

Investor Presentation BIO CEO & Investor Conference 2012

NASDAQ: CLSN

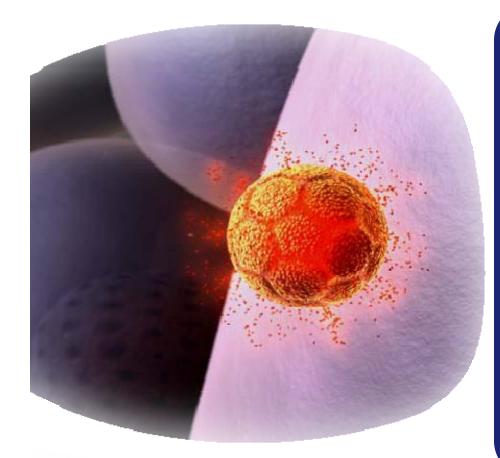
Presented by: Michael H. Tardugno President and Chief Executive Officer

Safe Harbor Statement



Except for historical information, the statements made in this presentation are forward-looking statements involving significant risks and uncertainties. These risks and uncertainties, including those related too the future financial position and business strategy of the Company, are detailed in the Company's blings with the Securities and Exchange Commission.





Late stage oncology focused company addressing largest unmet need in cancer - Hepatocellular Carcinoma (HCC)

Platform technology provides highly effective, targeted delivery of chemotherapeutics

ThermoDox[®] is in a Phase III pivotal trial with near-term data -- the HEAT Study

Represents billion dollar global market opportunity

Phase III HEAT Study



79 Clinical Sites in 11 Countries Registration Cohorts in

- China
- South Korea

Taiwan

Special Protocol Assessment for US

- 600 patient enrollment target reached; continuing to 700 (r 1:1)
- 380 PFS events Primary Endpoint
- 372 deaths for Overall Survival (secondary endpoint read out)

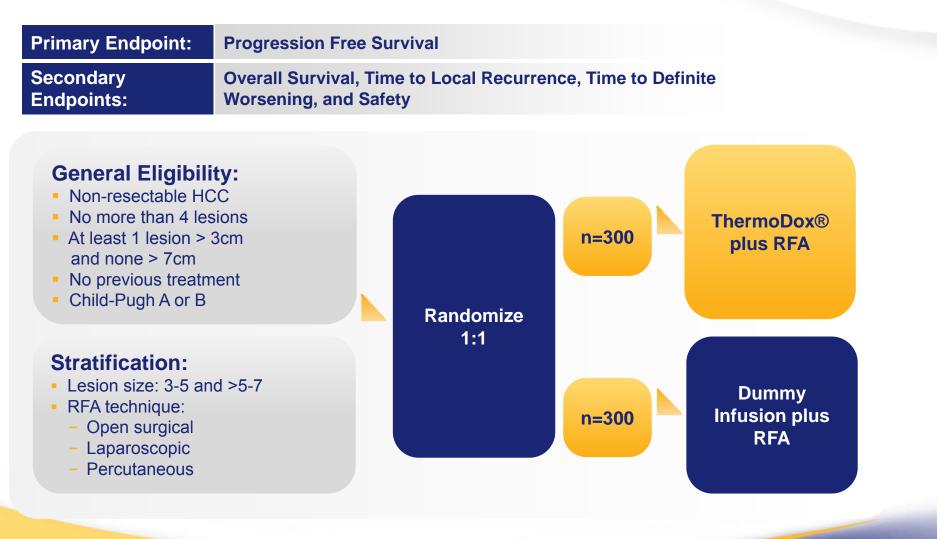
HEAT Study Protocol accepted by EMA

- Acceptable for centralized filing of Marketing Authorization Application
- PFS alone may be sufficient for unconditional approval
- Preclinical and manufacturing strategy supported

HEAT Study Design

RFA + ThermoDox for HCC





Fastest Path Regulatory Strategy



Unmet Need	#1 unaddressed Cancer NIH "Priority Trial"	HBV & HCV put millions at risk, globally CDC "growing global healthcare issue"	
Accelerated Trial	Agreed to SPA Accelerated endpoint	Supported by 10 regulatory agencies Progression Free Survival (PFS)	
Accelerated	Fast track granted Priority review	Rolling NDA begins in 2012 6 months PDUFA	
	505(b)(2) eligible for U.S. EU, China, Taiwan, S. Korea	Pre-clinical studies sufficient to support NDA Phase III trial as a stand alone for filing)
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Interim Analysis by the DMC Supports Continuation





Hepatocellular Carcinoma Study of RFA and ThermoDox®

Unanimous Recommendation to Complete the Study

 Interim Review included 613 patients and 219 PFS events

Statistical Model Established for Conducting Additional Interim Efficacy Analyses

 Company is seeking agreement with the FDA within its SPA

Top-line data (PFS) projected for year end 2012

ThermoDox Pre-Clinical Studies

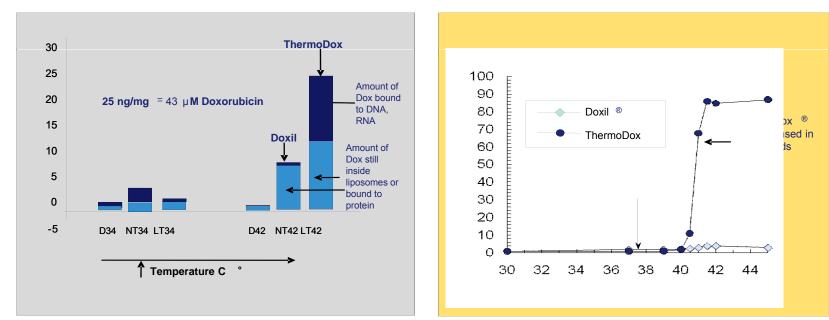
Chemotherapy Directly to Tumor with Superior Activity

IN VITRO After 1 hour at 42°C, heat-sensitive formulation delivered most drug to tumor

IN VITRO Drug release occurs at clinically achievable temperature

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Hepatocellular Carcinoma (HCC)



1st Indication

5th most prevalent cancer globally

- Age-adjusted HCC incidence rates tripled in U.S. between 1975 and 2005
- 750,000 annual incidence worldwide; growing over 5% per year
- By 2020, expected to be the #1 cancer, surpassing lung cancer

4th highest mortality

- 5-year survival rate less than 10%
- Median survival from time of diagnosis is generally 30 months
- Cure, usually through surgery, is possible in fewer than 20% of patients

Local therapies include:

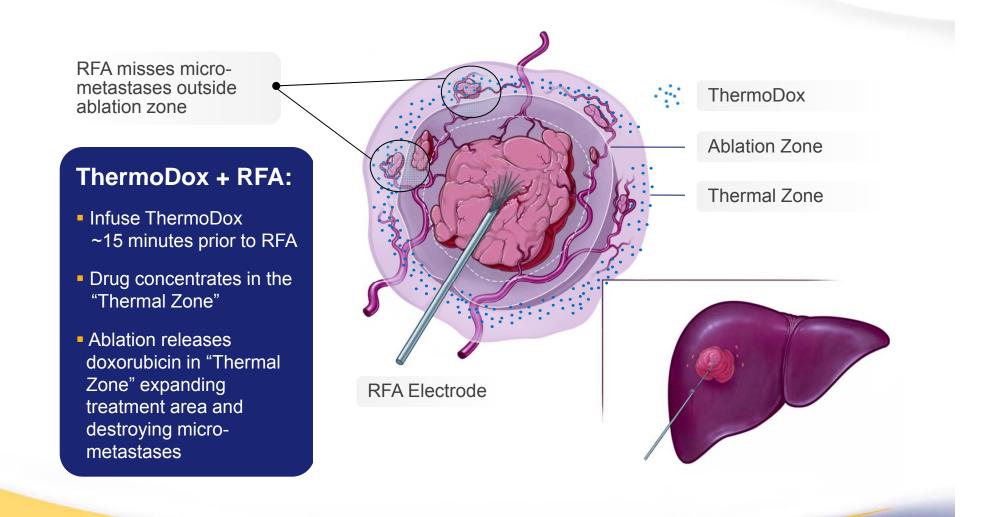
- RFA, TACE, ethanol injection, and radiation therapy
- RFA is the dominant treatment for nonresectable liver cancers with average local recurrence rate of 50%+/for lesions >3cm
- ThermoDox + RFA addresses limitations of current standard of care

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RF Liver Ablation + ThermoDox

Expanding the Treatment Zone Addresses RFA Limitations

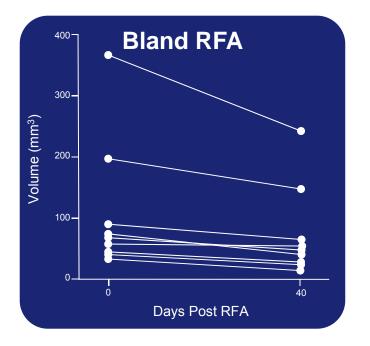


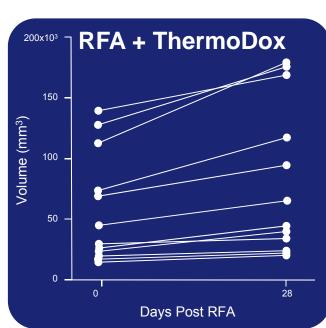


Phase I Liver Cancer Results

Highly Suggestive of Clinical Activity

- 2 Clinical Sites: NCI (US) and Queen Mary Hospital (HK)
- Single dose treatment; 50mg/m² MTD established
- No unanticipated SAE or AE experienced







Pre-treatment



11 weeks post-treatment



20 weeks post-treatment



Treatment Zone Increases

Evidence of clinical activity presented by Dr. B. Wood, NCI at the 2007 ASCO-GI Conference.

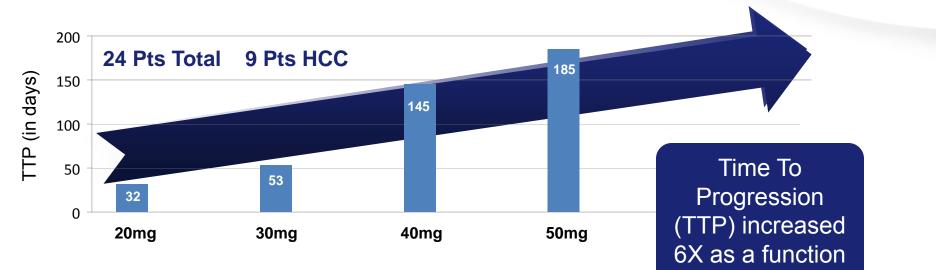
Phase I Liver Cancer Results

Dose Response Correlation Supports Phase III PFS Endpoint



of dose

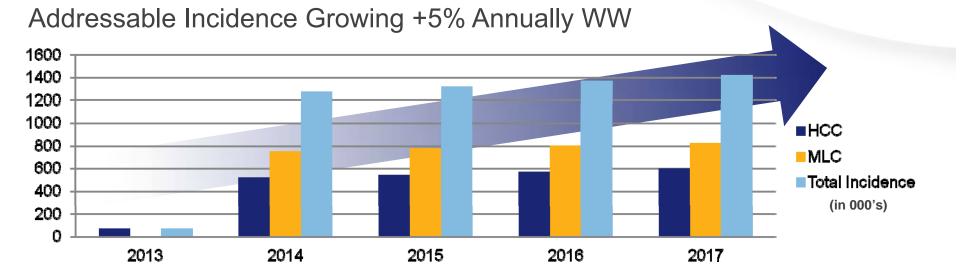
P = 0.038



- 185 days to progression at the MTD (50mg/m²) a 6 fold improvement over the baseline (20mg/m²)⁽¹⁾
- Dose uniquely shows statistical significance, p=0.038 ⁽²⁾
- In the HCC subgroup, TTP more than doubles at therapeutic doses, 50 and 60mg/m²

Phase I data presented at IHPBA Conference, Mumbai, India, February, 2008, Dr. R Poon
Manuscript: Poon, Borys, Expert Opinion, Pharmcother, 2009

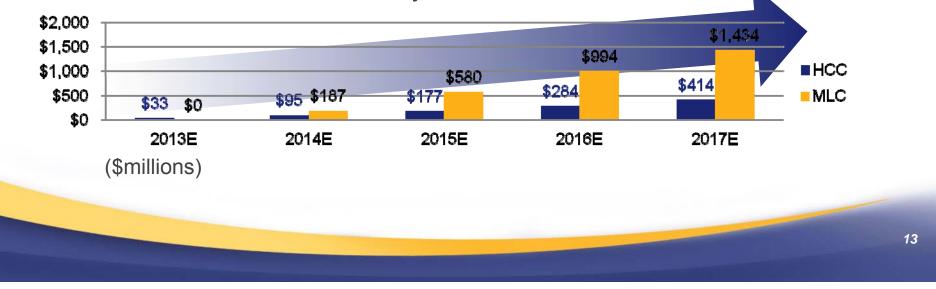




HCC & MLC Revenue Potential



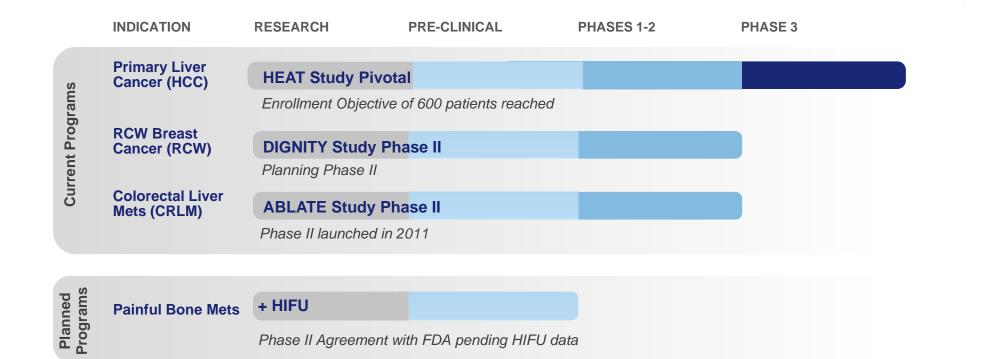
ThermoDox Revenue Potential by Indication



ThermoDox Clinical Program



Evaluating Multiple Oncology Indications





ThermoDox + Hyperthermia 2nd Indication: RCW Breast Cancer



16 patients, 100% show clinical activity SD, PR, or CR At 30 mg/m², 6/6 subjects showed a clinical response with 2 Complete Responses



Phase I Data Presented at the ICHO Conference, Munich Ger, Ap'08





Completed

11 Pts. 50 mg/m² dose established

Commencing 2012

Determine the Durable Complete Local Response Rate; Evaluate Site Comparability

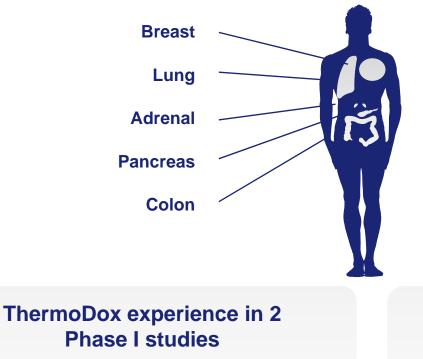
Eligibility:

Breast Cancer patients who have recurrence of breast cancer on the chest wall who have had a mastectomy and prior treatment.

Enrollment: 40 patients, 5 Institutions

ThermoDox + RFA 3rd Indication: Liver Cancer Metastases (The ABLATE Study)





- Liver cancer patients from 9 primary sites
- Local control and dose response relationship established

Phase II Study of ThermoDox in Colorectal LCM patients

Initiated in two sites

Expanding to 4 sites

by mid year

- Multiple center study, initiated Sept 2011
- 2 arm, randomized, RFA +/- ThermoDox
- Up to 88 patients to be enrolled

ThermoDox Commercialization Strategy





Global commercialization plans maximize shareholder value

- U.S. strategy is to market and sell directly
- Ex-U.S. strategy is through license agreements with Pharma Partner

Japan license completed with Yakult Honsha in 2008

- \$4.5 million Signing Payments
- \$7.0 million in shared development costs
- High double digit royalty and milestones
- Supplier of ThermoDox at cost plus 35%

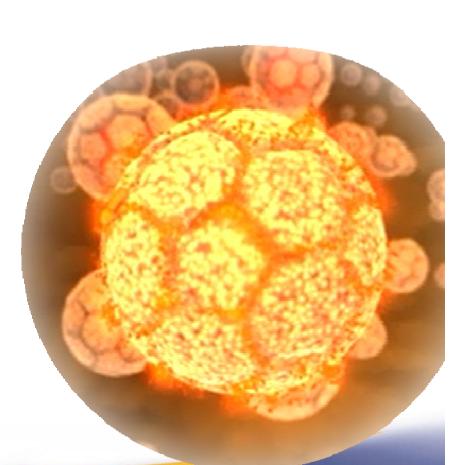


Patent and Regulatory Protection

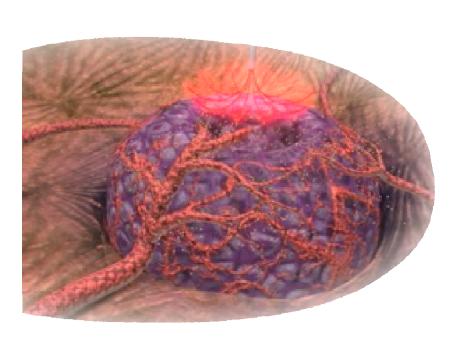
- Exclusive world-wide rights from Duke University Patent to 2018+
- Additional U.S Patent extends to 2021
- Orphan Drug Designation in U.S. and Europe provides 7 and 10 year exclusivity

Technology platform expandable to a range of therapeutics and indications

4-lipid patent to 2024







Balance Sheet Supports Major Activity

- Top-line data from Phase III HCC Trial
- RCW Breast Cancer study
- Phase II CR Liver Mets study
- Completion of Commercial Manufacturing Development

Experienced Management Team over 27 NDA's

- Drug Development Expertise
- Clinical Development and Operations
- CMC Development and Operations
- Regulatory and Quality
- Commercialization

Financial Summary



Total Cash at Sep 30 2011	\$21.4 M
Recent PIPE Financing Dec 2012	\$15.0 M
Average cash usage per month Common shares outstanding	~ \$1.7 M 33.2 M
52-week PPS Range	\$1.69 - \$4.37
Average Daily Trading Volume	> 400 K
Market Capitalization	~ \$75 M





Corporate Information

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