Rodman & Renshaw

18th Annual Global Investment Conference

September 11 – 13, 2016

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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 to the future financial position and business strategy of the Company, are detailed in the Company's filings with the Securities and Exchange Commission.

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Oncology Company

Capital Efficient Drug Development

Three Nano-Particle Based Technology Platforms to Drive Growth

- **Targeted Chemotherapy**
  - Phase III Study in Primary Liver Cancer (The OPTIMA Study)
  - Phase II Study in RCW Breast Cancer (The Euro-DIGNITY Study)
- **Gene Mediated Immuno-Oncology**
  - Phase I Neoadjuvant Therapy in 1st Line Ovarian Cancer (The OVATION Study)
  - Phase I/II Combination Therapy with Avastin 2nd line Ovarian Cancer (2017)
- **Lung Directed RNA Therapy**
  - Preclinical NHP mRNA
  - Preclinical murine miRNA

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Our Two Clinical Stage Platforms

LTSL

Lysolipid Thermally
Sensitive Liposomes
Known Chemotherapeutics

ThermoDox

Targeted Doxorubicin Delivery

- Phase III Study Enrolling in HCC
- Phase II Study in RCW Breast Cancer

TheraPlas

Synthetic Non-viral Vector
DNA-based Plasmids
Therapeutic Proteins

GEN-1

Localized IL-12 Immunotherapy

- Neoadjuvant Study in 1st Line Ovarian
- Combination Study with Avastin and Doxil in 2nd Line Ovarian Cancer

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Chemotherapy
ThermoDox®
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Hepatocellular Carcinoma

Large and Deadly Global Cancer

- **5th most prevalent**
  - 800,000 global incidence growing 5% annually
  - By 2020, expected to be the #1 cancer
  - China has 50% of new cases; 75% in Asia
- **4th highest mortality**
  - 5-year survival rate less than 10%
  - Median survival from time of diagnosis is less than 3 years
  - Curative surgery is possible in less than 20% of patients
- **Local therapies include:**
  - RFA, TACE and radiation
  - RFA is the dominant treatment with local recurrence rates >50% for lesions >3 cm
  - ThermoDox + RFA addresses limitations of current standard of care by **"Expanding the Treatment Zone"**

Market Opportunity >200K Patients
Multi-Billion Dollar Revenue Potential

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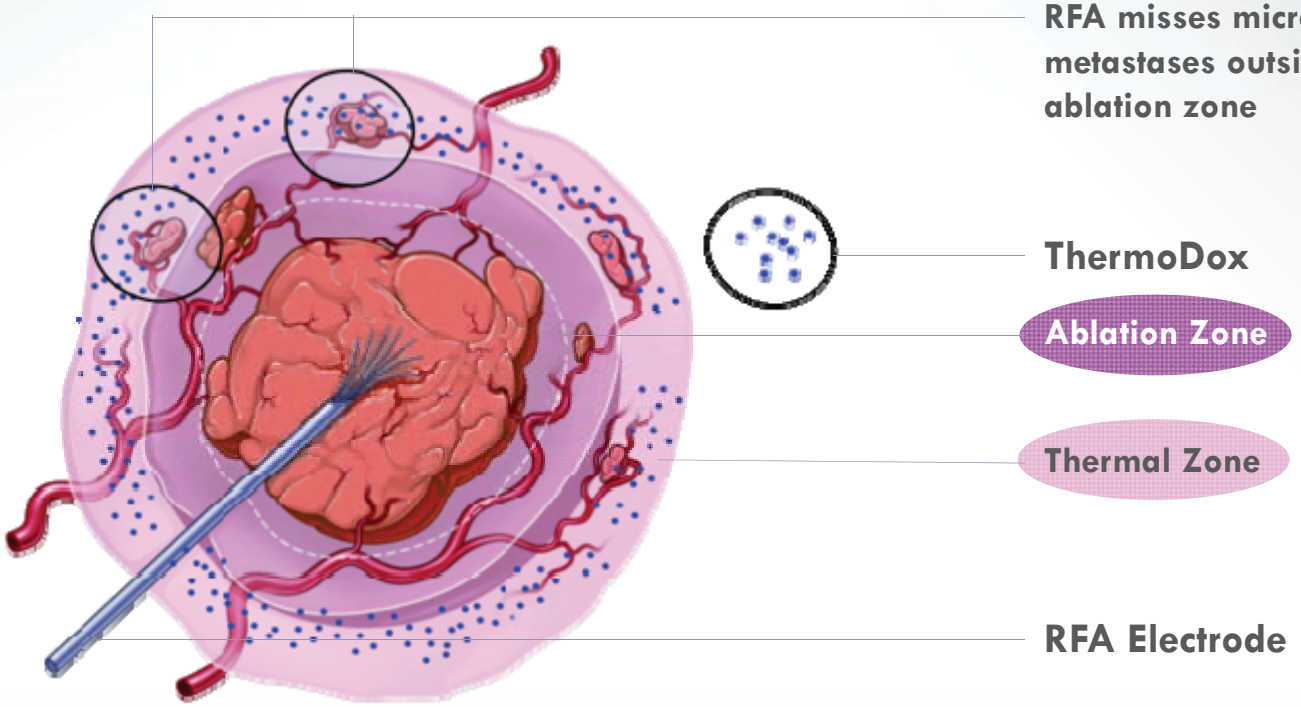
ThermoDox + RF Liver Ablation

Expanding the Treatment Zone Addresses RFA Limitations

- ThermoDox infused IV ~15 minutes prior to sRFA
- RFA ablates tumor and creates a "Thermal Zone" in margin surrounding the tumor
- Doxorubicin is released in the "Thermal Zone" expanding treatment area and killing the metastases outside the ablation zone



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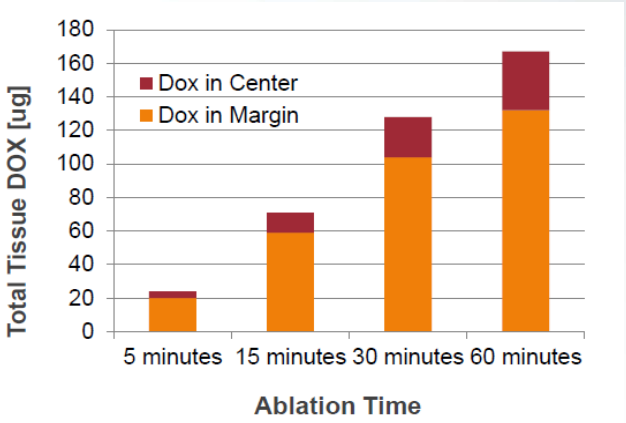
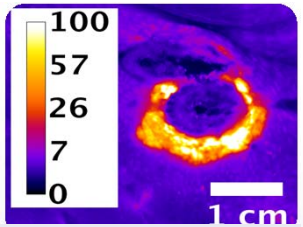
RFA Dwell Time Matters!

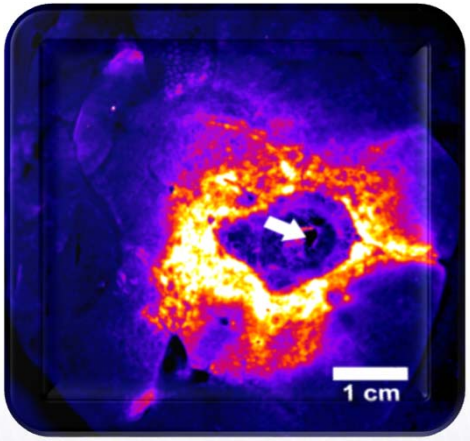
Learnings from the 700 patient HEAT Study

- When standardized for dwell time and lesion number, the ThermoDox patients demonstrated difference in Overall Survival
- The hypothesis that dwell time increases local doxorubicin concentration was then tested and demonstrated in computer simulation study
- The hypothesis was further tested and demonstrated in an in-vivo porcine model:





15 Min Dwell Time



45 Min Dwell Time

- Multivariate analysis points to RFA dwell time with ThermoDox as the factor correlating to significant improvement in survival

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RFA Dwell Time Matters!

Independent Confirmation from NIH Analysis of HEAT Study Data

- Analysis performed by the National Institutes of Health under a Cooperative Research & Development Agreement (CRADA) evaluated RFA burn time per tumor volume (min/ml) for correlation with clinical outcomes

- Results of Study: Overall Survival was found to be significant
  - Increase in burn time per tumor volume improves OS in the ThermoDox + RFA patients compared to RFA only patients
  - One unit increase in RFA duration per tumor volume improved OS of ThermoDox + RFA patients by 20%
  - More dramatic differences in subgroup of patients with RFA burn times per tumor volume greater than 2.5 minutes/ml

NIH

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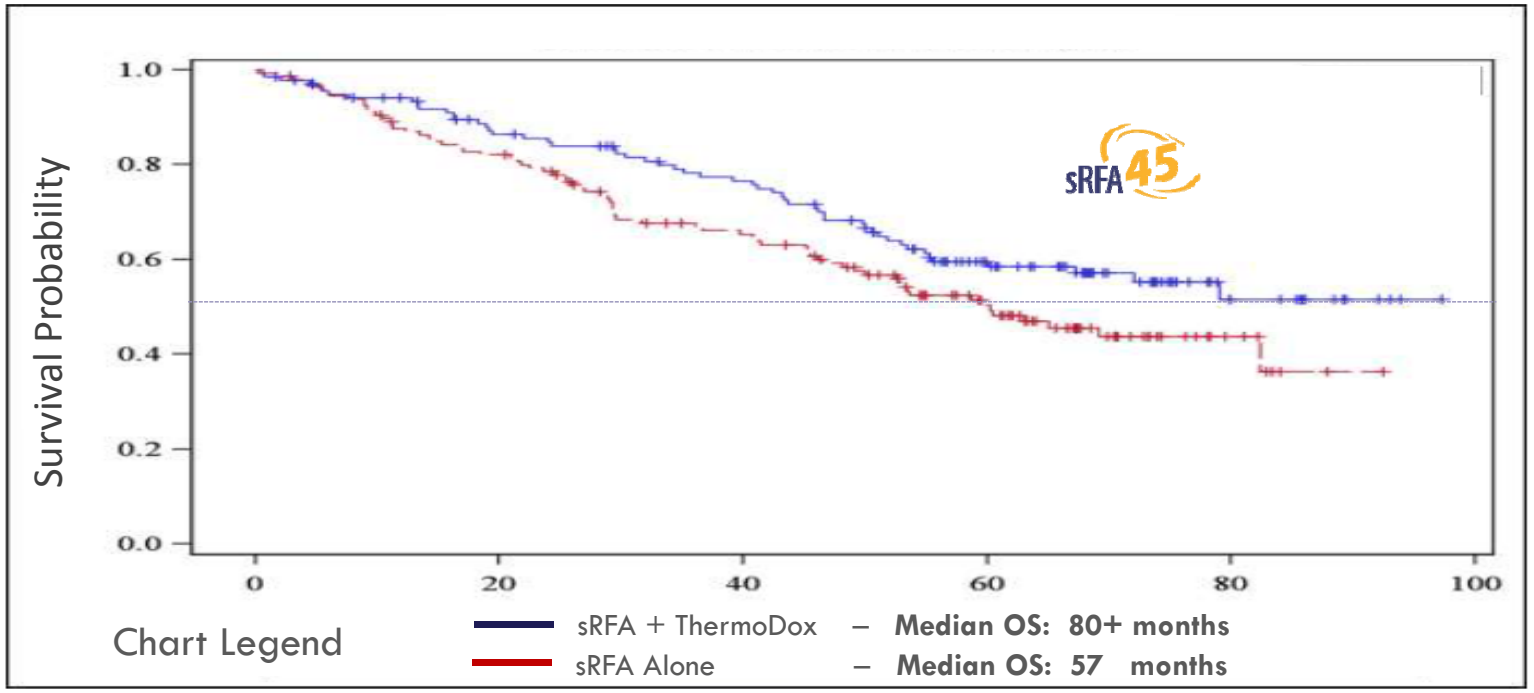
ThermoDox: HCC

Sub-Group Analysis of HEAT Study Data

Greater than Two Years Overall Survival Benefit

285 Patients Followed Quarterly for 3 ½ years

Standardized RFA > 45 minutes (sRFA)



Overall Survival as of 7/15/2016	HR=0.65 (95% CI 0.43 - 0.93) *P* Value = 0.02

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ThermoDox + RFA vs TACE

Intermediate HCC

	Study	Lesion size	N	Median OS (mos.)	Year 1 (%)	Year 2 (%)	Year 3 (%)
	HEAT Study ITT Population	Overall: 2.7 - 7.5 cm Mean: 4.2 cm Median: 4 cm	701	53 mos.	[85%]	[76%]	[64%]
HEAT Study Subgroup	**ThermoDox + RFA ≥ 45 min.**	**Overall: 2.7 - 6.9 cm Mean: 4.3 cm Median: 4.2 cm**	**138**	**80+ mos.**	**94%**	**85%**	**77%**
HEAT Study Subgroup	RFA alone time ≥ 45 min.	Overall: 3 - 6.9 cm Mean: 4.2 cm Median: 3.9 cm	147	57 mos.	88%	79%	69%
	Ikeda et al (TACE) 2013	Median: 3.9; range 1-11	99	37 mos.	90%	75%	NR
		> 3.0	64	NR	NR	66%	NR
	Burrel (DEB TACE) 2012	BCLC A	41	54 mos.	90%	NR	68%
		BCLC B	63	48 mos.	88%	NR	64%

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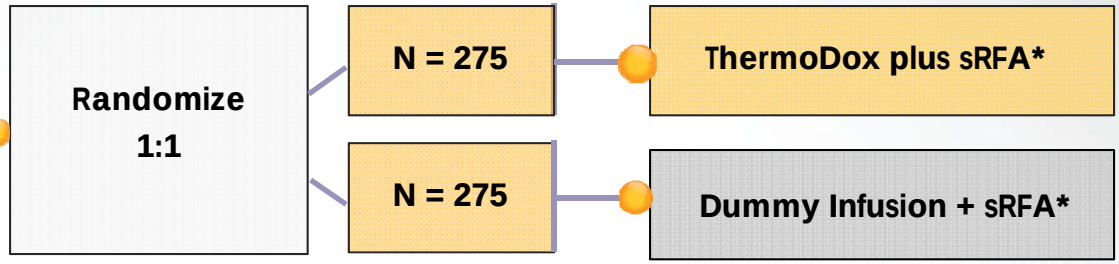
DEB TACE – Doxorubicin Eluding Beads

Phase III OPTIMA Study Design

General Eligibility
- Non-resectable HCC
- Single lesions
- Lesion > 3 cm but not > 7 cm
- Treatment naïve
- Child-Pugh A

Stratification
- Lesion size: 3-5 cm / 5-7 cm
- RFA Technique (Percutaneous, Laparoscopy, or Surgical)



Primary Endpoint	Overall Survival (OS)
Secondary Endpoints	Progression Free Survival; Safety
Interim Efficacy Analysis	118 OS Events / HR < 0.61 158 OS Events / HR < 0.70
Final Efficacy	197 OS Events / HR < 0.75

First Patient Enrolled
Q3 – 2014

~80 Clinical Sites in
14 Countries

* sRFA45 Standardized Radiofrequency Ablation > 45 minutes

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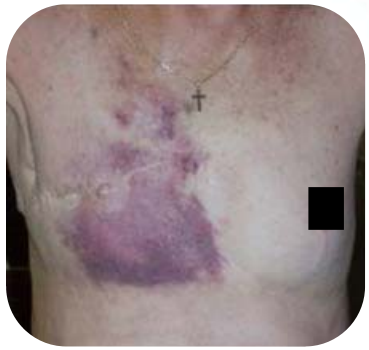
ThermoDox: RCW Breast Cancer

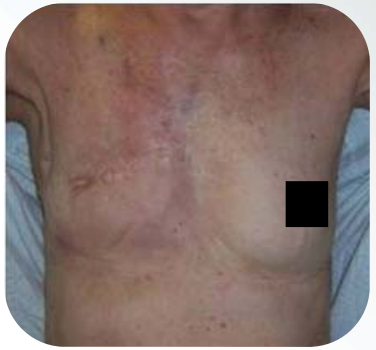
Difficult to Treat with Severe Complications

- Breast cancer recurring in the chest wall affects ~35,000 post-mastectomy patients in the US and Europe annually
- Up to 40% of women undergoing a mastectomy as primary treatment will experience local recurrence
- Local tumor control is a primary objective in treating these patients

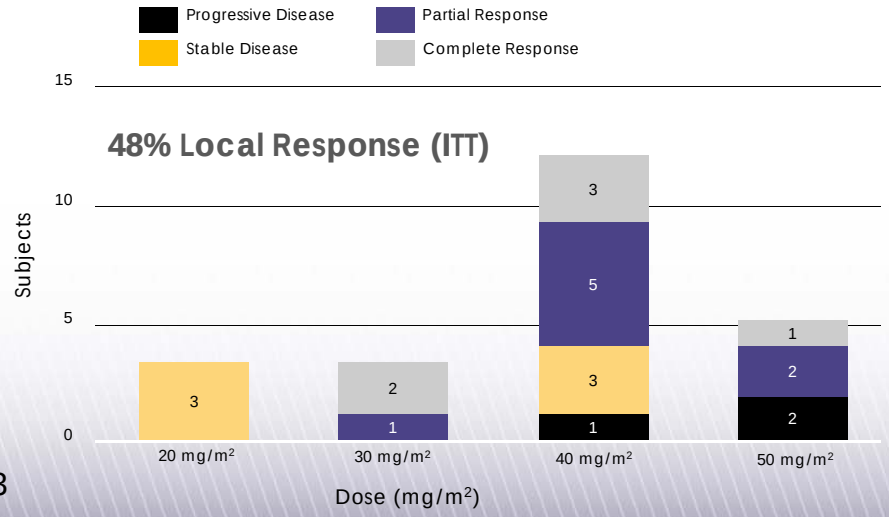
Limited Treatment Options



Complete Response



Combined Phase 1 Data (n = 29)



Phase 2 US DIGNITY Study

Evaluate local-regional breast tumor response.
17 patients enrolled; 12 evaluable for efficacy

- All evaluable patients experienced stabilization of disease; 67% of patients in evaluable population observed local responses - 5 CRs & 3 PRs
- 47% Local Response (ITT)

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ThermoDox: Euro-DIGNITY Study

ThermoDox + Hyperthermia + Radiation

Primary Objectives

- Evaluate complete and partial response after 3 cycles of ThermoDox + Hyperthermia and Radiation Treatment (Tri-Modal Therapy)
- Evaluate loco-regional breast tumor control in patients undergoing Tri-Modal Therapy

70 patients to be enrolled

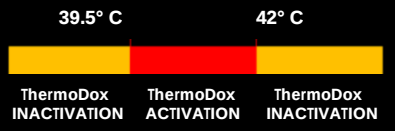
Open Label Design

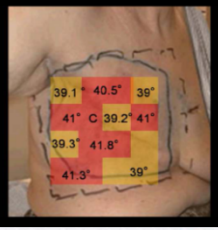
Study Timelines

- Site Activation: 2nd Half – 2016
- Interim Efficacy Assessment: Q1 – 2017
- Recruitment Period: 2016 – 2017
- LP/LV through Follow-Up: 2018

ThermoDox OPTIMAL HT DEVICE

Automated Temperature Control provides homogeneous, local temperature distribution





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GEN-1 IL-12

Immuno-Oncology Program

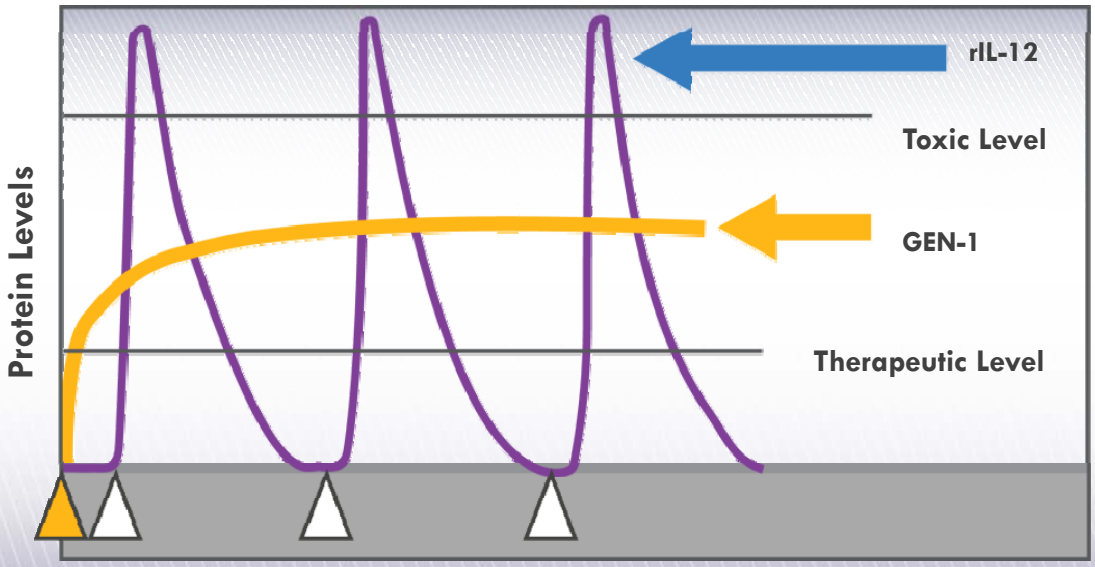
GEN-1

Novel Polymer-Plasmid DNA Nanoparticle

Rationale for Local Therapy with GEN-1 DNA Nanoparticles

- Loco-regional production of potent cytokine IL-12 avoid toxicities and poor pK associated with systemic recombinant IL-12
- Persistent local delivery of IL-12 lasts up to one week and dosing can be repeated
- Ideal for long-term maintenance therapy

GEN-1 is an Effective Alternative to rIL-12 Poor pK



100 nm

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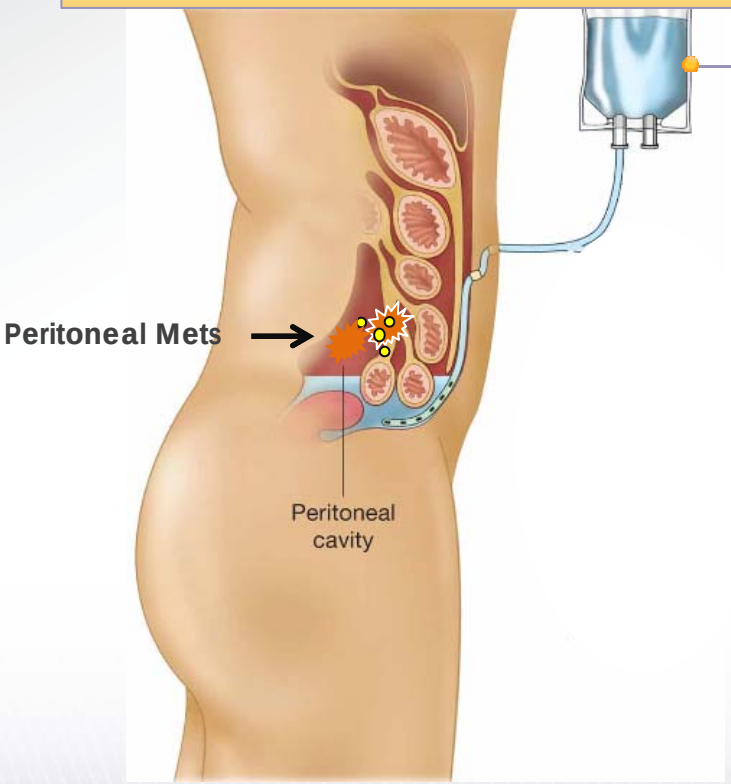
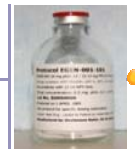
GEN-1 for Ovarian Cancer

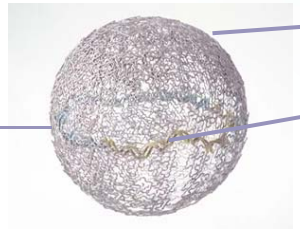
Local Immunotherapy

Persistent Local Delivery of an Immune Agent with a Single Administration





GEN-1



Stable Nanoparticles for Local Delivery

- GEN-1causes the controlled local production of IL-12 at the cancer site
- IL-12 addresses cancer cells by recruiting the immune system, inducing powerful anti-cancer mechanisms for an immune attack

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Ovarian Cancer

Large and Deadly Global Cancer

- **8th most diagnosed cancer among women**
  - 225,000 annual incidence worldwide
  - 22,280 in US and 100,000 in developed countries
  - 14,240 deaths in 2015
- **5th highest mortality among women**
  - 5-year survival rate for all stages is >50%
  - Survival rate reduces dramatically if not localized cancer
  - 15% diagnosed with localized cancer, eligible for potentially curative surgery
- **Local therapies for ovarian cancer**
  - Ovarian cancer is not diagnosed early - spreads to regional/mets requiring combo regimens
  - Most common site of recurrence in abdomen– importance of intra-peritoneal administered therapy
  - GEN-1 administered IP; ideal adjuvant to SoC therapy

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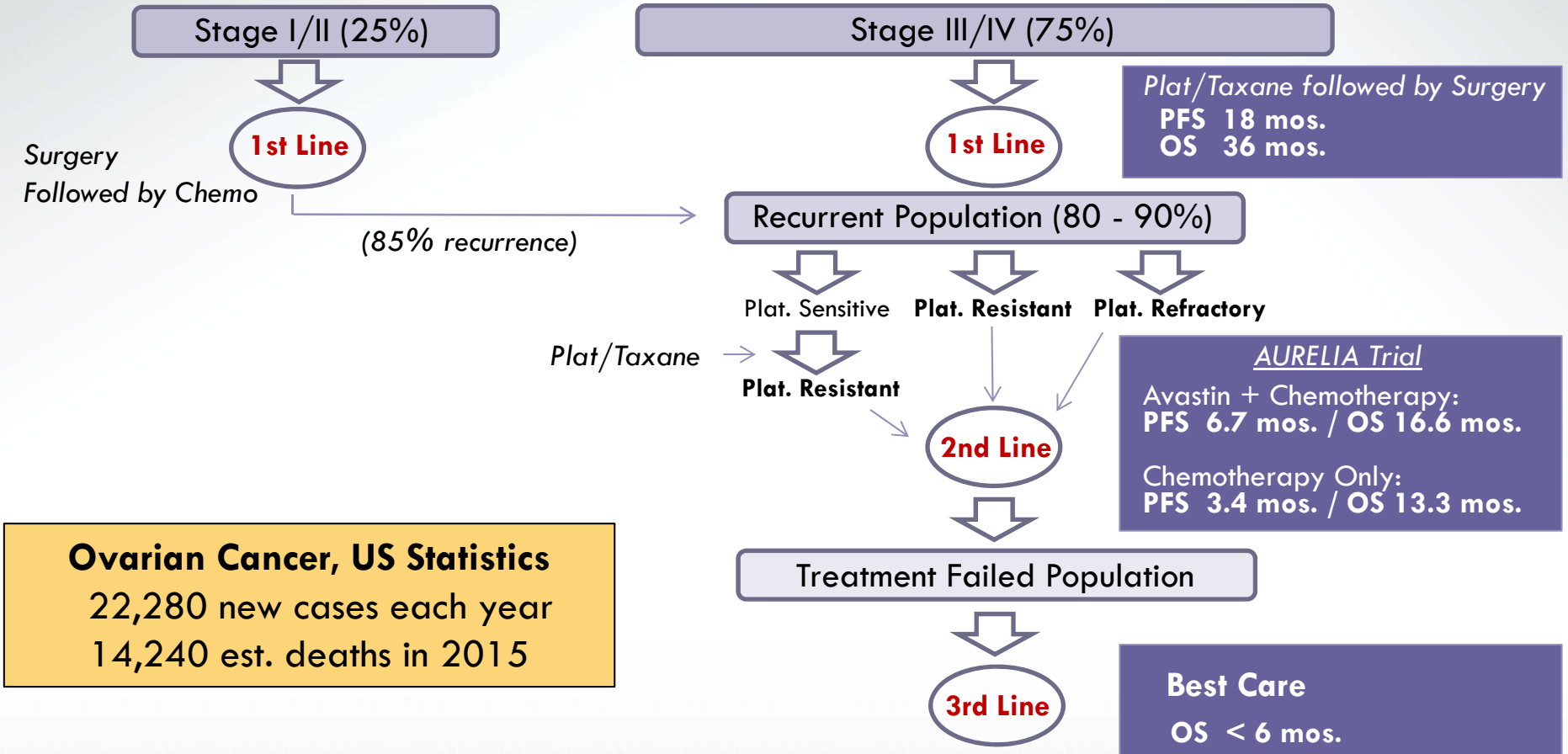
Sources: Cancer Statistics, American Cancer Society; Globocan; SEER database

Ovarian Cancer Treatment Path



Ovarian Cancer, US Statistics

22,280 new cases each year

14,240 est. deaths in 2015

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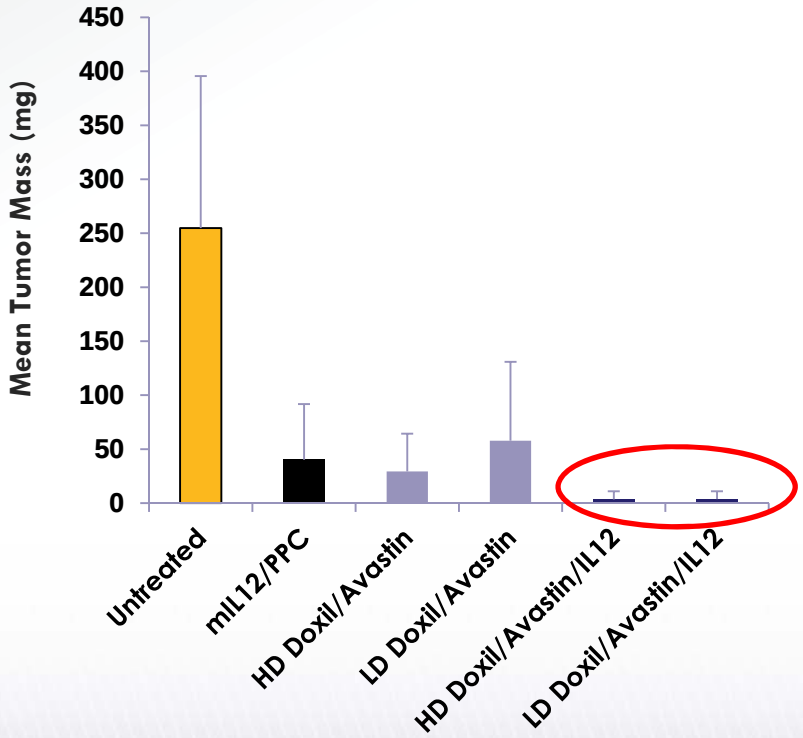
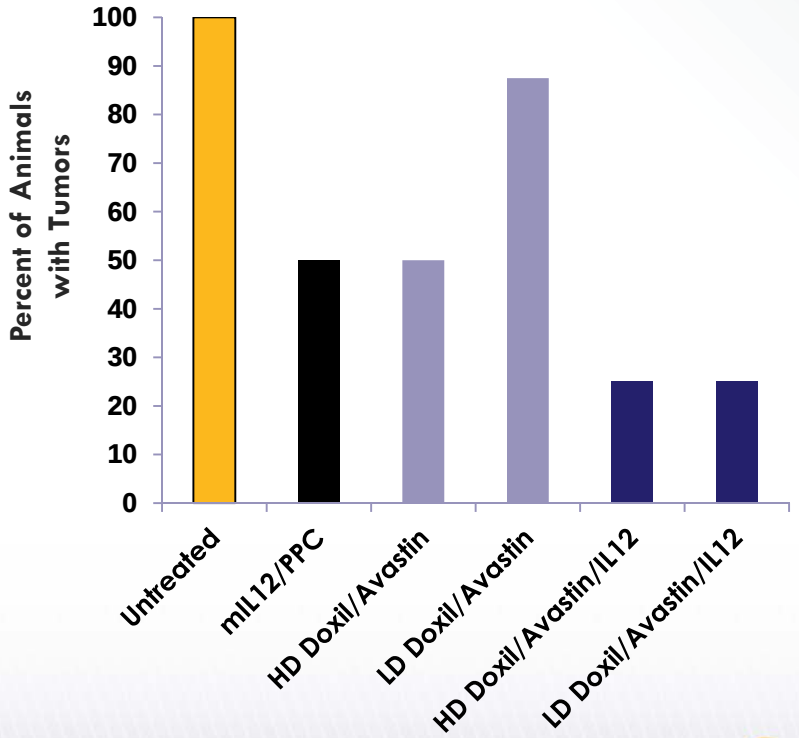
GEN-1: Preclinical Studies

GEN-1 + Doxil + Avastin

- Doxil + Avastin is 2nd line SoC for platinum-resistant ovarian cancer.
- Adding Avastin Results in a > 98% Reduction in Tumor Burden





HD Doxil = 7.5 mg/kg
LD Doxil = 3.75 mg/kg

N = 8 /group
Animals euthanized 59 days after tumor implant

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GEN-1 + Doxil Phase 1b Trial

2nd Line

GEN-1 (mg/m^2)	Doxil (mg/m^2)
24	40
36	40
36	50

Clinical Observations

- All doses well tolerated with no DLTs
- Clinical response rate:
  - All doses: **> 50%**
  - Highest dose: **86%**
- Single agent Doxil comparison 4 previous studies:
  - Clinical RR **< 50%**

Translational Data Findings

Significant increase in immunologically active IL-12 levels in peritoneal fluid

- Detectable for at least one week after GEN-1 dosing
- Not detectable or very low in plasma

Significant increase in key downstream mediators of IL-12

- IFN-γ and TNF-α: ~5-fold increase observed in peritoneal fluid above pre-treatment level with the highest increase observed at 77-fold
- Very low to non-detectable levels of IFNγ and TNF-α in plasma

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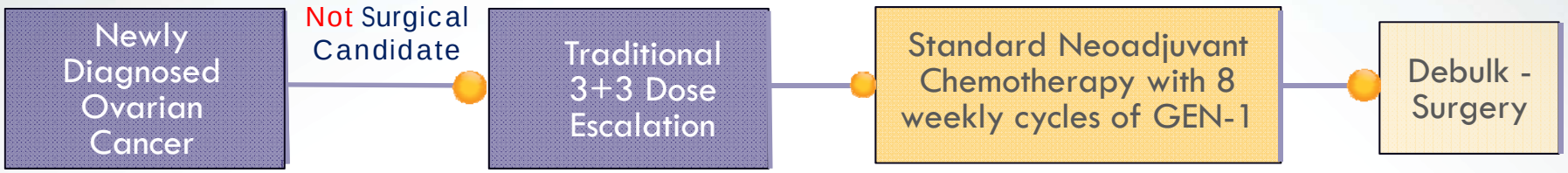
GEN-1 Phase I Study

1st Line in Ovarian Cancer

The OVATION Study



Neoadjuvant Study in Newly Diagnosed Ovarian Cancer Patients	To determine safety, dose, and feasibility in target patient population
Primary Endpoint	Optimal Therapeutic Dose
Secondary Endpoints	pCR, PFS, ↑IFNγ, ↑IL-12, ↓VEGF and Tumor-specific T-cell response CD4+,CD8+

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OVATION Study

Cohorts 1 & 2 Patients – Response and Safety

	Cohort 1 – 36 mg/m^2			Cohort 2 – 47 mg/m^2		
SUBJECT ID	**OV01-01(01)**	**OV01-02(02)**	**OV01-04(05)**	**OV04-01(06)**	**OV0-02(07)**	**OV03-01(09)**
FIGO STAGE	IV	IIIB	IIIC	IIIC	IIIC	III
DLT	No	No	No	No	No	No
TUMOR RESPONSE (RECIST)	SD	SD	**CR**	SD	**PR**	**PR**
DEBULKING STATUS	Optimal R1	**R0**	**R0**	N/A	R1	R1
PATHOLOGICAL RESPONSE	Macro PR	Micro PR	**cPR** **	N/A	Micro PR	Macro PR
CA-125 LEVELS *	BSL: 246 PST TX: 28 4/6 F/U: 6 **Δ = -97%**	BSL: 362 PST TX: 9 **Δ = -98%**	BSL: 423 PST TX: 16 **Δ = -98%**	BSL: 957 PST TX: 17 **Δ = -98%**	BSL: 934 PST TX: 5 **Δ = -99%**	BSL: 372 PST TX: 39 **Δ = -90%**

* 50% reduction in CA-125 levels from baseline that is maintained for greater than 2 weeks is considered a CA-125 Responder

** In a 332 patient GOG Study, pCR's were seen in only 6.5% of patients; Strong correlation with improvement in Overall Survival (median OS of 72 mos.) which is a 3 year improvement over patients having a microPR or macroPR (Pvalue = 0.018)

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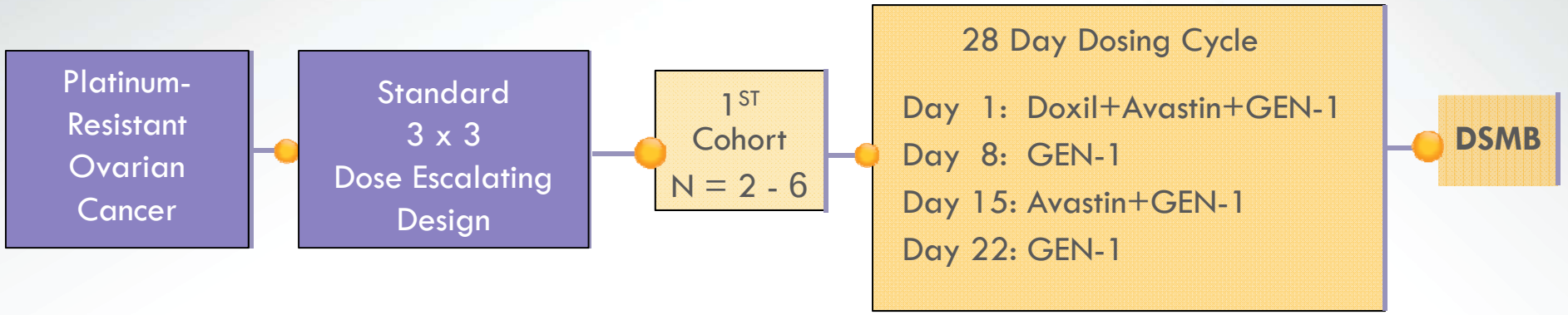
GEN-1 + Avastin and Doxil Trial Design

2nd Line



Primary Endpoint Phase I Primary Endpoint Phase II	Optimal Safe Dose (Max or MTD) Clinical Objective Tumor Response (RECIST)
Secondary Endpoint	IL-12, IFN-γ, TNF-α, VEGF
Treatment period	28 day cycles continue until GEN-1 or Avastin treatment is no longer tolerated

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Milestone Events (2016 - 2018)

	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ThermoDox												
OPTIMA STUDY		Initiate Enrollment in China √	HEAT Study OS Data (China cohort) √	OPTIMA 50% Complete				OPTIMA Enrollment Complete			1st Interim Efficacy Endpoint	
Euro-DIGNITY STUDY				Initiate Enrollment		1st Efficacy Assessment (24 pts)		Enrollment Complete		Final Data Assessment (70 pts)		
GEN-1												
OVATION STUDY		Efficacy Data from Cohorts 1 & 2 √	Translational Research Data from Cohorts 1 & 2	Efficacy Data from Cohort 3	Final Efficacy & TR Data from Cohorts 1-4							
Avastin+Doxil Study	TR Data from Phase 1b Ovarian Study √	Pre-Clin Data at AACR √		Submit IND for Ph 1/2 Study	Initiate Enrollment			Efficacy & TR data from Phase 1	Initiate Phase 2 Study			
TheraSilence												
Lung Cancer		Pre-Clin Data (Collaboration w/ RNA company √		Potential Co-Development Collaboration								

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Financial Overview

Cash & Investments (6/30/16) + $6M RD Offering in June 2016	$14.5 million
Estimated cash usage per month	~$1.3 million
Market Capitalization	$35 million
Common shares outstanding	26 million
Fully diluted shares outstanding	45 million
Avg Daily Trading Volume	~ 75,000

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