

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL                                 |           |
|--|-----------|
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|--|--|--|
| 1. Name and Address of Reporting Person *<br><u>MCINERNEY TIMOTHY</u><br><br>(Last) (First) (Middle)<br><u>PARAMOUNT BIOCAPITAL</u><br><u>787 SEVENTH AVENUE, 48TH FLOOR</u><br><br>(Street)<br><u>NEW YORK NY 10019</u><br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><u>ZIOPHARM ONCOLOGY INC [ ZIOP ]</u> | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><input checked="" type="checkbox"/> Director 10% Owner<br><br>Officer (give title below) Other (specify below) |
|  | 3. Date of Earliest Transaction (Month/Day/Year)<br><u>02/23/2007</u>                |  |
|  | 4. If Amendment, Date of Original Filed (Month/Day/Year)                             |  |

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |       | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|-------|---|--|---|
|                                 |                                      |  | Code                           | V | Amount  | (A) or (D) | Price |   |  |   |
| Common Stock, \$.001 par value  | 03/15/2007                           |  | P                              |   | 4,000   | A          | \$5   | 63,205  | D  |   |

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |     | 6. Date Exercisable and Expiration Date (Month/Day/Year) |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|--|--|---|--|
|  |  |                                      |  | Code                           | V | (A)  | (D) | Date Exercisable   | Expiration Date |   |  |  |   |  |
| Warrants to Purchase Common Stock          | \$4.75   |                                      |  |                                |   |  |     | 09/13/2005   | 05/31/2012      | Common Stock, \$.001 par value  | 20,767                                     | 20,767   | D   |  |
| Director Stock Option (right to buy)       | \$4.31   |                                      |  |                                |   |  |     | (1)  | 07/20/2015      | Common Stock, \$.001 par value  | 15,029                                     | 15,029   | D   |  |
| Director Stock Option (right to buy)       | \$5.01   |                                      |  |                                |   |  |     | 04/26/2006   | 04/26/2016      | Common Stock  | 15,000                                     | 15,000   | D   |  |
| Warrants to Purchase Common Stock          | \$5.09   |                                      |  |                                |   |  |     | 05/03/2006   | 05/03/2013      | Common Stock, \$.001 par value  | 80,737                                     | 80,737   | D   |  |
| Director Stock Option (right to buy)       | \$6.49   |                                      |  |                                |   |  |     | (2)  | 12/13/2016      | Common Stock  | 15,000                                     | 15,000   | D   |  |
| Warrant                                    | \$5.75   | 02/23/2007                           |  | j <sup>(3)</sup>               |   | 35,739   |     | 02/23/2007   | 02/23/2012      | Common Stock  | 35,739                                     | \$0  | 35,739  | D  |

**Explanation of Responses:**

- 1. 7,515 shares vest on 7/20/06 and 7,514 shares vest on 7/20/07.
- 2. 5,000 shares vest on each of 12/13/07, 12/13/08 and 12/13/09.
- 3. Warrant issued as part of a private placement for services rendered.

/s/ Timothy McInerney

03/22/2007

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.