FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

**OMB APPROVAL** OMB Number: Estimated average burden hours per response: 0.5

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

1. Name and Address of Reporting Person*  CANNON JAMES ANTHONY					2. Issuer Name and Ticker or Trading Symbol ZIOPHARM ONCOLOGY INC [ ZIOP ]								5. Relationship of Reporting Person(s) to Issuer (Check all applicable)						
(Last)			(Middle)		Date of Earliest Transaction (Month/Day/Year)								X Director Officer (give title below)			10% Owner Other (specify below)		- 1	
BBDO				05	05/13/2009														
1285 AV	ENUE OF	THE AMERICA	AS		4. 1	If Ame	endment,	Date	of Original F	iled	(Month/Da	ay/Year)			ividual or 3	Joint/Group	Filing	j (Check Ap	plicable
(Street) NEW YORK NY 10019													Line)  X Form filed by One Reporting Person  Form filed by More than One Reporting  Person						
(City)	(S	tate)	(Zip)																
		Tak	ole I - Non	-Deriv	vativ	e Se	curities	s Ac	quired, [	Disp	osed o	f, or Be	nefici	ially	Owned				
Date		Date	Transaction te onth/Day/Year)		2A. Deemed Execution Date, if any (Month/Day/Year)		r, Transaction Dis Code (Instr. 5)		Dispose	. Securities Acquired (A) isposed Of (D) (Instr. 3, )		4 and Secu Bene Own		es ally Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership		
							Code	v	Amount	(A) or (D)		e	Reported Transact (Instr. 3	ion(s)			(Instr. 4)		
Common Stock, \$.001 par value													15,000			D			
		-	Table II - I (						uired, Di						Owned				
1. Title of Derivative Security (Instr. 3) Conversi or Exerci Price of Derivative Security		3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Dat if any (Month/Day/Ye	ate, Transaction Code (Instr.			n of E		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amor of Securities Underlying Derivative Secur (Instr. 3 and 4)		Derivative Security		9. Numbe derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	Ownersi Form: Direct (I or Indire (I) (Instr	Ownership	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
					Code	v	(A)	(D)	Date Exercisable		xpiration late	Title	Amou or Numb of Share	er					
Director Stock Option (right to buy)	\$4.31								(1)	1	2/22/2014	Common Stock, \$.001 par value	15,0	29		15,02	9	D	
Director Stock Option (right to buy)	\$5.01								04/26/2006	0	4/26/2016	Common Stock	15,00	00		15,00	0	D	
Director Stock Option (right to buy)	\$6.49								(2)	1	2/13/2016	Common Stock	15,00	00		15,00	0	D	
Director Stock Option (right to buy)	\$4.85								(3)	0	6/18/2017	Common Stock	15,00	00		15,00	0	D	
Stock Option (right to buy)	\$2.73								(4)	1	2/12/2017	Common Stock	20,00	00		20,00	0	D	
Stock Option (right to buy)	\$0.7	05/13/2009			A		15,000		(5)	0	5/13/2019	Common Stock	15,00	00	\$0	15,00	0	D	

## Explanation of Responses:

- 1. 7,515 shares vest on 12/22/05 and 7,514 shares vest on 12/22/06.
- $2.\,5,\!000$  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.

/s/ James A. Cannon

05/14/2009

\*\* Signature of Reporting Person

Date

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

- $^{\star}$  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.