

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

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

OncoGenex Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

68230A106

(CUSIP Number)

August 12, 2011

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule 13G 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	NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Abingworth LLP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)	(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	England	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER: 0
	6	SHARED VOTING POWER: 489,540*
	7	SOLE DISPOSITIVE POWER: 0
	8	SHARED DISPOSITIVE POWER: 489,540*
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	489,540*	
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	5.0%*
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)	PN

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\* Beneficial ownership percentage is based upon 9,725,489 shares of common stock, \$0.001 par value per share ("Common Stock"), of OncoGenex Pharmaceuticals, Inc., a Delaware corporation (the "Issuer"), issued and outstanding as of August 1, 2011, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2011 (File No. 033-80623), filed with the Securities and Exchange Commission on August 5, 2011. Abingworth LLP (the "Reporting Person") is the investment manager to a number of investment funds that include Abingworth Bioventures V L.P. ("ABV V") and Abingworth Bioequities Master Fund Limited ("ABE" and, together with ABV V, the "Abingworth Funds"). As of August 12, 2011, ABV V is the owner of record of 335,578 shares of Common Stock and ABE is the owner of record of 153,962 shares of Common Stock. The Reporting Person, as the investment manager to the Abingworth Funds, may be deemed to beneficially own the 489,540 shares of Common Stock held by the Abingworth Funds.

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- Item 1(a).** **Name of Issuer:** OncoGenex Pharmaceuticals, Inc. (the "Issuer").
- Item 1(b).** **Address of Issuer's Principal Executive Offices**  
1522 217<sup>th</sup> Place SE, Suite 100, Bothell, Washington 98021.
- Item 2(a).** **Name of Persons Filing:** This Schedule 13G is being filed by Abingworth LLP (the "Reporting Person"). The Reporting Person is the investment manager to a number of investment funds that include Abingworth Bioventures V L.P. ("ABV V") and Abingworth Bioequities Master Fund Limited ("ABE" and, together with ABV V, the "Abingworth Funds"). As of August 12, 2011, ABV V is the owner of record of 335,578 shares of the Issuer's common stock, par value \$0.001 per share ("Common Stock"), and ABE is the owner of record of 153,962 shares of Common Stock. The Reporting Person, as the investment manager to the Abingworth Funds, may be deemed to beneficially own the 489,540 shares of Common Stock held by the Abingworth Funds.
- Item 2(b).** **Address of Principal Business Office or, if None, Residence:** The business address for the Reporting Person is Princes House, 38 Jermyn Street, London, England SW1Y 6DN.
- Item 2(c).** **Citizenship:** Abingworth LLP is a limited liability partnership organized under the laws of England.
- Item 2(d).** **Title of Class of Securities:** Common Stock, \$0.001 par value per share.
- Item 2(f).** **CUSIP Number:** 68230A106
- Item 3.** **If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person filing is a**  
Not applicable.
- Item 4.** **Ownership.**
- |       |   |          |
|-------|---|----------|
| (a)   | Amount Beneficially Owned (as of August 12, 2011):    | 489,540* |
| (b)   | Percent of Class (as of August 12, 2011):             | 5.0%*    |
| (c)   | Number of Shares as to which such person has:         |          |
| (i)   | sole power to vote or to direct the vote:             | 0        |
| (ii)  | shared power to vote or to direct the vote:           | 489,540* |
| (iii) | sole power to dispose or to direct the disposition:   | 0        |
| (iv)  | shared power to dispose or to direct the disposition: | 489,540* |

\* Beneficial ownership percentage is based upon 9,725,489 shares of Common Stock issued and outstanding as of August 1, 2011, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2011 (File No. 033-80623), filed with the Securities and Exchange Commission on August 5, 2011. The Reporting Person is the investment manager to a number of investment funds that include ABV V and ABE. As of August 12, 2011, ABV V is the owner of record of 335,578 shares of Common Stock and ABE is the owner of record of 153,962 shares of Common Stock. The Reporting Person, as the investment manager to the Abingworth Funds, may be deemed to beneficially own the 489,540 shares of Common Stock held by the Abingworth Funds.

**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

Not applicable.

**Item 6. Ownership of More than Five 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**

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. Certification.**

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.

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**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 31, 2011

**ABINGWORTH LLP**

By: /s/ John Heard  
Name: John Heard  
Title: Authorized Signatory

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