Based on 9,908,352 shares outstanding, which is the sum of (i) 9,748,352 common shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011, and (ii) 160,000 Common Shares underlying Warrants to purchase Common Shares. See Item 4.

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(1)	Names of reporting persons				
	Boxer Asset Management Inc.				
(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				
	Bahamas	Bahamas			
		(5)	Sole voting power		
Number of shares			-0-		
		(6)	Shared voting power		
benefi owne			629,801		
eac	ch	(7)	Sole dispositive power		
reporting person with:			-0-		
		(8)	Shared dispositive power		
			629,801		
(9)	Aggregate amount beneficially owned by each reporting person				
	629,801				
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) □				
(11)	Percent of class represented by amount in Row (9)				
	6.35%*				
(12)	Type of	repor	ting person (see instructions)		
	CO				
	-				

<sup>\*</sup> Based on 9,908,352 shares outstanding, which is the sum of (i) 9,748,352 Common Shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011, and (ii) 160,000 Common Shares underlying Warrants to purchase Common Shares. See Item 4.

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(1)	Names of reporting persons		
	MVA Investors, LLC		
(2)			propriate box if a member of a group (see instructions)
	(a) □ (b) ⊠		
(3)	SEC use only		
(4)	Citizenship or place of organization		
	Delaware		
<b>'</b>		(5)	Sole voting power
Number of shares			-0-
		(6)	Shared voting power
beneficially owned by			15,000
each		(7)	Sole dispositive power
reporting person			-0-
with:		(8)	Shared dispositive power
			15,000
(9)	Aggregate amount beneficially owned by each reporting person		
	15,000		
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) □		
(11)	Percent of class represented by amount in Row (9)		
	0.15%*		
(12)	Type of 1	repor	ting person (see instructions)
	СО		

<sup>\*</sup> Based on 9,753,352 shares outstanding, which is the sum of (i) 9,748,352 common shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011, and (ii) 5,000 Common Shares underlying the Warrants. See Item 4.

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(1)	Names of reporting persons			
	Neil Reisman			
(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			
United States				
		(5)	Sole voting power	
Number of shares beneficially			4,000	
		(6)	Shared voting power	
owned by			-0-	
eac		(7)	Sole dispositive power	
reporting person			4,000	
with:		(8)	Shared dispositive power	
			-0-	
(9)	Aggregate amount beneficially owned by each reporting person			
	4,000			
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) □			
(11)	Percent of class represented by amount in Row (9)			
	0.0%*			
(12)	Type of reporting person (see instructions)			
	IN			

<sup>\*</sup> Based on 9,748,352 Common Shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011. See Item 4.

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(1)	Names of reporting persons				
	Ivan Liel	berbu	rg		
(2)	Check th	e app	propriate box if a member of a group (see instructions)		
` ′	(a) $\square$				
	( )	` ′			
(3)	SEC use only				
(4)	Citizenship or place of organization				
( )		_			
	United S	nited States			
		(5)	Sole voting power		
		` ´			
Numb	per of		100		
sha		(6)	Shared voting power		
benefi					
owne			-0-		
eac	ch	(7)	Sole dispositive power		
repoi	rting				
pers			100		
with:		(8)	Shared dispositive power		
			-0-		
(9)	Aggregate amount beneficially owned by each reporting person				
	100				
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) □				
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions)				
(11)	Percent of class represented by amount in Row (9)				
	0.0%*				
(12)	Type of	repor	ting person (see instructions)		
	IN				

<sup>\*</sup> Based on 9,748,352 Common Shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011. See Item 4.

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(1)	Names of reporting persons		
	Joseph Lewis		
(2)			
	(a) □ (b) ⊠		
(3)	SEC use only		
(4)	Citizenship or place of organization		
United Kingdom		om	
		(5)	Sole voting power
Number of shares beneficially			-0-
		(6)	Shared voting power
owned by			629,801
renor	-	(7)	Sole dispositive power
reporting person			-0-
with:		(8)	Shared dispositive power
			629,801
(9)	Aggregate amount beneficially owned by each reporting person		
	629,801		
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) □		
(11)	Percent of class represented by amount in Row (9)		
	6.35%*		
(12)	Type of 1	epor	ting person (see instructions)
	IN		

<sup>\*</sup> Based on 9,908,352 shares outstanding the sum of (i) 9,748,352 Common Shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011, and (ii) 160,000 Common Shares underlying the Warrants. See Item 4.

This Amendment No. 3 ("Amendment No. 3") amends and supplements the statement on Schedule 13G initially filed on June 10, 2009 (the "Original Filing"), as amended on February 16, 2010 ("Amendment No. 1") and November 1, 2010 ("Amendment No. 2"). The Original Filing remains in effect except to the extent that it is amended, restated or superseded by information contained in Amendment No. 1, Amendment No. 2 or this Amendment No. 3. Capitalized terms used and not defined in this Amendment No. 3 have the meanings set forth in the Original Filing, Amendment No. 1 or Amendment No. 2.

#### Item 2(a). Name of Person Filing:

Item 2(a) is hereby restated as follows:

This Schedule 13G is jointly filed by Boxer Capital, LLC ("Boxer Capital"), Boxer Asset Management Inc. ("Boxer Management"), MVA, Neil Reisman, Ivan Lieberburg and Joseph Lewis (together with Boxer Capital and Boxer Management, MVA, Neil Reisman and Ivan Lieberburg the "Reporting Persons"). Boxer Management is the managing member and majority owner of Boxer Capital. Joseph Lewis is the sole indirect owner and controls Boxer Management. Messrs. Reisman and Lieberburg are employed by Tavistock Life Sciences Company, which is a Delaware corporation and an affiliate of Boxer Capital. MVA is the independent, personal investment vehicle of certain employees of Boxer Capital and Tavistock Life Sciences Company. As such, MVA is not controlled by Boxer Capital, Boxer Management or Joseph Lewis.

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

Item 2(b) is hereby restated as follows:

The principal business address of the Boxer Capital, MVA, Neil Reisman and Ivan Lieberburg is 445 Marine View Avenue, Suite 100, Del Mar, CA 92014. The principal business address of both Boxer Management and Joseph Lewis is: c/o Cay House P.O. Box N-7776 E.P. Taylor Drive Lyford Cay, New Providence, Bahamas.

#### Item 2(c). Citizenship:

Item 2(c) is hereby restated as follows:

Boxer Capital is a limited liability company organized under the laws of Delaware. Boxer Management is organized under the laws of the Bahamas. Neil Reisman and Ivan Lieberburg are citizens of the United States. Joseph Lewis is a citizen of the United Kingdom. MVA is a limited liability company organized under the laws of Delaware.

#### Item 4. Ownership.

Item 4 is hereby restated as follows:

(a) Amount beneficially owned:

Boxer Capital, Boxer Management and Joseph Lewis beneficially own 629,801\* Common Shares, the sum 469,801 Common Shares and 160,000 Common Shares underlying currently exercisable warrants to purchase Common Shares (the "Warrants"). MVA beneficially owns 15,000\* Common Shares, the sum of 10,000 Common Shares and 5,000 Common Shares underlying Warrants. Neil Reisman beneficially owns 4,000\* Common Shares. Ivan Lieberburg beneficially owns 100\* Common Shares.

(b) Percent of class:

The Common Shares beneficially owned by Boxer Capital, Boxer Management and Joseph Lewis represent 6.35% of the Issuer's outstanding Common Shares. The Common Shares beneficially owned by MVA represent 0.15% of the Issuer's outstanding Common Shares. The Common Shares beneficially owned by Neil Reisman represent 0.0% of the Issuer's outstanding Common Shares. The Common Shares beneficially owned by Ivan Lieberburg represent 0.0% of the Issuer's outstanding Common Shares.

- (c) Number of shares as to which such person has:
  - (i) Sole power to vote or direct the vote:

MVA has the sole power to vote the 15,000\* Common Shares it beneficially owns. Neil Reisman has the sole power to vote the 4,000\* Common Shares he beneficially owns. Ivan Lieberburg has the sole power to vote the 100\* Common Shares he beneficially owns. Boxer Capital, Boxer Management and Joseph Lewis do not have the sole power to dispose or direct the disposition of any Common Shares.

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

Boxer Capital, Boxer Management and Joseph Lewis have shared voting power with respect to the 629,801\* Common Shares they beneficially own. MVA, Neil Reisman and Ivan Lieberburg do not have shared power to vote or direct the vote of any Common Shares.

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

MVA has the sole power to dispose of the 15,000\* Common Shares it beneficially owns. Neil Reisman has the sole power to dispose of the 4,000\* Common Shares he beneficially owns. Ivan Lieberburg has the sole power to dispose of the 100\* Common Shares he beneficially owns. Boxer Capital, Boxer Management and Joseph Lewis do not have the sole power to dispose or direct the disposition of any Common Shares.

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

Boxer Capital, Boxer Management and Joseph Lewis have shared dispositive power with respect to the 629,801\* Common Shares they beneficially own. MVA, Neil Reisman and Ivan Lieberburg do not have shared power to dispose of or direct the disposition of any Common Shares.

\* The Reporting Persons may be deemed to beneficially own 644,801 Common Shares which constitute approximately 6.5% of 9,913,352 outstanding Common Shares, a notional number of outstanding Common Shares based on the sum of (i) 9,748,352 Common Shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011, and (ii) 165,000 Common Shares underlying the Warrants. Boxer Management and Joseph Lewis each have shared voting and dispositive power with regard to the Common Shares beneficially owned directly by Boxer Capital. MVA has sole voting and dispositive power over the Common Shares beneficially owned by it. None of Boxer Capital, Boxer Management or Mr. Lewis has any voting or dispositive power with regard to the Common Shares beneficially owned by MVA. Messrs. Reisman and Lieberburg each hold the Common Shares directly owned by each of them in their respective personal accounts and each has sole voting and dispositive power over the Common Shares owned by each of them directly. None of Boxer Capital, Boxer Management, MVA or Mr. Lewis have any voting or dispositive power with regard to the Common Shares held by Messrs. Reisman and Lieberburg. As of February 14, 2012, the Reporting Persons may be deemed to beneficially own 543,963 Common Shares, which constitute approximately 5.5% of 9,913,352 outstanding Common Shares, a notional number of outstanding Common Shares based on the sum of (i) 9,748,352 Common Shares reported outstanding as of November 1, 2011 on the Issuer's Quarterly Report on Form 10-Q filed on November 3, 2011, and (ii) 165,000 Common Shares underlying the Warrants.

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

Not applicable.

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

Item 6 is restated as follows:

Only Boxer Capital has the right to receive dividends and the proceeds from sale of the Common Shares held by the Boxer Capital. Only MVA has the right to receive dividends and the proceeds from sale of the Common Shares held by the MVA. Messrs. Reisman and Lieberburg each have the sole right to receive dividends and proceeds from the sale of the Common Shares directly owned by them, which are held by each of them in their respective personal accounts. See Item 4 above.

#### Item 10. Certification.

(c) 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 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.

# **Exhibits**

Joint Filing Agreement, dated the date hereof, between the Reporting Persons.

### 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, 2012

BOXER CAPITAL, LLC.

By: /s/ Aaron Davis

Name: Aaron Davis Title: Authorized Signatory

BOXER ASSET MANAGEMENT INC.

By: /s/ Jefferson R. Voss

Name: Jefferson R. Voss

Title: Director

MVA INVESTORS, LLC

By: /s/ Neil Reisman

Name: Neil Reisman Title: Authorized Signatory

NEIL REISMAN

By: /s/ Neil Reisman

Neil Reisman, Individually

IVAN LIEBERBURG

By: /s/ Ivan Lieberburg

Ivan Lieberburg, Individually

JOSEPH LEWIS

By: /s/ Joseph Lewis

Joseph Lewis, Individually

#### JOINT FILING AGREEMENT

The undersigned hereby agree that the Statement on Schedule 13G, dated February 14, 2012, with respect to the shares of OncoGenex Pharmaceuticals, Inc.'s Common Stock, par value \$0.001 per share, is, and any amendments thereto executed by each of us shall be, filed on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, and that this Agreement shall be included as an Exhibit to the Schedule 13G and each such amendment. Each of the undersigned agrees to be responsible for the timely filing of the Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning itself contained therein. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the 14th day of February, 2012.

BOXER CAPITAL, LLC.

By: /s/ Aaron Davis

Name: Aaron Davis Title: Authorized Signatory

BOXER ASSET MANAGEMENT INC.

By: /s/ Jefferson R. Voss

Name: Jefferson R. Voss Title: Director

MVA INVESTORS, LLC

By: /s/ Neil Reisman

Name: Neil Reisman Title: Authorized Signatory

NEIL REISMAN

By: /s/ Neil Reisman

Neil Reisman, Individually

IVAN LIEBERBURG

By: /s/ Ivan Lieberburg

Ivan Lieberburg, Individually

JOSEPH LEWIS

By: /s/ Joseph Lewis

Joseph Lewis, Individually