

ZIOPHARM ONCOLOGY INC

Reported by
BRENNAN MURRAY

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 01/05/10 for the Period Ending 12/31/09

Address	1180 AVENUE OF THE AMERICA 19TH FLOOR NEW YORK, NY 10036
Telephone	646-214-0700
CIK	0001107421
Symbol	ZIOP
SIC Code	8093 - Specialty Outpatient Facilities, Not Elsewhere Classified
Industry	Biotechnology & Drugs
Sector	Healthcare
Fiscal Year	12/31

FORM 4

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

**UNITED STATES SECURITIES AND EXCHANGE
COMMISSION
Washington, D.C. 20549**

OMB APPROVAL
OMB Number: 3235-0287
Expires: February 28, 2011
Estimated average burden hours per response... 0.5

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP
OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,
Section 17(a) of the Public
Utility Holding Company Act of 1935 or Section 30(f) of the
Investment Company Act of 1940

1. Name and Address of Reporting Person * BRENNAN MURRAY (Last) (First) (Middle) MEMORIAL SLOAN KETTERING CANCER CENTER, 1275 YORK AVENUE (Street) NEW YORK, NY 10021 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol ZIOPHARM ONCOLOGY INC [ZIOP]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director _____ 10% Owner <input type="checkbox"/> Officer (give title below) _____ Other (specify below)
3. Date of Earliest Transaction (MM/DD/YYYY) <p align="center">12/31/2009</p>		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
4. If Amendment, Date Original Filed (MM/DD/YYYY)		

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

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. 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	12/31/2009		A	(6)	7500	A	\$0	52500	D	

Table II - Derivative Securities Beneficially Owned (e.g. , puts, calls, warrants, options, convertible securities)

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. 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		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 of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		(A)	(D)	Date Exercisable	Expiration Date				
Director Stock Option	\$4.31						(1)	12/22/2014	Common Stock, \$.001 par value	15029		15029	D	
Stock Option (right to buy)	\$5.01							4/26/2006	4/26/2016	Common Stock		15000	D	
Stock Option (right to buy)	\$6.49						(2)	12/13/2016	Common Stock			15000	D	
Stock Option (right to buy)	\$4.85						(3)	6/18/2017	Common Stock			15000	D	
Stock Option (right to buy)	\$2.73						(4)	12/12/2017	Common Stock			20000	D	
Stock Option (right to buy)	\$0.70						(5)	5/13/2019	Common Stock			15000	D	
Stock Option (right to buy)	\$2.85	12/31/2009		A		7500	(7)	12/31/2019	Common Stock, \$.001 par value	7500	\$0	7500	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, 6/30/10 and 12/31/10.
- (6) Grant of restricted stock; restrictions lapse in 2 equal annual installments beginning on the anniversary date of the date of grant.
- (7) 3,750 shares vest on each of 12/31/2011 and 12/31/2012.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
BRENNAN MURRAY MEMORIAL SLOAN KETTERING CANCER CENTER 1275 YORK AVENUE NEW YORK, NY 10021	X			

Signatures/s/ Murray Brennan1/5/2010

** 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.

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 control number.