

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Date of report (Date of earliest event reported): **January 11, 2012**

ZIOPHARM Oncology, Inc.
(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-33038
(Commission File Number)

84-1475672
(IRS Employer
Identification No.)

**1180 Avenue of the Americas
19th Floor
New York, NY**
(Address of Principal Executive Offices)

10036
(Zip Code)

(646) 214-0700
(Registrant's telephone number, including area code)

Not applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425).
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12).
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)).
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).
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Item 7.01 Regulation FD Disclosure.

Attached hereto as Exhibit 99.1, which is incorporated herein by reference, is a copy of certain slides used by ZIOPHARM Oncology, Inc. (the "Company") in making an investor presentation and that are expected to be used in subsequent presentations to interested parties, including analysts and stockholders. This information is being furnished pursuant to Item 7.01 of this Report and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section and will not be incorporated by reference into any registration statement filed by the Company, under the Securities Act of 1933, as amended, unless specifically identified as being incorporated therein by reference. This Report will not be deemed an admission as to the materiality of any information in this Report that is being disclosed pursuant to Regulation FD.

Please refer to page 2 of Exhibit 99.1 for a discussion of certain forward-looking statements included therein and the risks and uncertainties related thereto.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No.	Description
99.1	Presentation of the Company made January 11, 2012

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ZIOPHARM Oncology, Inc.

Date: January 11, 2012

By: /s/ Caesar Belbel

Name: Caesar Belbel

Title: Executive Vice President, Chief Legal Officer and Secretary

INDEX OF EXHIBITS

Exhibit No.

Description

99.1 Presentation of the Company made January 11, 2012



ZIOPHARM Oncology

Better Cancer Medicine

30th Annual J.P. Morgan Healthcare Conference

**Jonathan Lewis, MD, PhD
Chief Executive Officer**

www.ziopharm.com

January 11, 2012 | 1

Forward-Looking Statements

This presentation contains certain forward-looking information about ZIOPHARM Oncology that is intended to be covered by the safe harbor for "forward-looking statements" provided by the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts. Words such as "expect(s)," "feel(s)," "believe(s)," "will," "may," "anticipate(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to, statements regarding our ability to successfully develop and commercialize our therapeutic products; our ability to expand our long-term business opportunities; financial projections and estimates and their underlying assumptions; and future performance. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: whether any of our therapeutic candidates will advance further in the clinical trials process and whether and when, if at all, they will receive final approval from the U.S. Food and Drug Administration or equivalent foreign regulatory agencies and for which indications; whether any of our therapeutic candidates will be successfully marketed if approved; whether our DNA-based biotherapeutics discovery and development efforts will be successful; our ability to achieve the results contemplated by our collaboration agreements; the strength and enforceability of our intellectual property rights; competition from pharmaceutical and biotechnology companies; the development of and our ability to take advantage of the market for DNA-based biotherapeutics; our ability to raise additional capital to fund our operations on terms acceptable to us; general economic conditions; and the other risk factors contained in our periodic and interim reports filed with the SEC including, but not limited to, our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, our Quarterly Report on Form 10-Q for the quarter ended September 30, 2011, and our Current Reports on Form 8-K filed from time to time with the Securities and Exchange Commission. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.



ZIOPHARM Oncology

- A late-stage oncology company with a compelling product portfolio
- Ongoing pivotal Phase 3 study with another pivotal study to initiate in 2012
- A revolutionary technology for drug discovery poised to cure cancers

Integrated, Data Driven Oncology Portfolio

Near-term	Late-Stage Opportunity	<p>Palifosfamide</p> <ul style="list-style-type: none"> Phase 3 study for soft tissue sarcoma (STS) <ul style="list-style-type: none"> PFS data expected 2H 2012 Phase 3 study for small cell lung cancer (SCLC) to initiate 2H 2012 STS/SCLC market potential of >\$1 Bn in sales <p>IL-12 DNA</p> <ul style="list-style-type: none"> Pivotal Phase 2 study to initiate year-end 2012 Additional multi-indication Phase 2; second pivotal to follow 2013
Mid-term	Early-Stage Clinical Development	<p>DNA therapeutics: File INDs for pre-clinically validated compounds</p> <p>Darinaparsin: Ongoing oral Phase 1 study</p> <p>Indibulin: Ongoing Phase 1/2 study (breast)</p>
Long-term	Discovery Pipeline	<p>DNA therapeutics</p> <ul style="list-style-type: none"> Pursue genes of interest rapidly and cost-effectively Broad application of technology (immunotherapy, mAbs, decoys, etc.)

Palifosfamide
(Zymafos[®] or ZIO-201)

Palifosfamide: Novel DNA Cross-linker

- More effective, less toxic than in-class agents, improved QOL, ease of administration and flexible pricing
- First indication in STS; second indication in SCLC
- Orphan Drug status for STS in U.S. and Europe
- U.S. pharmaceutical composition patent rights extending to 2029; other pending applications WW



Soft Tissue Sarcoma

- Currently over 100,000 people diagnosed with STS worldwide; estimated metastatic front-line of 23,000 people for U.S. and Europe*
 - Estimated 9,000 treated for front-line metastatic disease in U.S., target indication
 - Estimated 14,000 being treated in Europe
- Doxorubicin alone, doxorubicin-based therapy currently SOC; NCCN recommends clinical trial participation whenever possible
- Objective of palifosfamide in combination with doxorubicin as standard of care for metastatic STS

*Source: U.S.: IntrinsIQ Data, © Copyright 2012, IntrinsIQ, LLC an AmersourceBergens Specialty Group company. All rights reserved; remainder of world Company estimated from epidemiology (SEER, NCCN).



Phase 3 Structure (PICASSO 3)

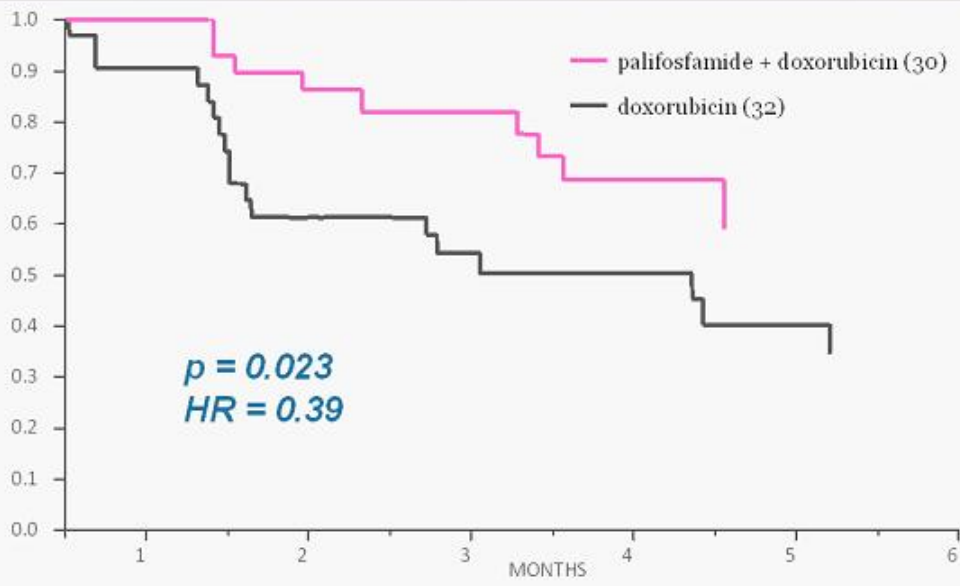
N:	Approximately 424 patients; fully enrolled by end of 1Q12 Front-line metastatic STS Design based on successful Phase 2 study
Regimen:	Palifosfamide + doxorubicin vs. doxorubicin + placebo
Primary Endpoint:	PFS for accelerated approval, OS for full approval Powered for PFS & OS
PFS Power:	85% power to detect 0.60 HR ($p=0.0005$, one-tailed)
PFS Analysis:	Evaluation of PFS by IDMC following a pre-determined number of PFS events
Study sites:	> 150 centers worldwide
Results:	Pivotal PFS data expected 2H 2012

Strong Randomized Phase 2 Foundation (PICASSO)

Phase 2 (PICASSO) Randomized Outcome

- 67 patients randomized, 66 treated, 62 eligible
- Palifosfamide administered with doxorubicin compared to single-agent doxorubicin in front- and second-line unresectable or metastatic STS
 - PFS endpoint
 - 28 documented PFS events (18 dox, 10 dox plus pali)
- Hazard ratio of 0.43 favoring the combination, (p-value 0.019)
- Median PFS 4.4 months for dox alone, 7.8 months for combination; 3.4 month difference
- Data presented at 2010 ASCO; **selected as Best of ASCO**

PFS Receiving/Censored at ≤ 6 Cycles (w/out ongoing or cross-over palifosfamide)



Small Cell Lung Cancer

- Approximately 15% of lung cancers
- Estimated 30,000-35,000 U.S. annual incidence, 200,000 worldwide¹ (China annual incidence alone growing to >150,000²)
- Platinum plus etoposide SOC front-line extensive disease (80-90%); only topotecan approved second-line
- Cisplatin plus etoposide with and without *ifosfamide* in extensive small-cell lung cancer; statistically significant improvement in median time to progression and median survival benefit with high toxicity³
- Objective is to add palifosfamide to platinum and etoposide as SOC for extensive front-line SCLC

¹SEER, Globocan.

²Derived from: Liu et. al. Emerging tobacco hazards in China: 1. Retrospective proportional mortality study of one million deaths. *BMJ*. 1998;317:1411.

³Hosier Oncology Group study - Einhorn et. al.

**Data of Phase 1b Study:
Palifosfamide Plus Carboplatin/Etoposide
Presented at AACR NCI EORTC**

Tumor Response

Response Assessment¹	Number of Patients² (22 enrolled as of 10/26/11)	Cancer Types
PR	5	Germ Cell Tumor, NSCLC, Ovarian, SCLC (2)
SD	4	Ovarian, NSCLC, SCLC, Uterine Leiomyosarcoma
PD	4	Adenocarcinoma, Mediastinal Carcinoid, Pancreatic, SCLC

¹Response Assessment per RECIST 1.1 definitions; and/or assessed per biomarkers.

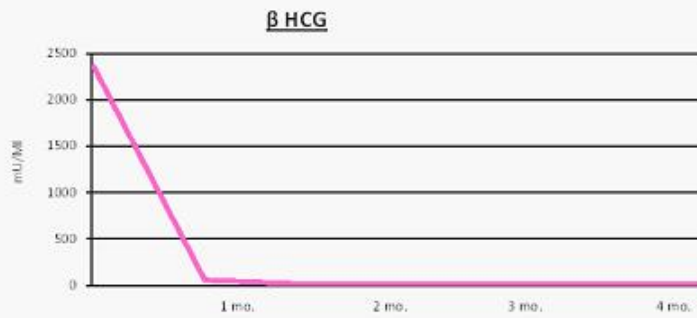
²7 Active patients not yet evaluated for response as their follow-up scans are still pending. 2 Patients did not continue past cycle 1 due to adverse events.

Combination well tolerated; dose limiting toxicity: neutropenic fever

Phase 3 study starting 2H 2012

Compelling Efficacy: Primary Mediastinal Nonseminomatous Germ Cell Tumor

- Normalization of tumor markers:
 - Previously treated (**including ifosfamide containing regimen** – developed encephalopathy)
 - β HCG reduction: 2358 to 12 mU/MI
 - Completed 4 cycles of therapy



Worldwide Estimated Sales: STS & SCLC

Soft Tissue Sarcoma Year 5 Sales

STS Patients Treated	Blended EU/US Price Per Patient		
	\$ 30,000	\$ 40,000	\$ 50,000
9,000	\$ 270	\$ 360	\$ 450
10,000	\$ 300	\$ 400	\$ 500
11,000	\$ 330	\$ 440	\$ 550

Asia/Latin America Opportunity: +\$200 – \$300 M

Small Cell Lung Cancer Year 5 Sales

SCLC Patients Treated	Blended EU/US Price Per Patient		
	\$ 30,000	\$ 40,000	\$ 50,000
14,000	\$ 420	\$ 560	\$ 700
16,000	\$ 480	\$ 640	\$ 800
18,000	\$ 540	\$ 720	\$ 900

Asia/Latin America Opportunity: +\$400 – \$600 M

>\$1 Bn total market potential

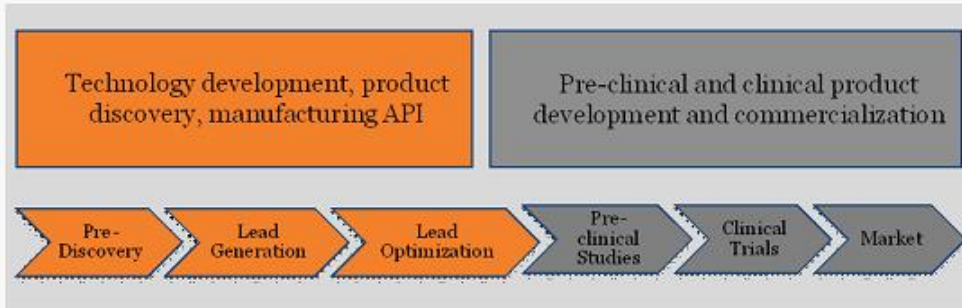
* Source: Based on Company projections.

(in millions)

IL-12 DNA

ZIOPHARM Exclusive Channel Collaboration

Exclusive channel partnership (ECP) formed 1/6/11



Controllable and scalable synthetic biology allows for discovery of viable product candidates

DNA Therapeutics

ZIOPHARM-Intrexon Partnership

- Synthetic biology discovery platform for the development of complex transgenes (DNA therapeutics)
- Product candidate optimization at an industry leading pace
 - Minimize immunogenicity/toxicity
 - Maximize yield/therapeutic profile
- Novel *in vivo* control of biologic drug dosing
- Control over biologic drug distribution (local/systemic)
- Multiple therapeutic protein approaches

IL-12 DNA

- Interleukin-12 (IL-12) is a potent, naturally occurring anti-cancer protein central to initiation and regulation of cellular anti-cancer immune responses
 - Use as *recombinant protein* therapy **limited by toxicity**
- Two product candidates in Phase 1 (melanoma)
 - 1. Autologous dendritic cells (DC) transduced with IL-12 DNA
 - 2. Viral vector (AD) with IL-12 DNA
 - *Both* control production of IL-12 via RheoSwitch Therapeutic System[®] turned *on/off* by oral activator ligand
 - First in-human biological switch system (developed by Intrexon)

ZIOPHARM Advances Lead Candidate for Pivotal Study Late 2012

- DC-IL-12 clinical POC data presented ASCO 2011
- AD-IL-12 mid-Phase 1
- Pivotal Phase 2 study to initiate end of 2012
- Additional multi-indication Phase 2; second pivotal to follow 2013

ASCO 2011

First Proof of Concept in Humans

"Immunotherapy of advanced melanoma by intra-tumoral injections of autologous, purified dendritic cells transduced with gene construct of interleukin-12, with dose-dependent expression under the control of an oral activator ligand" Schwartzentruber et al.

Clinical Responses

No. of evaluable patients

Partial response (PR)	1
Stable disease (SD)	3
Progressive disease (PD)	4
Disease control rate (CR,PR, and SD):	50%

Adverse Events were mild to moderate with nausea, vomiting, anorexia, arthralgia, fever, chills being reported. There was one SAE occurring 18 hours after treatment onset that completely resolved.

Early-Stage
Clinical
Development

Early-Stage Clinical Development

DNA therapeutics

- INDs next 12 -24 months from preclinical work in progress
- Pre-clinical and discovery continuing to advance multiple antibody, immunotoxin, and protein decoy candidates
- Pre-clinical programs underway for next generation RheoSwitch Therapeutic System® and systemic delivery

Darinaparsin

- Novel mitochondrial- and hedgehog-targeted agent (organic arsenic); oral and IV
- Ongoing oral Phase 1 study
- Data from Phase 1 to direct further study

Indibulin

- Novel oral tubulin binding agent; expected low toxicity and neurotoxicity not seen
- Ongoing Phase 1/2 study in metastatic breast cancer

Financial Highlights

- Primary shares outstanding: approximately 68.5MM
- Cash: approximately \$119MM @ 9/30/11
- Current cash resources expected to support operations into early 2013

2012 Anticipated Key Clinical Milestones

Palifosfamide		IL-12 DNA		Early Stage Development	
Full Enrollment	1Q 2012	IL-12 DNA Program		New DNA Candidates	
STS Pivotal PFS Data	2H 2012	Phase 1 Data	2012	• Preclinical Data	2012
SCLC Adaptive Phase 3 Initiation	2H 2012	Pivotal Phase 2	2H 2012	• IND	2012-13
		Additional multi-indication Phase 2	2H 2012	Darinaparsin	
		• Second pivotal study	2013	• Further Study with IV and/or Oral	2H 2012
				Indibulin	
				• Oral Phase 1/2 Data	2012

Key Investment Highlights

- An intelligent portfolio of therapeutics addressing unmet medical needs in cancer
 - Near-term, Phase 3 study results with palifosfamide in STS
 - Phase 3 for SCLC in 2H 2012
 - >\$1 Bn total market potential
 - DNA therapeutics targeting established treatment pathway into pivotal study in 2012
 - Small molecule therapeutics targeting multiple indications
- World-class synthetic biology discovery platform
- Ability to commercialize on a global basis



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January 11, 2012 | 26