

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO § 240.13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED
PURSUANT TO § 240.13d-2.

(Amendment No.)*

Ziopharm Oncology, Inc.

(Name of Issuer)

Common Stock, \$.001 par value per share

(Title of Class of Securities)

98973P101

(CUSIP Number)

November 11, 2018

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAMES OF REPORTING PERSONS MSD Partners, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER -0-
	6	SHARED VOTING POWER 10,986,258
	7	SOLE DISPOSITIVE POWER -0-
	8	SHARED DISPOSITIVE POWER 10,986,258
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 10,986,258	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.8% ¹	
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN	

¹ The percentages used herein and in the rest of this Schedule 13G is calculated based upon 161,319,164 shares of the Issuer's common stock outstanding, based upon the 142,379,770 shares of the Issuer's common stock outstanding as of October 31, 2018, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, filed with the Securities and Exchange Commission ("SEC") on November 9, 2011, and 18,939,394 shares of the Issuer's common stock issued in a private placement on November 11, 2018, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on November 13, 2018.

1	NAMES OF REPORTING PERSONS MSD Credit Opportunity Master Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER -0-
	6	SHARED VOTING POWER 10,986,258
	7	SOLE DISPOSITIVE POWER -0-
	8	SHARED DISPOSITIVE POWER 10,986,258
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 10,986,258	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.8% ¹	
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN	

1	NAMES OF REPORTING PERSONS John and Amy Phelan Family Foundation	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER -0-
	6	SHARED VOTING POWER 18,838
	7	SOLE DISPOSITIVE POWER -0-
	8	SHARED DISPOSITIVE POWER 18,838
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 18,838	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.01% ¹	
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO	

1	NAMES OF REPORTING PERSONS Fuhrman Family Foundation	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER -0-
	6	SHARED VOTING POWER 11,137
	7	SOLE DISPOSITIVE POWER -0-
	8	SHARED DISPOSITIVE POWER 11,137
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 11,137	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.01% ¹	
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO	

Item 1(a) Name of Issuer:

The name of the issuer is Ziopharm Oncology, Inc. (the "Company")

Item 1(b) Address of Issuer's Principal Executive Offices:

The Company's principal executive office is located at One First Avenue, Parris Building 34, Navy Yard Plaza, Boston, MA 02129

Item 2(a) Name of Person Filing:

This Schedule 13G is being jointly filed by and on behalf of each of MSD Partners, L.P. ("MSD Partners"), MSD Credit Opportunity Master Fund, L.P. ("MSD Credit Opportunity Master Fund"), the John and Amy Phelan Family Foundation (the "Phelan Foundation") and the Fuhrman Family Foundation (the "Fuhrman Foundation"). MSD Credit Opportunity Master Fund, the Phelan Foundation and the Fuhrman Foundation are the direct owners of the securities covered by this statement.

MSD Partners is the investment manager of, and may be deemed to beneficially own securities beneficially owned by, MSD Credit Opportunity Master Fund. MSD Partners (GP), LLC ("MSD GP") is the general partner of, and may be deemed to beneficially own securities beneficially owned by, MSD Partners. Each of Glenn R. Fuhrman, John C. Phelan and Marc R. Lisker is a manager of, and may be deemed to beneficially own securities beneficially owned by, MSD GP.

John C. Phelan is the sole member and a director of the Phelan Foundation, and may be deemed to beneficially own securities beneficially owned by the Phelan Foundation.

Glenn R. Fuhrman is the sole member and a director of the Fuhrman Foundation, and may be deemed to beneficially own securities beneficially owned by the Fuhrman Foundation.

The Reporting Persons have entered into a Joint Filing Agreement, dated November 21, 2018, a copy of which is filed with this Schedule 13G as Exhibit 99.1, pursuant to which the Reporting Persons have agreed to file this statement jointly in accordance with the provisions of Rule 13d-1(k)(1) under the Act.

Neither the filing of this statement nor anything herein shall be construed as an admission that any person other than the Reporting Persons is, for the purposes of Section 13(d) or 13(g) of the Act or any other purpose, the beneficial owner of any securities covered by this statement.

Item 2(b) Address of Principal Business Office or, if none, Residence:

The principal business address of MSD Partners, the Phelan Foundation and the Fuhrman Foundation is 645 Fifth Avenue, 21st Floor, New York, New York 10022.

The address of the principal business office of MSD Credit Opportunity Master Fund is c/o Maples Corporate Services Limited, P.O. Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

Item 2(c) Citizenship:

MSD Partners is organized as a limited partnership under the laws of the State of Delaware. MSD Credit Opportunity Master Fund is a limited partnership organized under the laws of the Cayman Islands. The Phelan Foundation and the Fuhrman Foundations are each organized as nonprofit, nonstock corporations under the laws of the State of Delaware.

Item 2(d) Title of Class of Securities:

Common Stock, par value \$0.001 per share

Item 2(e) CUSIP No.:

98973P101

Item 3 If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b), check whether the person filing is a:

Not applicable.

Ownership:

A. MSD Partners, L.P.

- (a) Amount beneficially owned: 10,986,258
- (b) Percent of class: 6.8%²
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 10,986,258
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 10,986,258

B. MSD Credit Opportunity Master Fund, L.P.

- (a) Amount beneficially owned: 10,986,258
- (b) Percent of class: 6.8%²
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 10,986,258
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 10,986,258

C. John and Amy Phelan Family Foundation

- (a) Amount beneficially owned: 18,838
- (b) Percent of class: 0.01%²
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 18,838
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 18,838

D. Fuhrman Family Foundation

- (a) Amount beneficially owned: 11,137
-

- (b) Percent of class: 0.01%²
 - (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 11,137
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 11,137
- E. MSD Partners (GP), LLC
- (a) Amount beneficially owned: 10,986,258
 - (b) Percent of class: 6.8%²
 - (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 10,986,258
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 10,986,258
- F. Glenn R. Fuhrman
- (a) Amount beneficially owned: 10,997,395
 - (b) Percent of class: 6.8%²
 - (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 10,997,395
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 10,997,395
- G. John C. Phelan
- (a) Amount beneficially owned: 11,005,096
 - (b) Percent of class: 6.8%²
 - (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
-

- (ii) Shared power to vote or direct the vote: 11,005,096
- (iii) Sole power to dispose or direct the disposition: -0-
- (iv) Shared power to dispose or direct the disposition: 11,005,096

H. Marc R. Lisker

- (a) Amount beneficially owned: 10,986,258
- (b) Percent of class: 6.8%²
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 10,986,258
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 10,986,258

² The percentages used herein and in the rest of this Schedule 13G is calculated based upon 161,319,164 shares of the Issuer's common stock outstanding, based upon the 142,379,770 shares of the Issuer's common stock outstanding as of October 31, 2018, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, filed with the Securities and Exchange Commission ("SEC") on November 9, 2011, and 18,939,394 shares of the issuer's common stock issued in a private placement on November 11, 2018, as reported in the Issuer's Current Report on Form 8-K filed with the SEC on November 13, 2018.

Item 5 Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof each of the Reporting Persons has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [].

Item 6 Ownership of More Than Five Percent on Behalf of Another Person:

Not applicable.

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person:

Not applicable.

Item 8 Identification and Classification of Members of the Group:

Not applicable.

Item 9 Notice of Dissolution of Group:

Not applicable.

Item 10 Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under § 240.14a-11.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: November 21, 2018

MSD Partners, L.P.

By: MSD Partners (GP), LLC
Its: General Partner

By: /s/ Marc R. Lisker
Name: Marc R. Lisker
Title: Manager

MSD Credit Opportunity Fund, L.P.

By: MSD Partners, L.P.
Its: Investment Adviser

By: MSD Partners (GP), LLC
Its: General Partner
Title: Manager

By: /s/ Marc R. Lisker
Name: Marc R. Lisker
Title: Manager

John and Amy Phelan Family Foundation

By: /s/ John C. Phelan
Its: Member

Fuhrman Family Foundation

By: /s/ Glenn R. Fuhrman
Its: Member

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description of Exhibit</u>
99.1	Joint Filing Agreement dated November 21, 2018.

AGREEMENT REGARDING THE JOINT FILING OF SCHEDULE 13G

The undersigned hereby agree as follows:

(i) Each of them is individually eligible to use the Schedule 13G to which this Exhibit is attached, and such Schedule 13G is filed on behalf of each of them; and

(ii) Each of them is responsible for the timely filing of such Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

Date: November 21, 2018

MSD Partners, L.P.

By: MSD Partners (GP), LLC
 Its: General Partner

By: /s/ Marc R. Lisker
 Name: Marc R. Lisker
 Title: Manager

MSD Credit Opportunity Fund, L.P.

By: MSD Partners, L.P.
 Its: Investment Adviser

By: MSD Partners (GP), LLC
 Its: General Partner
 Title: Manager

By: /s/ Marc R. Lisker
 Name: Marc R. Lisker
 Title: Manager

John and Amy Phelan Family Foundation

By: /s/ John C. Phelan
 Its: Member

Fuhrman Family Foundation

By: /s/ Glenn R. Fuhrman
 Its: Member