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FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

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			of Section So(n) of the investment company Act of 1540						
1	Address of Reporting	Person*	2. Issuer Name and Ticker or Trading Symbol ZIOPHARM ONCOLOGY INC [ZIOP]	(Check	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)				
					Director	10% Owner			
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 09/23/2009	1	Officer (give title below)	Other (specify below)			
C/O ZIOPH	IARM ONCOLO	GY, INC.							
1180 AVEN	UE OF THE AN	IERICAS, SUTIE 1920							
			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line)	vidual or Joint/Group Filing (Check Applicable				
(Street)				X	Form filed by One Re	eporting Person			
NEW YOR	K NY	10036			Form filed by More th Person	an One Reporting			
(City)	(State)	(Zip)							

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)			4. Securities Disposed Of 5)			5. Amount of Securities Beneficially Owned Following Reported	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	Transaction(s) (Instr. 3 and 4)		(11311 4)
Common Stock, \$.001 par value	09/23/2009		A ⁽⁶⁾		30,000	Α	\$ <mark>0</mark>	128,445	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. Transa Code (8)		of	iired r osed) 7. 3, 4	6. Date Exerc Expiration Da (Month/Day/Y	ate	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		Derivative Security	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	Title	Amount or Number of Shares				
Warrants to Purchase Common Stock	\$4.75							09/13/2005	05/31/2012	Common Stock, \$.001 par value	35,566		35,566	D	
Director Stock Option (right to buy)	\$4.31							(1)	12/22/2014	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, \$.001 par value	15,000		15,000	D	
Warrants to purchase Common Stock	\$5.09							05/03/2006	05/03/2013	Common Stock, \$.001 par value	18,319		18,319	D	
Director Stock Option (right to buy)	\$6.49							(2)	12/13/2016	Common Stock, \$.001 par value	15,000		15,000	D	
Stock Option (right to buy)	\$4.85							(3)	06/18/2017	Common Stock	15,000		15,000	D	
Stock Option (right to buy)	\$2.73							(4)	12/12/2017	Common Stock	20,000		20,000	D	
Stock Option (right to buy)	\$0.7							(5)	05/13/2019	Common Stock	15,000		15,000	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. 5,000 shares vest on each of 6/18/08, 6/18/09 and 6/18/10.

4. 6,667 shares vest on each of 12/12/08 and 12/12/09; 6,666 shares vest on 12/12/10.

5. 5,000 shares vest on each of 12/31/09, 6/30/2010 and 12/31/2010.

6. Grant of restricted stock; restrictions lapse on 9/23/2010.

/s/ Michael Weiser

** Signature of Reporting Person

09/24/2009 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.

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