

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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

ZIOPHARM ONCOLOGY, INC.

Common Stock, par value \$0.001 per share
(Title of Class of Securities)

98973P101
CUSIP Number

December 31, 2005
(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 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).

Continued on following pages
Page 1 of 5 Pages

SCHEDULE 13G

CUSIP No. 563118207

Page 2 of 5

1 Names of Reporting Persons
I.R.S. Identification Nos. of above persons (entities only)

LINDSAY A. ROSENWALD, M.D.

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

Number of Shares Beneficially Owned By Each Reporting Person With	5	Sole Voting Power 760,310
	6	Shared Voting Power 563,296
	7	Sole Dispositive Power 760,310

9 Aggregate Amount Beneficially Owned by Each Reporting Person

1,323,606

10 Check Box If the Aggregate Amount in Row (9) Excludes Certain
Shares *

11 Percent of Class Represented By Amount in Row (9)

17.5%

12 Type of Reporting Person *

IN

* see instructions before filling out

ITEM 1(A) NAME OF ISSUER:
ZioPharm Oncology, Inc. (the "Issuer")

ITEM 1(B) ADDRESS OF THE ISSUER'S PRINCIPAL EXECUTIVE OFFICES:
1180 Avenue of the America's
New York, NY 10019

ITEM 2(A) NAME OF PERSON FILING:
Lindsay A. Rosenwald, M.D. (the "Reporting Person").

ITEM 2(B) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:
c/o Paramount BioCapital Investments, LLC
787 Seventh Avenue, 48th Floor
New York, NY 10036

ITEM 2(C) CITIZENSHIP:
The Reporting Person is a citizen of the United States.

ITEM 2(D) TITLE OF CLASS OF SECURITIES:
Common Stock (the "Shares").

ITEM 2(E) CUSIP NUMBER:
98973P101

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:

This Item 3 is not applicable.

ITEM 4. OWNERSHIP:

ITEM 4(A) AMOUNT BENEFICIALLY OWNED:

The Reporting Person beneficially owned 1,498,087 Shares, consisting of (i) 476,678 Shares held directly by the Reporting Person; (ii) warrants to purchase 221,011 Shares held directly by the Reporting Person; (iii) warrants to purchase 62,621 Shares held by Paramount Biocapital Investments, LLC, of which the Reporting Person is managing member; and (iv) 563,296 Shares held by certain individuals and with respect to which Dr. Rosenwald has certain call rights pursuant to pledge agreements to secure certain obligations. Dr. Rosenwald disclaims beneficial ownership of these 563,296 pledged Shares, except to the extent of his pecuniary interest therein, if any.

ITEM 4(B) PERCENT OF CLASS:

See Item 11 of the cover page.

ITEM 4(C) NUMBER OF SHARES AS TO WHICH SUCH PERSON HAS:

- | | | |
|-------|---|--------------------------------------|
| (i) | Sole power to vote or direct the vote: | Please see Item 5 of the cover page. |
| (ii) | Shared power to vote or to direct the vote | Please see Item 6 of the cover page. |
| (iii) | Sole power to dispose or to direct the disposition of | Please see Item 7 of the cover page. |
| (iv) | Shared power to dispose or to direct the disposition of | Please see Item 8 of the cover page. |

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS:

This Item 5 is not applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON:

See Item 4 Above.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY:

This Item 7 is not applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP:

This Item 8 is not applicable.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP:

This Item 9 is 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 such purpose or effect.

SIGNATURES

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

February 10, 2006

Lindsay A. Rosenwald, M.D.