FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

hours per response:

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0.5

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

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1. Name and Address of Reporting Person* WEISER MICHAEL						2. Issuer Name and Ticker or Trading Symbol ZIOPHARM ONCOLOGY INC [ZIOP]								Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner							
(Last) (First) (Middle) C/O ZIOPHARM ONCOLOGY, INC.						3. Date of Earliest Transaction (Month/Day/Year) 12/31/2009									Officer below)	(give title		Other (: below)	specify		
1180 AVENUE OF THE AMERICAS, SUTIE 1920						If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable						
(Street) NEW YORK NY 10036														X Form filed by One Reporting Person Form filed by More than One Reporting Person							
(City) (State) (Zip)																					
		Tab	le I - Nor	-Deriv	ative	_			cquired,	Dis	posed o	of, or Be	nef	ciall	y Owned	i					
1. Title of Security (Instr. 3) 2. Trans Date (Month/						ear)	2A. Deemed Execution Date if any (Month/Day/Yea		Code (I	Transaction Code (Instr.					5. Amou Securitie Benefici Owned F Reporte	es ally Following	Form (D) o	n: Direct r Indirect istr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
									Code	v	Amount	(A) (D)	or F	rice	Transac (Instr. 3	tion(s)			(111511.4)		
Common Stock, \$.001 par value 12/31/											7,50			\$0				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. Deeme Execution if any (Month/Day	Date,	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 Amo of Securities Underlying Derivative Secu (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)	Beneficial Ownership (Instr. 4)		
					Code	v	(A)	(D)	Date Exercisabl		xpiration ate	Title	Amo or Nun of Sha	- 1							
Warrants to Purchase Common Stock	\$4.75								09/13/2005	5 0	5/31/2012	Common Stock, \$.001 par value	35,	566		35,566	5	D			
Director Stock Option (right to buy)	\$4.31								(1)	13	2/22/2014	Common Stock, \$.001 par value	15,	029		15,029)	D			
Director Stock Option (right to buy)	\$5.01								04/26/2006	5 0	4/26/2016	Common Stock, \$.001 par value	15,	000		15,000)	D			
Warrants to purchase Common Stock	\$5.09								05/03/2006	5 0	5/03/2013	Common Stock, \$.001 par value	18,	319		18,319)	D			
Director Stock Option (right to buy)	\$6.49								(2)	13	2/13/2016	Common Stock, \$.001 par value	15,	000		15,000)	D			
Stock Option (right to buy)	\$4.85								(3)	0	5/18/2017	Common Stock	15,	000		15,000)	D			
Stock Option (right to buy)	\$2.73								(4)	1	2/12/2017	Common Stock	20,	000		20,000)	D			
Stock Option (right to buy)	\$0.7								(5)	0	5/13/2019	Common Stock	15,	000		15,000)	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	ercise (Month/Day/Year) if any (Month/Day/Year) if uny		4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exerc Expiration Da (Month/Day/\)	ate	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	Title	Amount or Number of Shares				
Stock Options (right to buy)	\$2.85	12/31/2009		A		7,500		(7)	12/31/2019	Common Stock, \$.001 par value	7,500	\$0	7,500	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 in 2 equal annual installments beginning on the first anniversary of the date of grant.
- 7. 3,750 shares vest on each of 12/31/2011 and 12/31/2012.

/s/ Michael Weiser 01/05/2010

** 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.

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