

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Ziopharm Oncology, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

98973P101

(CUSIP Number)

Martin P. Sutter
Essex Woodlands Health Ventures Fund V, L.P.
21 Waterway Avenue, Suite 225
The Woodlands, Texas 77380
(281) 364-1555

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

February 22, 2007

(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 13G-1(b)
 Rule 13G-1(c)
 Rule 13G-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
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures Fund VI, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
 (a)
 (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

6 SHARED VOTING POWER

-0-

7 SOLE DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

8 SHARED DISPOSITIVE POWER

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

PN

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures VI, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

- (a)
 (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

6 SHARED VOTING POWER

-0-

7 SOLE DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

8 SHARED DISPOSITIVE POWER

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

OO

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Essex Woodlands Health Ventures VI, L.L.C.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH 2,296,652 (includes 382,776 shares under immediately exercisable warrants)

6 SHARED VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH -0-

7 SOLE DISPOSITIVE POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH 2,296,652 (includes 382,776 shares under immediately exercisable warrants)

8 SHARED DISPOSITIVE POWER

-0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

OO

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

James L. Currie

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

- (a)
 (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

-0-

6 SHARED VOTING POWER

**NUMBER OF
 SHARES
 BENEFICIALLY
 OWNED BY
 EACH
 REPORTING
 PERSON
 WITH**

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

7 SOLE DISPOSITIVE POWER

-0-

8 SHARED DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

IN

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Martin P. Sutter

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

- (a)
 (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

-0-

6 SHARED VOTING POWER

**NUMBER OF
 SHARES
 BENEFICIALLY
 OWNED BY
 EACH
 REPORTING
 PERSON
 WITH**

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

7 SOLE DISPOSITIVE POWER

-0-

8 SHARED DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

IN

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Immanuel Thangaraj

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

- (a)
 (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

-0-

6 SHARED VOTING POWER

**NUMBER OF
 SHARES
 BENEFICIALLY
 OWNED BY
 EACH
 REPORTING
 PERSON
 WITH**

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

7 SOLE DISPOSITIVE POWER

-0-

8 SHARED DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

IN

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Mark Pacala

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

-0-

6 SHARED VOTING POWER

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

7 SOLE DISPOSITIVE POWER

-0-

8 SHARED DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

IN

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Jeff Himawan

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

- (a)
 (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

-0-

6 SHARED VOTING POWER

**NUMBER OF
 SHARES
 BENEFICIALLY
 OWNED BY
 EACH
 REPORTING
 PERSON
 WITH**

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

7 SOLE DISPOSITIVE POWER

-0-

8 SHARED DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

IN

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Petri Vainio

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

- (a)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

-0-

6 SHARED VOTING POWER

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

7 SOLE DISPOSITIVE POWER

-0-

8 SHARED DISPOSITIVE POWER

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.84%

12 TYPE OF REPORTING PERSON

IN

ORIGINAL REPORT ON SCHEDULE 13G

- Item 1.** (a) Name of Issuer:
Ziopharm Oncology, Inc.
- (b) Address of Issuer's Principal Executive Offices:
1180 Avenue of the Americas, 19th Floor New York, NY 10036

- Item 2.** (a) Name of Person Filing:
This Schedule 13G is being filed jointly by Essex Woodlands Health Ventures Fund VI, L.P., a Delaware limited partnership (the "Partnership"), Essex Woodlands Health Ventures VI, L.P., a Delaware limited partnership the general partner of the Partnership, (the "GP Partnership"), Essex Woodlands Health Ventures VI, L.L.C., a Delaware limited liability company the general partner of the GP Partnership, James L. Currie, an individual, Martin P. Sutter, an individual, Immanuel Thangaraj, an individual, Petri Vainio, an individual, Mark Pacala, an individual and Jeff Himawan an individual (each a "Manager", collectively, the "Managers", and together with the Partnership, GP Partnership and the General Partner, the "Reporting Persons").
- (b) Address of Principal Business Office:
The address of the principal business of each of the Reporting Persons is 21 Waterway, Suite 225, The Woodlands, Texas 77380.
- (c) Citizenship:
(i) Essex Woodlands Health Ventures Fund VI, L.P. is a Delaware limited partnership; (ii) Essex Woodlands Health Ventures VI, LP is a Delaware limited partnership, (iii) Essex Woodlands Health Ventures VI, L.L.C. is a Delaware limited liability company; (iv) James L. Currie, Martin P. Sutter, Immanuel Thangaraj, Mark L. Pacala, Petri Vainio and Jeff Himawan are all individuals who are citizens of the United States.
- (d) Title of Class of Securities:
Common Stock, par value \$.001 per share
- (e) CUSIP Number:
98973P101

Item 3. If this statement is filed pursuant to §§240.13G-1(b), or 240.13G-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 240.13G 1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with 240.13G 1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with 240.13G 1(b)(1)(ii)(G);
- (h) A savings association 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) Group, in accordance with 240.13G 1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount Beneficially Owned.

As of the date of this filing, each Reporting Person may be deemed to be the beneficial owner of 1,913,876 shares of Common Stock and 382,776 shares under immediately exercisable warrants. The Partnership purchased the Common Stock as part of a private placement on February 22, 2007.

The General Partner may be deemed to have voting control and investment discretion over securities owned by the Partnership. The Managers may be deemed to be the beneficial owner of any shares deemed to be beneficially owned by the General Partner. The foregoing should not be construed in and of itself as an admission by the General Partner or the Managers as to beneficial ownership of the shares owned by the Partnership.

(b) Percent of Class.

10.84% of the Common Stock (see Item 4(a) above), which percentage was calculated based on shares of Common Stock outstanding, as reported in the Issuer's prospectus filed with the Commission on February 13, 2007.

(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 direct the vote:

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

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

-0-

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

2,296,652 (includes 382,776 shares under immediately exercisable warrants)

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 five 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

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. 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 the purpose or effect.

SIGNATURES

After reasonable inquiry and to the best of our knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: March 9, 2007

**ESSEX WOODLANDS HEALTH VENTURES
FUND VI, L.P.**

By: Essex Woodlands Health Ventures VI, L.P.,
Its General Partner

By: Essex Woodlands Health Ventures VI, .L.L.C.,
Its General Partner

By: /s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

ESSEX WOODLANDS HEALTH VENTURES VI, L.P.

By: Essex Woodlands Health Ventures VI, .L.L.C.,
Its General Partner

By: /s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

ESSEX WOODLANDS HEALTH VENTURES VI, L.L.C.

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

INDIVIDUALS:

/s/ James L. Currie

Name: James L. Currie

/s/ Martin P. Sutter

Name: Martin P. Sutter

/s/ Immanuel Thangaraj

Name: Immanuel Thangaraj

/s/ Mark L. Pacala

Name: Mark L. Pacala

/s/ Jeff Himawan

Name: Jeff Himawan

/s/ Petri Vainio

Name: Petri Vainio

Exhibit 1

JOINT FILING AGREEMENT

Each of the undersigned agrees that (i) the statement on Schedule 13G relating to the Common Stock of Ziopharm Oncology, Inc., has been adopted and filed on behalf of each of them, (ii) all future amendments to such statement on Schedule 13G will, unless written notice to the contrary is delivered as described below, be jointly filed on behalf of each of them, and (iii) the provisions of Rule 13G-1(k) under the Securities Exchange Act of 1934 apply to each of them. This agreement may be terminated with respect to the obligations to jointly file future amendments to such statement on Schedule 13G as to any of the undersigned upon such person giving written notice thereof to each of the other persons signature hereto, at the principal office thereof.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Date: March 9, 2007

**ESSEX WOODLANDS HEALTH VENTURES
FUND VI, L.P.**

By: Essex Woodlands Health Ventures VI, L.P.,
Its General Partner

By: Essex Woodlands Health Ventures VI, .L.L.C.,
Its General Partner

By: /s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

ESSEX WOODLANDS HEALTH VENTURES VI, L.P.

By: Essex Woodlands Health Ventures VI, L.L.C.,
Its General Partner

By: /s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

ESSEX WOODLANDS HEALTH VENTURES VI, L.L.C.

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

INDIVIDUALS:

/s/ James L. Currie

Name: James L. Currie

/s/ Martin P. Sutter

Name: Martin P. Sutter

/s/ Immanuel Thangaraj

Name: Immanuel Thangaraj

/s/ Mark L. Pacala

Name: Mark L. Pacala

/s/ Jeff Himawan

Name: Jeff Himawan

/s/ Petri Vainio

Name: Petri Vainio