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): April 23, 2008

ZIOPHARM Oncology, Inc.
(Exact name of registrant as specified in its charter)

Delaware	0-32353	84-1475642
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

1180 Avenue of the Americas, 19th Floor
New York, NY 10036
(Address of principal executive offices) (Zip Code)

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

(Former name or former address, if changed since last report)

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

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. Other Events.

On April 23, 2008, ZIOPHARM Oncology, Inc. (the "Company") held its annual shareholder meeting where the Company provided shareholders with the presentation attached hereto as Exhibit 99.1, which is incorporated herein by reference. The presentation was also made available via real-time webcast on the Company's website, www.ziopharm.com, and will remain available on the Company's website for 90 days, until July 21, 2008.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

99.1 ZIOPHARM Oncology, Inc. Shareholder Presentation dated April 23, 2008.

SIGNATURE

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.:
(Registrant)

Date: April 23, 2008

By: /s/ Richard E. Bagley

RICHARD E. BAGLEY,
President, Chief Operating Officer and Chief Financial Officer

Exhibit Index

Exhibit No.	Description
99.1	ZIOPHARM Oncology, Inc. Shareholder Presentation dated April 23, 2008

ZIOPHARM Oncology, Inc.

BETTER CANCER MEDICINE.

Jonathan Lewis, MD, PhD

Chief Executive Officer

FORWARD-LOOKING STATEMENTS

Some of the statements made in this presentation are forward-looking statements. These forward-looking statements are based upon our current expectations and projections about future events and generally relate to our plans, objectives and expectations for the development of and commercialization of in-licensed cancer drugs. Although management believes that the plans and objectives reflected in or suggested by these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties and actual future results may be materially different from the plans, objectives and expectations expressed in this presentation.

ZIOPHARM Mission

- Advance patient treatment in cancer
- Apply new insights from molecular and cancer biology to understand how to improve the efficacy and safety of approved and developmental cancer therapies
- Develop and commercialize a diverse, risk-sensitive portfolio of cancer drugs to address unmet medical needs

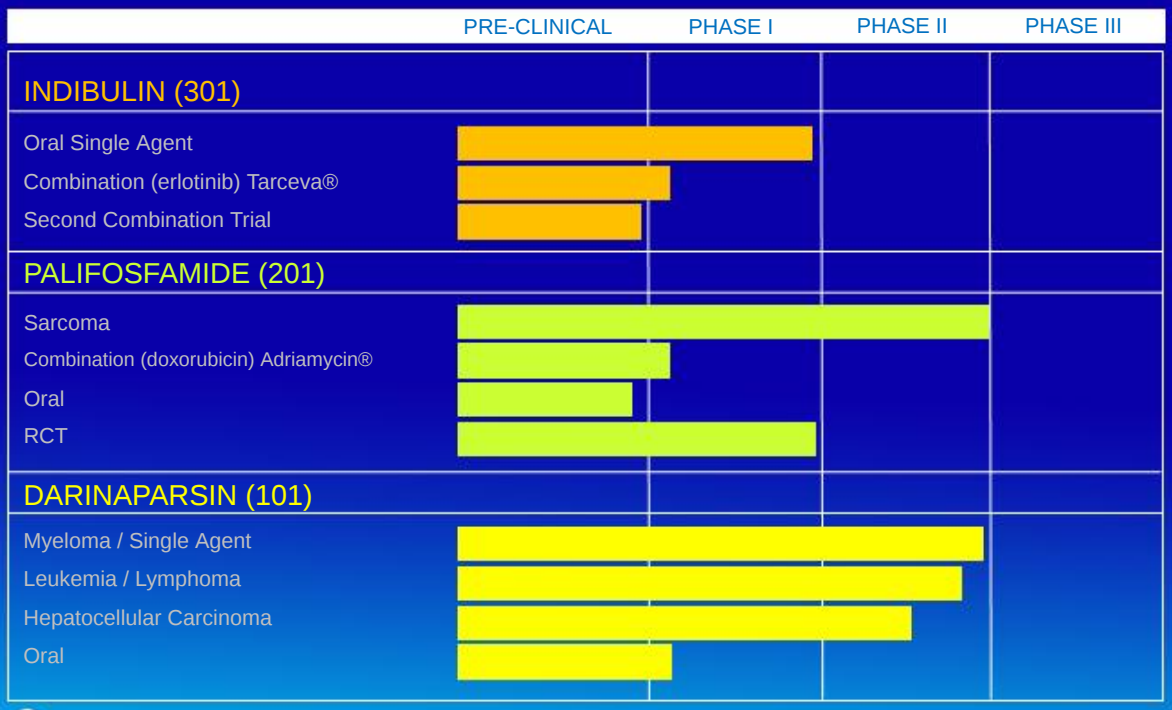
2007 Year in Review

- Three product portfolio in phase I/II trials; multiple registration pathways for both niche and broad-based indications
- Multiple data points in all programs for phase II randomized trials – palifosfamide expected to initiate Q3 2008
- Significant portfolio sales potential remains validated
- Intellectual property portfolio broadened
- Leadership team strengthened

Leadership Team

Executive	Yrs. Exp	Industry Experience
Jon Lewis, MD, PhD Chief Executive Officer	17	Yale, Memorial Sloan Kettering Antigenics (CMO)
Dick Bagley President, Chief Operating Officer	40	Biotech CEO (Velcade®, OvaRex®) President Squibb, US SmithKline Beecham (Tagamet®)
Brian Schwartz, MD Chief Medical Officer	14	Bayer (Nexavar®), Leo
Barbara Wallner, PhD Chief Technology Officer	26	Biogen (Amevive®), ImmuLogic, Point Therapeutics, BioTransplant
Barry Jones, PhD SVP, Technical Operations	15	Point Therapeutics, Procept
Bob Morgan, JD VP, Regulatory Affairs & Quality	22	EPIX, Theseus, Dupont, Genzyme, PAREXEL
John Amedio, PhD VP, Manufacturing & Process Development	17	EPIX, Sandoz (Novartis)
Steve Bloom VP, Business Development	24	Eli Lilly (Prozac®), Inflexxion, PHARMetrics, PAREXEL

ZIOPHARM PIPELINE



Product Status

- Indibulin – most commercial promise (major solid tumors)
- Palifosfamide – most advanced (sarcoma)
- Darinaparsin – best “tumor response” (lymphoma)

Capital Markets / FDA

Strategy analysis results in 2008 adjustments

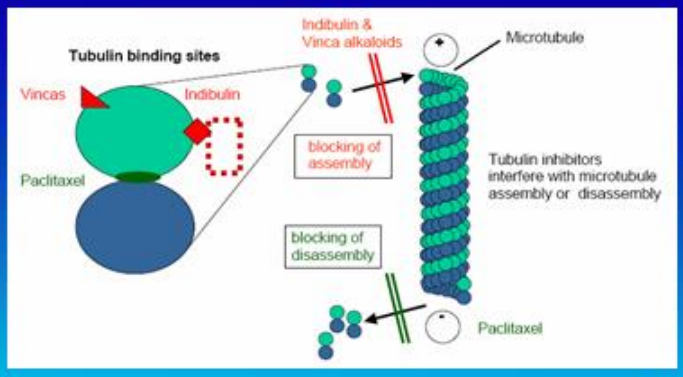
- **Palifosfamide** – most advanced program (sarcoma)
  - IV randomized phase II initiating Q3
  - Oral additional preclinical study
- **Indibulin** – most commercial promise (major solid tumors)
  - Tarceva® combination study in progress
  - Xeloda® combination trial in Q3
- **Darinaparsin** – best tumor response (lymphoma)
  - Phase II data in lymphoma, additional data in liver cancer will guide partnering

ZIO-301

INDIBULIN

Indibulin

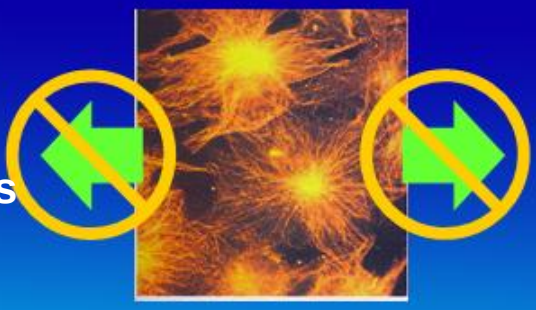
- Novel, oral tubulin binding agent
- Targets cancer cell mitosis and movement
- Potent preclinical synergy with approved therapies (Tarceva ®, 5-FU, Taxotere®)
- Low toxicity profile
- Strong intellectual property



Indibulin Mechanism of Action

- Tubulins are involved in cell migration – “seeding”
- Indibulin inhibits cell migration of MO4 cells in concentration dependent manner
- Anti-invasive *and* anti-metastatic activity
- Indibulin is *also* anti-mitotic

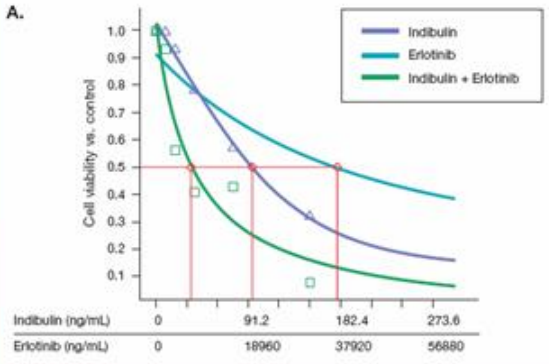
Cell Mitosis

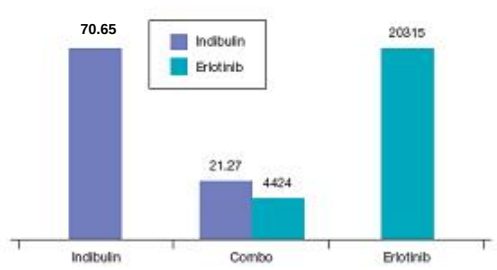


Cell Migration “Seeding”

Indibulin and Tarceva®

Figure 4. Indibulin synergizes with erlotinib in the NSCLC A549 cell line.





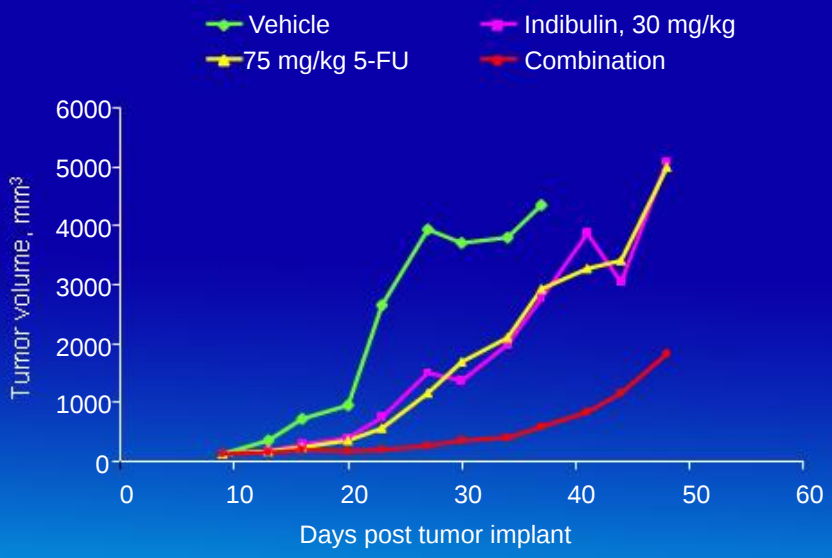
A. Dose response curves for indibulin and erlotinib as single agents and in combination.

B. Concentrations of indibulin and erlotinib as single agents and in combination resulted in 40% growth/viability inhibition (CI[IC_{40}]=0.51; concentrations [ng/mL] shown above bars).

Indibulin Synergizes With 5-FU

Second Phase I/II Combination Trial To Follow

Human Breast Cancer, MX-1, Xenograft



ZIOPHARM Oncology

April 08

Indibulin
Preliminary Efficacy Seen in Phase I Studies

Prolonged stable disease in multiple tumor types

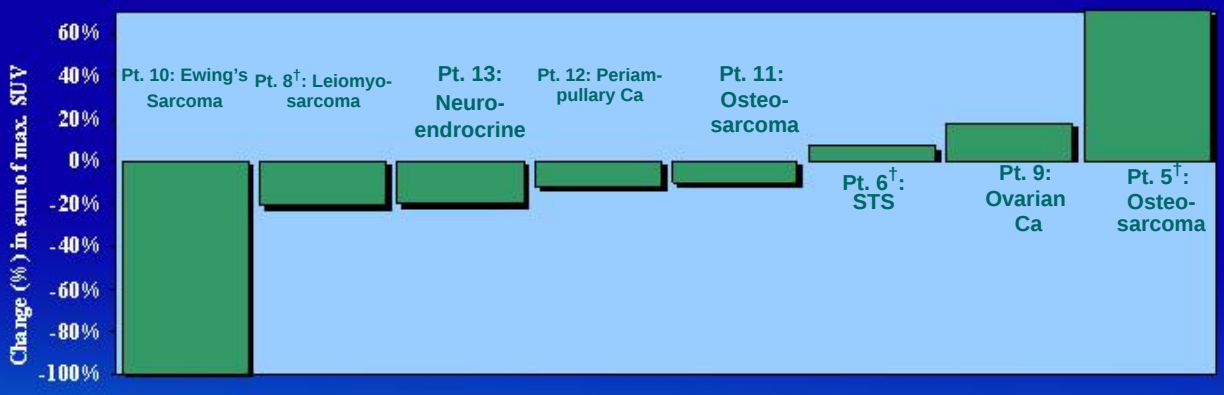
- Prostate
  - Rapidly rising PSA prior to starting study
- NSCLC
  - Prior gem/cis
- CRC
  - 2 heavily pretreated patients
- H & N
  - 2 pretreated patients
- Ovarian
  - Heavily pretreated patient with brain metastases
  - Reduction in abdominal tumor size and markers
- Papillary thyroid
  - Reduction in tumor size
  - Reduction in thyroglobulin

AACR/ NCI/ EORTC 2007,

ASCO 2007

Indibulin Phase I Preliminary PET Data

Change In Maximum SUV Of Target Lesions From Baseline*



† Patient has global MP for appearance of new lesions or for increase in size of target or non-target lesions

*Data represent maximum percent change in SUV of target lesions from baseline as assessed by Investigator from PET on Week 7 of treatment.

Unverified data. Cutoff date: 20 FEB 2008
Ca=carcinoma; SUV=standardized uptake value (sum)

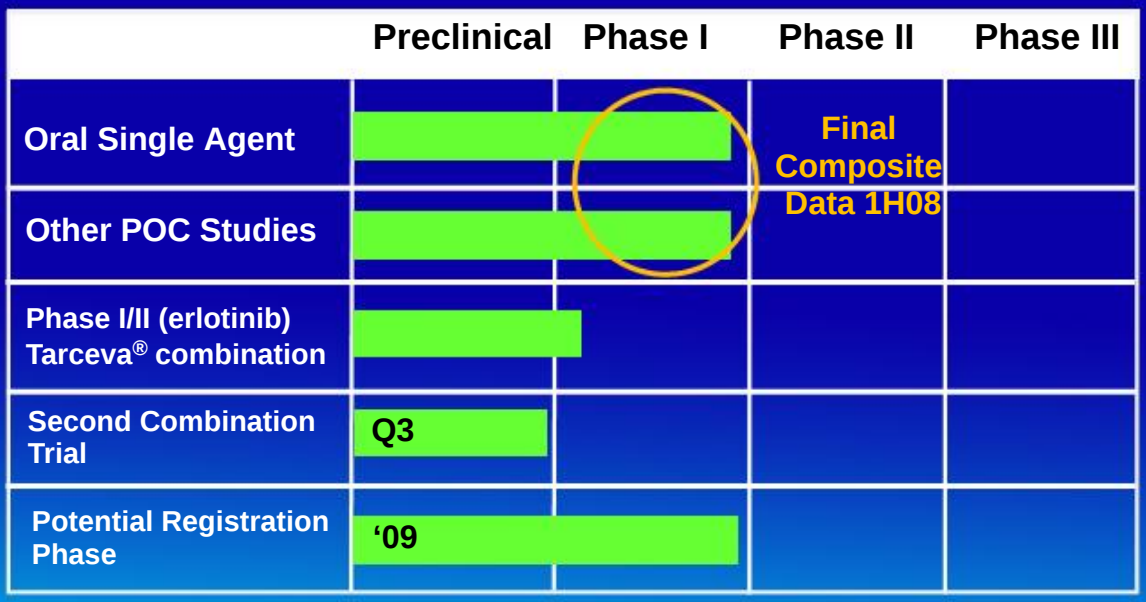
ZIOPHARM Oncology

April 08

Indibulin: Development Strategy

- Taxanes are standard of care
  - Lung, breast, prostate, ovarian and gastric cancer
- Indibulin may garner significant market share
  - Oral dosing
  - Lack of neurotoxicity
  - Potential efficacy in MDR tumors
- Potential initial indications
  - Lung, head & neck, breast, gastric, prostate, other
- Label expansion following Fast Track development program

Indibulin: Clinical Development Plan

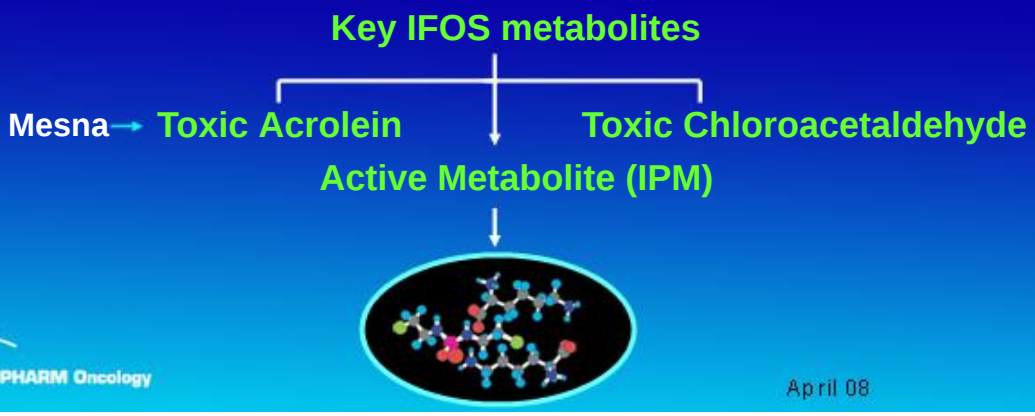


ZIO-201

PALIFOSFAMIDE

Palifosfamide (ZIO-201)

- Stabilized active metabolite of ifosfamide (IFOS); related to cyclophosphamide - CPA
- Novel IV alkylating agent; oral form developed
- Niche and large market potential
- Potent preclinical synergy with Adriamycin®
- Activity, convenience and safety profile over ifosfamide
- Patent applications filed in U.S. and internationally



Ifosfamide (IFOS)

- IFOS approved for testicular cancer; standard of care for sarcoma; as part of ICE regimen for lymphoma
- In Sarcoma:
  - 5.5 – 8.4 % **front-line** response rate in multicenter, randomized study (n=326)*
  - Response does not translate into survival benefit
  - Median PFS 2.16 – 3.0 months
  - Ifosfamide-based therapy associated with improved survival in synovial sarcoma**
  - Drug is difficult to tolerate*:
    - Grade 3/4 febrile neutropenia – 18-20%
    - Grade 3/4 encephalopathy – 11%

*Lotigan et al, JCO, July 2007
**Eilber et al, Ann Surg, July 2007

Palifosfamide Advantages

Palifosfamide advantages over IFOS include:

- Active, no pro-drug
- No hemorrhagic cystitis or CNS toxicity
- No Mesna
- Active in IFOS and CPA resistant xenografts
- IV and oral

Palifosfamide: **Phase II Sarcoma**

- Phase II trial includes diverse sarcoma subtypes
- 50 patients, fully enrolled and treatment completed
- Median number of *prior chemotherapies was 5*

- As reported, SD or better in 48% of 44 evaluated patients
  - 1 PR (liposarcoma) lasting 35 weeks
- IFOS-naïve patients (n=11): 64% (7/11) SD or better

- Adverse events primarily mild to moderate in severity and gastrointestinal or renal related
- No reports of CNS or bladder toxicities and no significant bone marrow suppression or alopecia.

Palifosfamide: **Phase II Sarcoma Trial**

Reported Preliminary Progression-free Survival

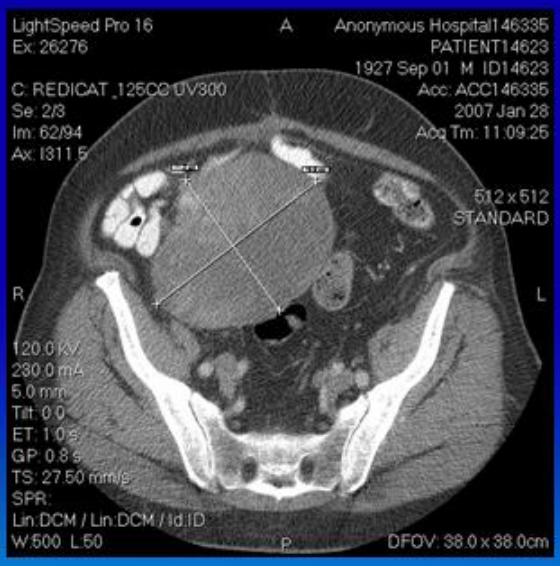
	N	Median PFS (weeks)	% Progression-free at 3 months
All	44	10	40.1
IFOS-naïve	11	Not reached	52.1
Over age 65	11	17	53.0

Because of limited efficacy of post-surgical standard care, 40% progression-free rate is indicative of a highly active experimental therapy warranting further study

Note: PFS was calculated using time interval of first study drug dose until date of documented disease progression (clinical or radiological symptomatology or death). Patients were censored if discontinued due to toxicity or early withdrawal.

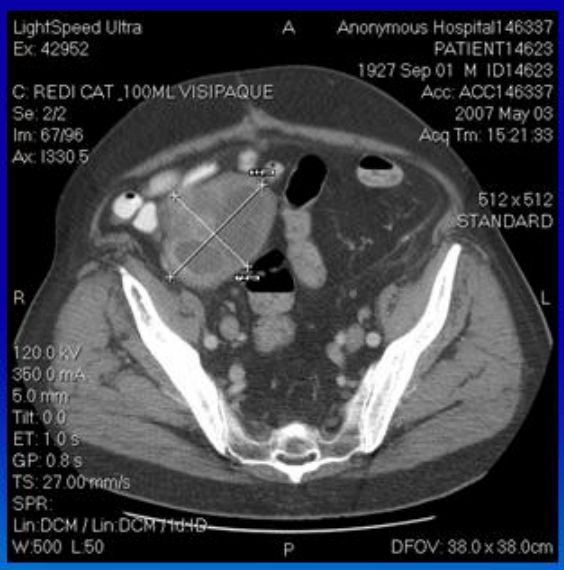
Retroperitoneal Sarcoma: Multiple Prior Recurrences

Baseline



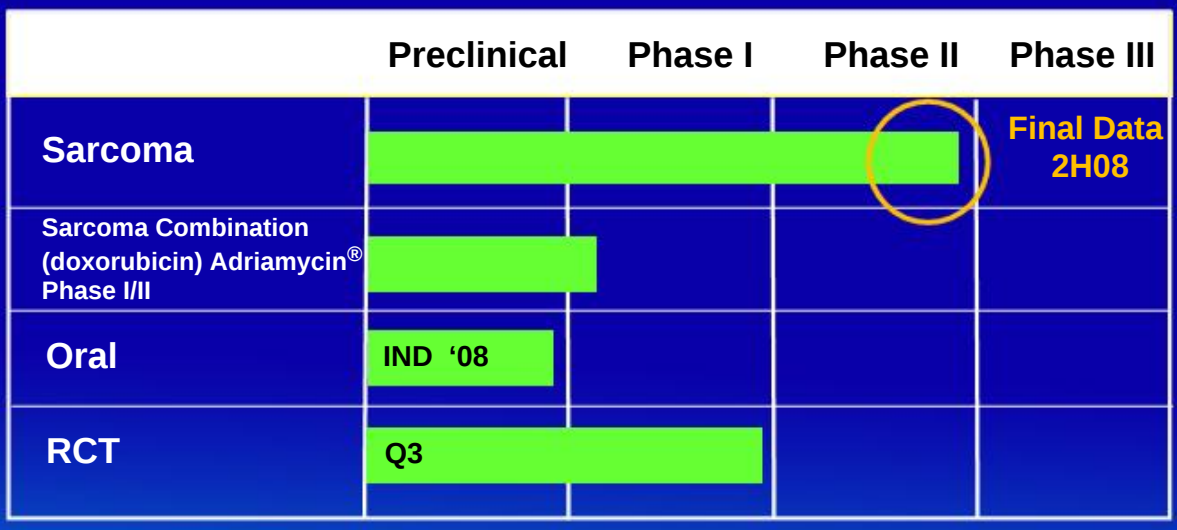
13.9 × 11.2 cm

12 weeks

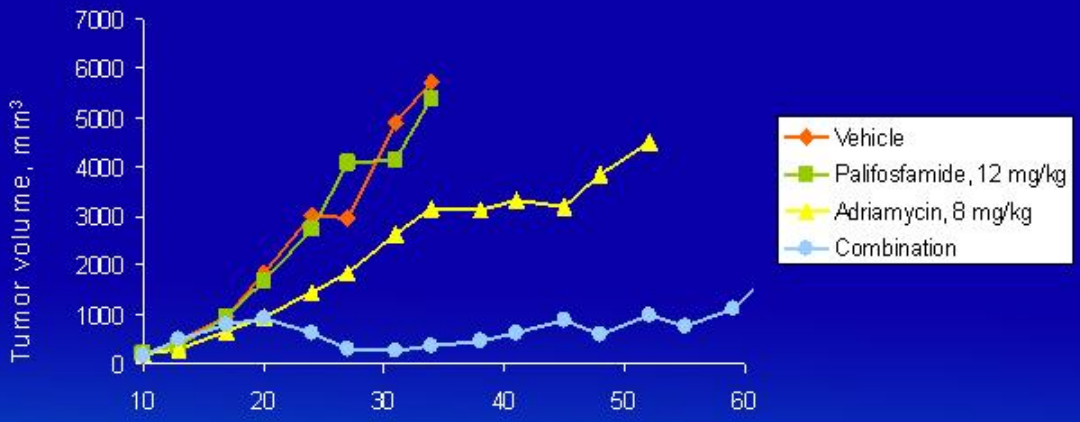


9.0 × 7.0 cm

Palifosfamide : Clinical Development Plan



Palifosfamide : Synergistic With Adriamycin® (MX-1 Xenograft Model)



Time since tumor implantation, days

Palifosfamide Registration Options

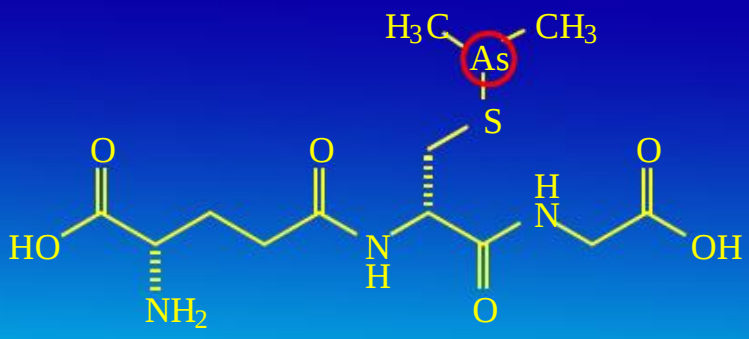
- Registration strategy
  - Data and expert opinion suggest: palifosfamide / Adriamycin ® vs. Adriamycin® in front and second-line patients;
    - PFS as primary endpoint
    - Do single study for approval
    - Window of opportunity for studies in sarcoma

ZIO-101

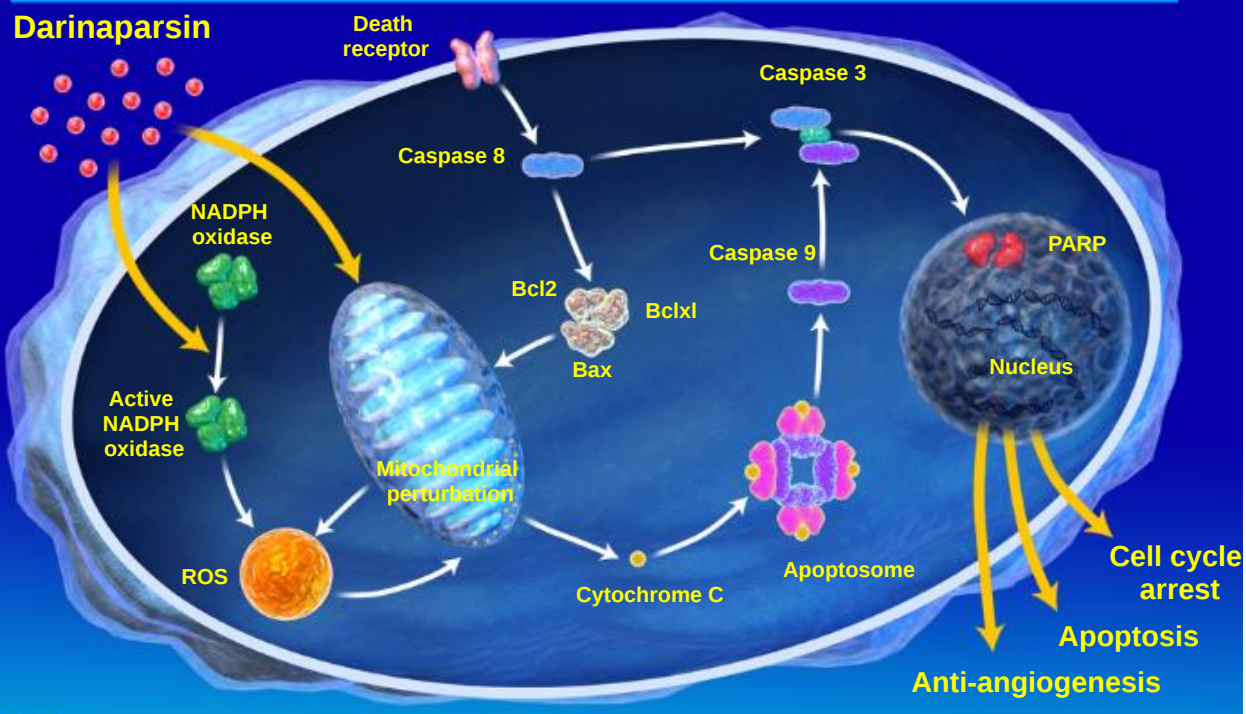
DARINAPARSIN

Darinaparsin (ZIO-101) Organic Arsenic

- Organic Arsenic: first in a new class of molecules
- Novel IV multifunctional agent; phase I oral accelerated
- Potentially safer and more active for cancer treatment than approved inorganic arsenic
- Early activity in NHL and liver; Active in myeloma, other heme indications
- Issued U.S. patents, applications internationally



Darinaparsin: Mechanism of Action



Darinaparsin: Phase I/II Trials

Hematological Cancers

- Results reported in hematology phase II trial
- In 6 of 14 leukemia patients SD
- In 3 of 7 evaluable lymphoma patients: CR in heavily pretreated NHL (PTCL), prolonged SD in B-cell lymphoma; and interval response in HL (NS)

Solid Tumors

- Phase I solid tumor results reported (37/40 patients)
- 2/3 renal with stable disease; 4/18 colorectal with stable disease; one pancreas, H&N, spinal tumor

Multiple Myeloma

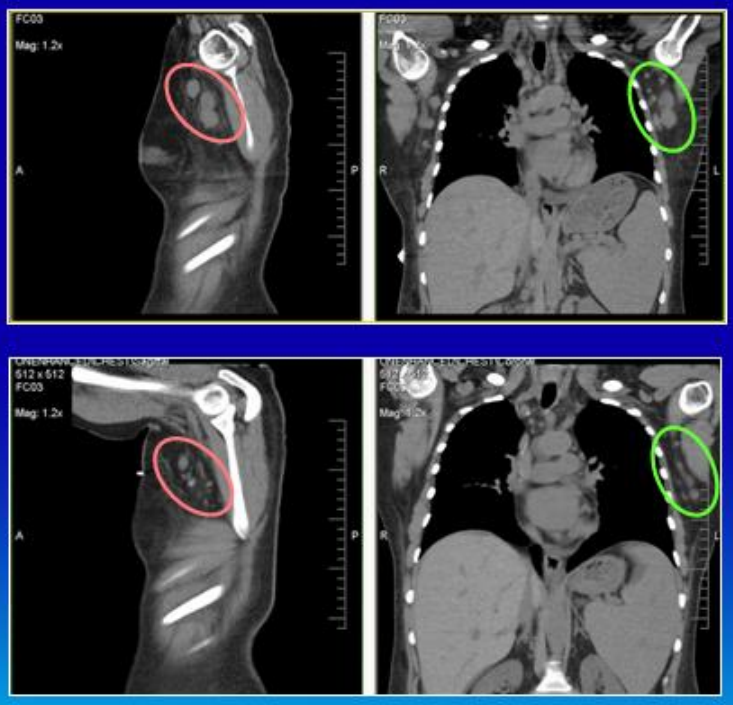
- Phase I myeloma patients (14 evaluable reported) heavily pretreated (failed median 8 prior therapies)
- 6/14 stable disease, > 4 months duration
- Two phase II trials, best response stable disease (one > year); registration strategy not viable in current market

Liver Cancer

- Patients with multiple treatment courses; reports of Q0L

AACR 2008, ECCO 2007, ASCO 2007, AACR/ EORTC/ NCI 2006

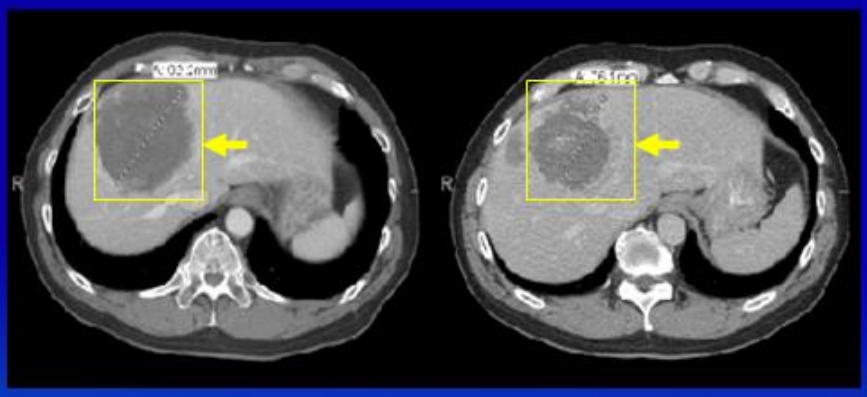
Darinaparsin: NH Lymphoma CR



Baseline

12 weeks

Darinaparsin: Early Activity Results
Pancreas Cancer – Liver Metastases

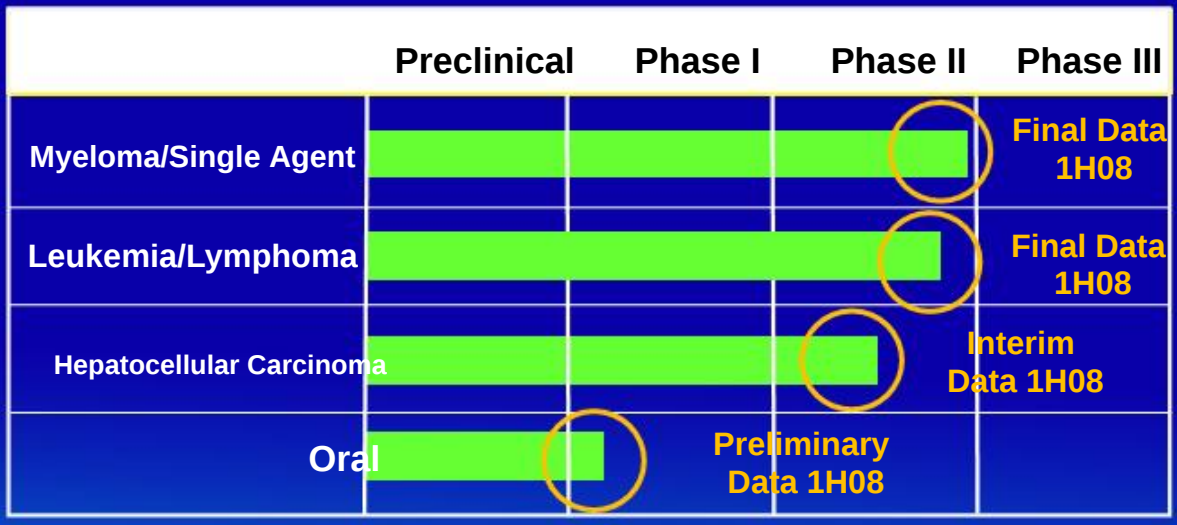


Baseline Post treatment

Darinaparsin: Safety Summary

- Well tolerated
- No clinically relevant QTc prolongation, bone marrow suppression or peripheral neuropathy
- DLT of transient confusion, ataxia
- All toxicities reversible

Darinaparsin: Clinical Development Plan



Additional IV phase II data and oral results form basis for future study

Business Strategy: Progressive Label Expansion

INDIBULIN	Target Indications	Secondary Indications
Oral Combination	NSCL(2nd) Ovarian (3 rd)	Breast(3rd) Colorectal(3rd) Prostate (3rd)
Oral Single Agent IV	Head & Neck (3rd)	
PALIFOSFAMIDE	Target Indications	Secondary Indications
IV Combination	Sarcoma (1st, 2 nd)	Lymphoma (ICE, RICE) Ovarian (3rd) Pediatric Sarcoma
Oral Combination	Breast (3rd) Colorectal (3 rd) Prostate (3rd) Ovarian (3rd)	
DARINAPARSIN	Target Indications	Secondary Indications
IV Single Agent IV Combination Oral Single Agent Oral Combination	PTCL (front) Liver APL MM (3rd) Liver	Other Hodgkins/Non-Hodgkins (3rd) Other Solid Tumors

Upcoming Milestones

Compound	Goal	Target
INDIBULIN (301)	Initiate ph Ib/IIa combination Tarceva® trial	**Q1**
	Initiate second ph II combination trial	**Q3**
	Final composite data from three ph I trials	**1H**
	Potential registration phase	**'09**
PALIFOSFAMIDE (201)	Initiate IV ph I/II combination Adriamycin® trial	**Q1**
	Initiate oral ph I solid tumors	**'09**
	Final ph II sarcoma data	**2H**
	Randomized front & second line worldwide sarcoma trial	**Q3**
DARINAPARSIN (101)	Final ph II myeloma	**1H**
	Final ph II heme	**1H**
	Interim ph II liver	**1H**
	Preliminary oral ph I	**1H**
	Ph II	**2H**

Financial Highlights

- Cash at 12/31/07: $35.0 MM
- Current Cash Burn: $2.1 MM / mth
- Primary Shares: ~ 21 MM

Cash financial guidance: Strategy review decisions impact cash burn by extending into Q3 ’09 (update of 10KSB)

ZIOPHARM Oncology, Inc.

BETTER CANCER MEDICINE.

NASDAQ:ZIOP