

Cytori Therapeutics
NASDAQ: CYTX

Corporate Update
March 2015

Restoring Lives

Forward Looking Statements

This presentation contains certain 'forward-looking statements' about Cytori Therapeutics, Inc. All statements, other than statements of historical fact, that address activities, events or developments that we intend, expect, project, believe or anticipate will or may occur in the future are forward-looking statements. Such statements are based upon certain assumptions and assessments made by our management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate.

The forward-looking statements included in this presentation, involve known and unknown risks that relate to future events or our future financial performance and the actual results could differ materially from those discussed in this presentation. Some of those forward-looking statements include: our ability to successfully initiate the planned clinical trials in the United States, Japan and Europe, as well as the financial, clinical and regulatory burdens associated with those trials, and our ability to complete the trials in the time frames referenced, the various medical indications that may be addressed by Cytori Cell Therapy, the potential effectiveness of Cytori Cell Therapy, our ability to maintain a substantially reduced cash burn and increase our percentage of R&D expenditures compared to prior years, Our partners ability to launch products in China and Europe, our ability to refinance our corporate loan, and the anticipated BARDA funding of approximately $8.3 million to cover the costs of the pilot clinical trial for thermal burn. Some risks and uncertainties related to such forward looking statements include: risks in the collection and results of clinical data, final clinical outcomes, regulatory uncertainties, financing uncertainties, dependence on third party performance, future Government funding and procurement priorities, the Government's sole discretion in determining funding timing and amounts, the Government's ability to reduce, modify or terminate the BARDA contract if it determines it is in the Government's best interests to do so, the performance of our products, and other risks and uncertainties described under the "Risk Factors" section in our Securities and Exchange Commission Filings on Form 10-K and Form 10-Q. These risks and uncertainties may cause our actual results to differ materially from those discussed in this presentation. We advise reading our most recent annual report on Form 10-K and quarterly report on Form 10-Q filed with the United States Securities and Exchange Commission for a more detailed description of these risks.

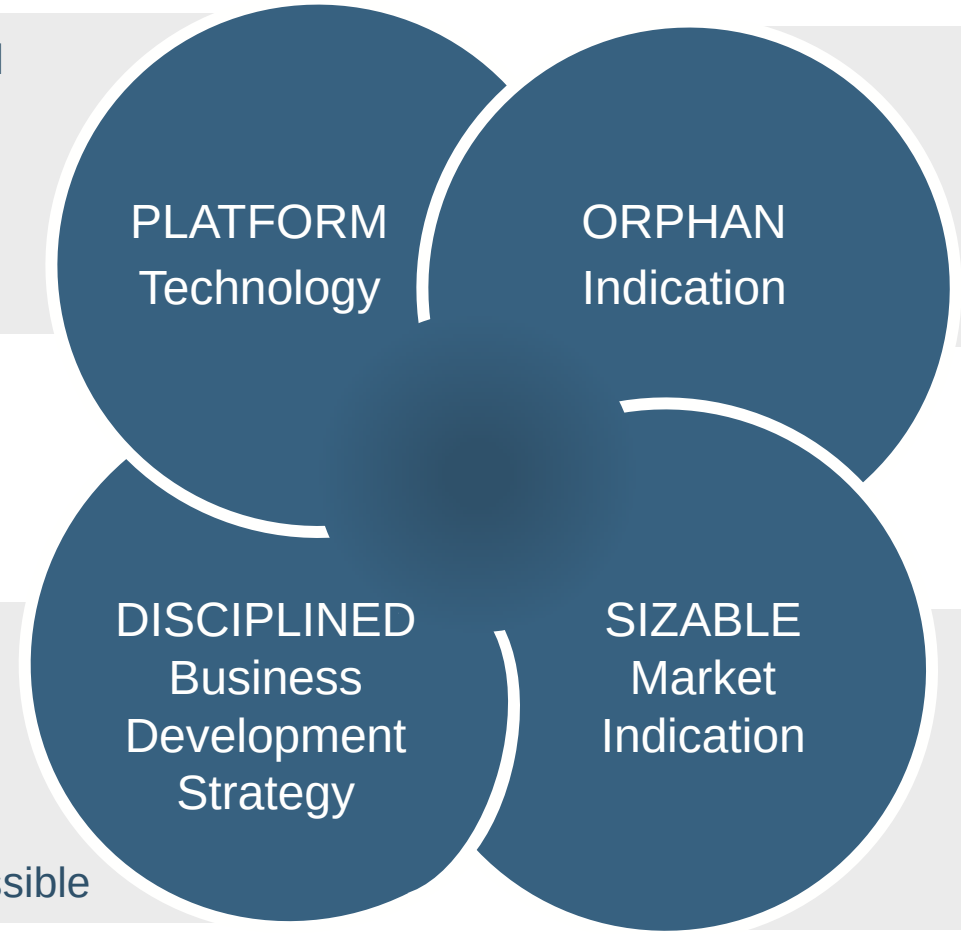
The forward-looking statements contained in this presentation represent our estimates and assumptions only as of the date of this presentation and we undertake no duty or obligation to update or revise publicly any forward-looking statements contained in this presentation as a result of new information, future events or changes in our expectations.

Cytori Recent Headlines

- ✓ Substantial refocus of strategy and restructure of the business - May'14
- ✓ BARDA executes $12M plus $8.3M conditional option for thermal burn injury trial – Aug'14
- ✓ BARDA ups contract option to $14M to accelerate thermal burn injury program – Dec'14
- ✓ Positive resolution ATHENA trial hold – Oct'14
- ✓ US FDA knee osteoarthritis trial (ACT-OA trial) approval – Sep'14
- ✓ US ACT-OA trial enrolls first patient – Feb'15
- ✓ Publication of Phase I/II data for scleroderma- Aug'14
- ✓ US scleroderma STAR pivotal trial FDA approval – Jan'15
- ✓ FDA approval of STAR trial site expansion to 20 sites – Feb'15
- ✓ Announced EU scleroderma trial SCLERADEC II - 2014
- ✓ Positive EMEA opinion on orphan drug status for Cytori's ECCS-50 – Feb'15

Cytori Corporate Overview

- **Autologous cell therapeutics from adipose**
- Regulated as PMA device

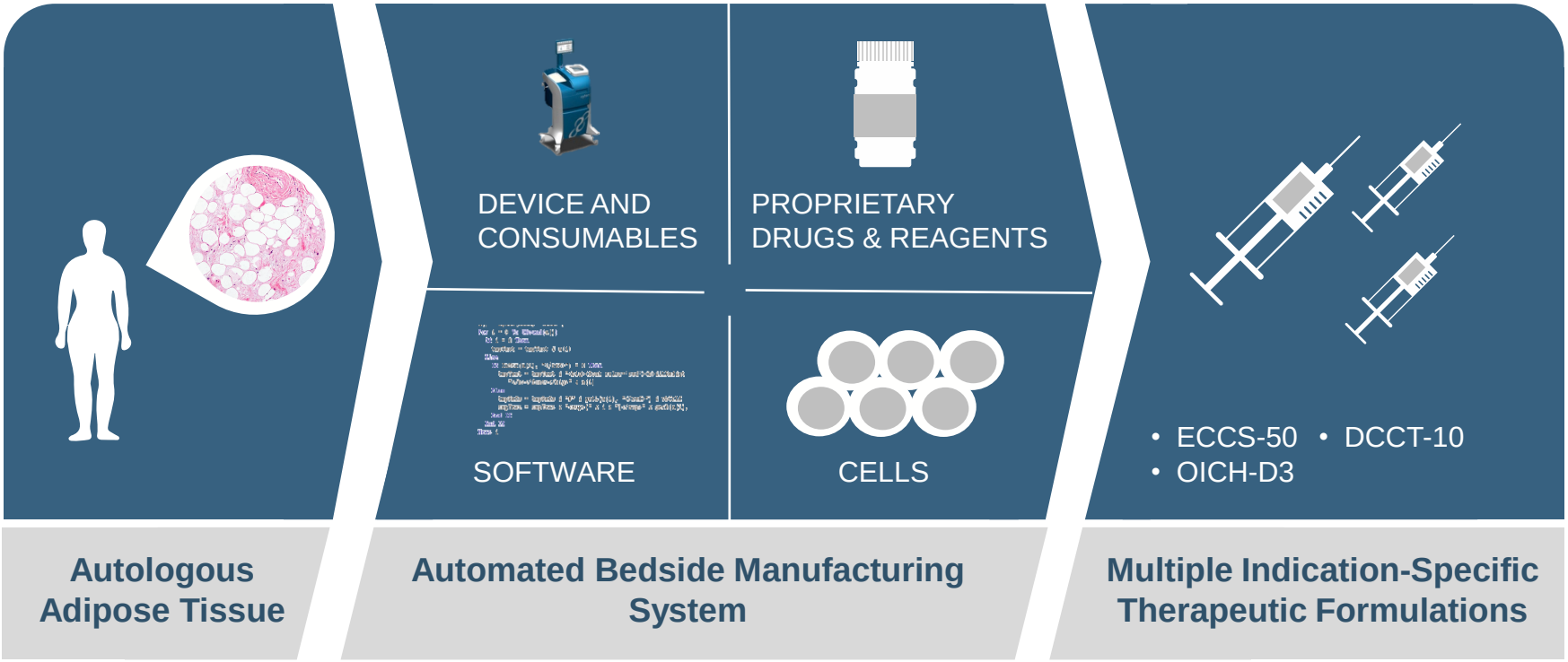


- **PHASE III /Pivotal trial for Scleroderma**
- Est. market value > $1B

- **BARDA, Japan MHLW funded clinical trials**
- Significant new opportunities possible

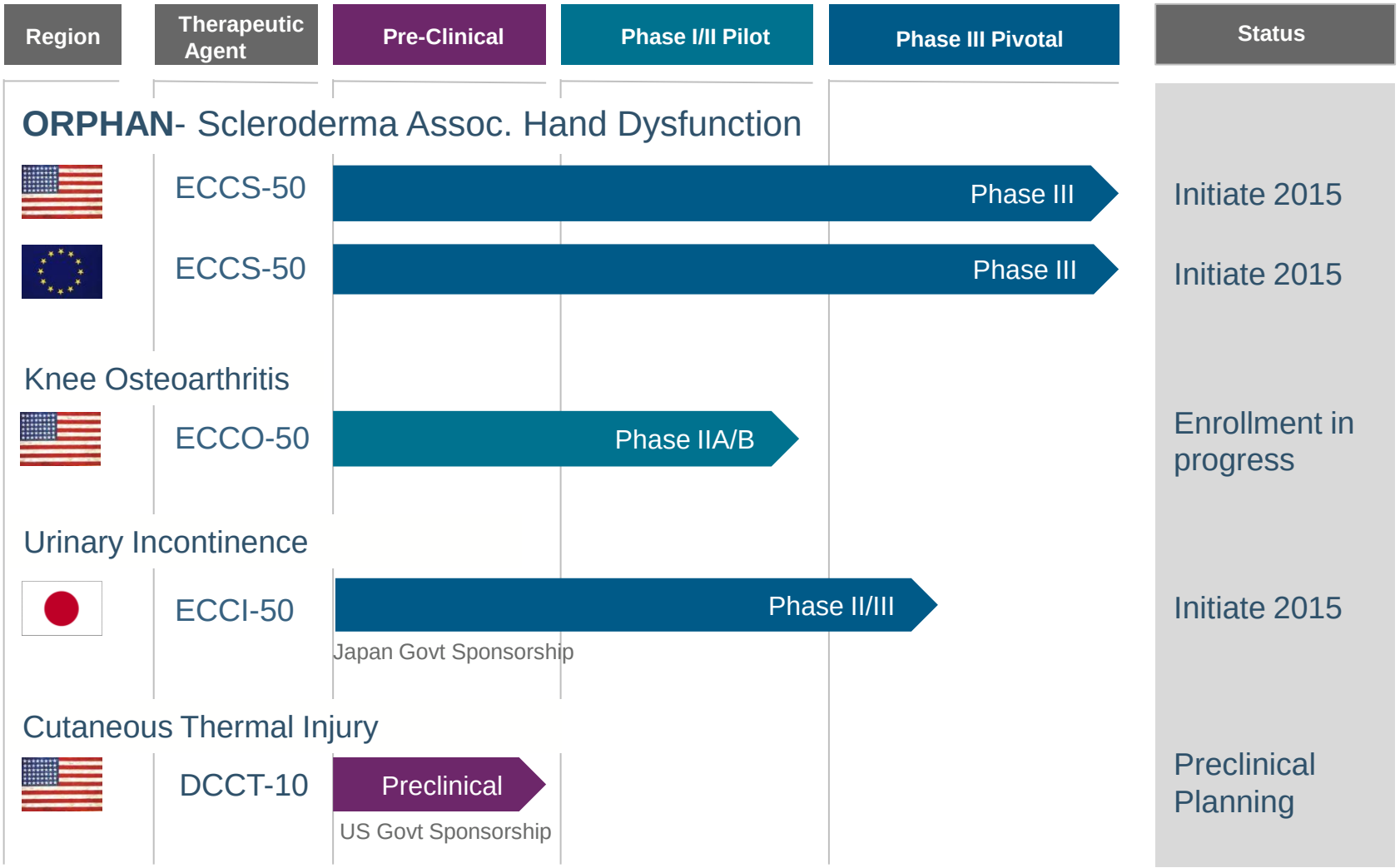
- **PHASE IIB for knee osteoarthritis**
- Est. Market value >$3B

Cytori Platform Technology



FDA regulates technology & therapeutics via PMA device path
(see FDA RFD# 090013)

Cytori Cell Therapy™ Pipeline



Cytori Cell Therapy for Scleroderma Hand Dysfunction

Scleroderma Opportunity Overview

- Hand dysfunction in scleroderma primary cause of disability
  - More disabling than RA
- Phase I/II data consistent with disease modifying effect
- Orphan indication
  - Fast tracked in US - 80 patient pivotal in 2015
  - EU orphan designation - 40 patient pivotal in 2015
- US market opportunity >$1B (premium pricing assumptions)
- FDA has approved expansion from 12 to 20 sites
- Direct commercialization model- approximately 35 key scleroderma centers in the US

Systemic Scleroderma of the Hand (SSc-H)

Systemic sclerosis (SSc) or scleroderma

- Rare Autoimmune condition
- Affects women:men, 4:1
- Cutaneous and visceral fibrosis
- Obliteration of the lumen of small vessels
- ≥90% patients hand disability

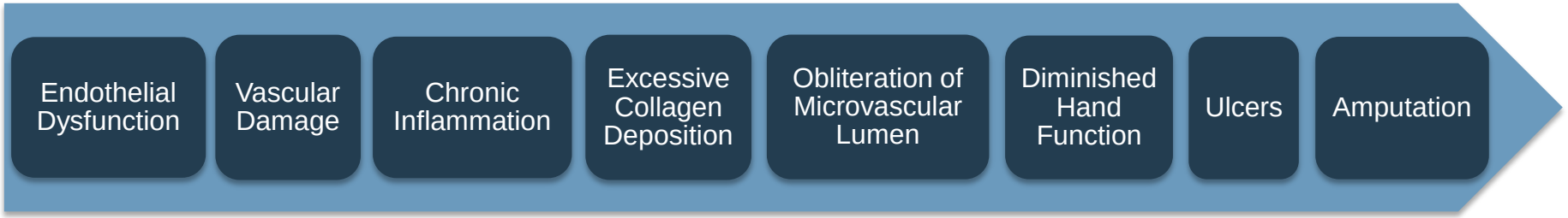
SSc-H manifestations principal source of functional impairment and reduced quality of life

- Fibrosis, pain, and edema result in diminished mobility and hand function even with standard medical care



Images reproduced with permission of the nonprofit International Scleroderma Network at sclero.org

Pathophysiology



Rare Disease Basis for Scleroderma (SSc-H) & Therapeutic Analogue

Scleroderma

Definition

An autoimmune disorder causing collagen overproduction leading to fibrosis and impaired vasculature. Most commonly effects the hands but often affects multiple organ systems.

Epidemiology

- Prevalence: 50 – 75,000 (242/million adults)
- Incidence: 4,400 (18.8/million adults)
- Predominance in women 20 to 50 years old

Therapeutics

- Focus on vasodilation/vasoconstriction
  - Calcium channel blockers
  - NO pathway
  - Endothelin-1 receptor antagonists
  - Prostanoids

Estimated US Market Opportunity

>$1B

Analogous Disease

Rheumatoid Arthritis (RA)

Definition

An autoimmune disorder causing a systemic inflammation which manifests itself in multiple joints of the body. Primarily affects lining of the joints but can also affect other organs.

Epidemiology

- Prevalence: 1,500,000 (30x more common than SSc)
- Incidence: 131,000 (410/million)

Therapeutics

- NSAIDS
- Disease modifying drugs
  - Methotrexate
  - Biologics
- RA biologics can cost over $30k/year

Comparison of Scleroderma and RA Hand Disability

Published studies confirm that SSc disability is similar to or worse than RA

Metric	Outcomes	Source
Work disability (WD)	WD was observed in 56% of SSc patients vs. 35% of RA patients	Ouimet 2007
	"…the prevalence of work disability in SSc is substantially higher than other common rheumatic conditions."	Sharif 2011
HAQ-DI	"QOL in patients with SSc, as indicated by their level of physical function, was significantly reduced compared to healthy controls, but similar across groups of rheumatology patients… Joint involvement in SSc is more disabling than joint involvement in [psoriatic arthritis]; and patients with SSc experience more severe pain than patients with RA"	Johnson 2007
	"…patients with dSSc have more functional impairment than patients with RA or other CTDs [connective tissue diseases]"	Morita 2007
Cost (health care utilization)	"…indirect comparison with RA in Canada suggests that SSc's average costs are higher (RA: 10 459; SSc: 12 585 euros/patient/year)"	Minier 2010
	"…average annual cost of SSc per patient may be as high as that of RA (the equivalent of $16,141 in 2007 Canadian dollars, based on RA cost estimates from one study [31]), and in diffuse SSc the average annual cost per patient may very well exceed the cost of RA."	Bernatsky 2009

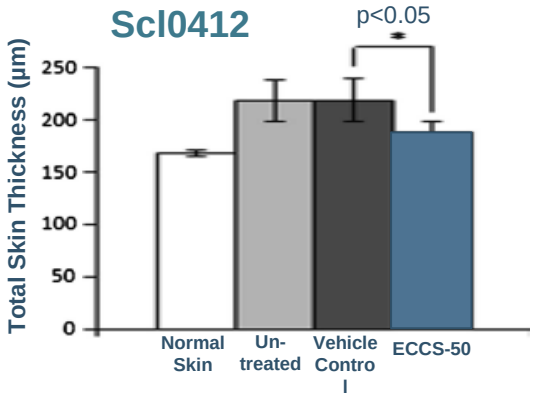
Development of ECCS-50 for Scleroderma (SSc-H)

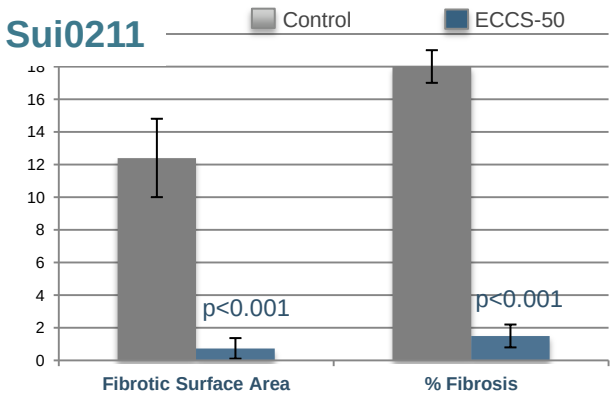
Study	Phase	Approach	Status	Key Findings	Ref
Scl0101	Preclin. (human)	Feasibility	Complete	Preparation of ADRCs from scleroderma patients is feasible §	1
Scl0412	Preclin. (murine)	Drug-induced cutaneous fibrosis	Complete	Reduced skin thickness §	2
Sui0211	Preclin. (porcine)	Urethral fibrosis	Complete	Reduced fibrosis §	3
Scl102	Clinical Phase I (Pilot)	12 patient, single arm	Complete	Good safety profile; Sustained improvement in hand function, pain, and quality of life §	4
Scl103	Clinical Phase III (Pivotal)	80 patient USA randomized, controlled trial	FDA-approved Projected to begin enrollment in Q1, 2015		
Scl104	Clin. Phase II/III	40 patient multi-center EU randomized, controlled trial	Pending French regulatory approval (ANSM)		

1. Unpublished. Data on file at Cytori // 2. Serratrice *et al* 2014; Stem Cell Res. & Ther. 5: 138- // 3. Unpublished. Data on file at Cytori // 4. Granel *et al* (2014); Ann Rheum Dis Aug 11

§ Study executed by Cytori collaborator

Preclinical studies demonstrate consistent reduction in fibrosis





E.U. SCLERADEC I Pilot Trial for Scleroderma (SSc-H)

Study Design

- Single center (Marseille, France), open-label trial of 12 patients (NCT01813279)
- Funded by Groupe Francophone de Recherche de la Sclérodermie

Population

- Men and women with diagnosis of limited or diffuse scleroderma
- Age ≥ 18 years
- Functional disability of the hand
  - Cochin Hand Function Score >20

Treatment/Dosing

- ECCS-50: 1 mL s.c. into each finger (4 million cells/finger)

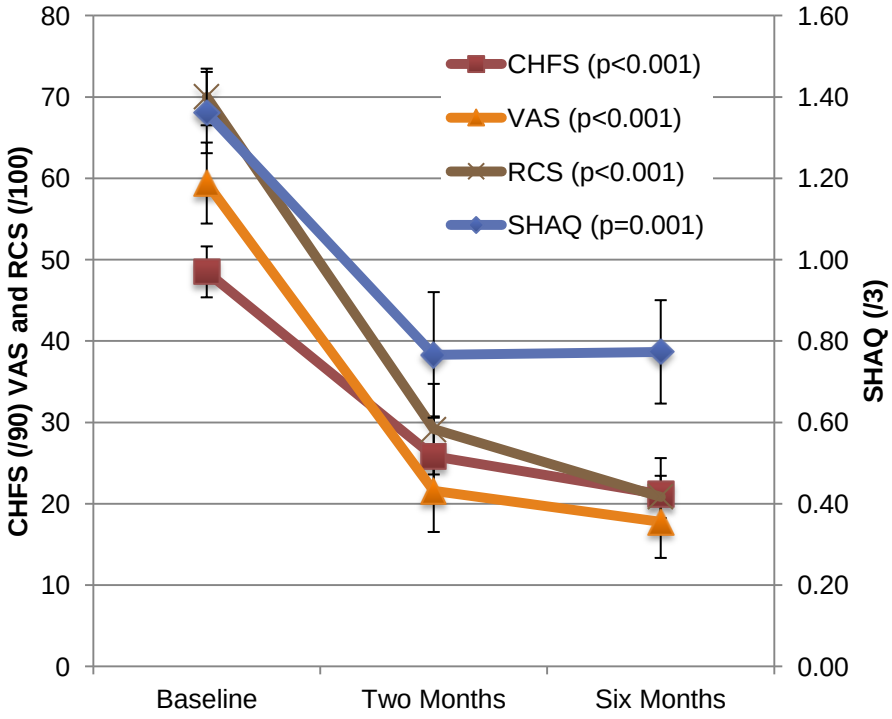
Study Endpoints

- Primary endpoint: CHFS
- Secondary endpoints:
  - Hand symptoms and function (other than CHFS)
  - Health-related quality of life (S-HAQ questionnaire)
  - Raynaud's & vasculopathy
  - Safety

E.U. SCLERADEC I Pilot Trial Results for Scleroderma (SSc-H)

Scleradec I Results

- **ECCS-50 Safety**
  - No serious AEs during follow-up
  - Four minor AEs reported by four patients
    - All resolved spontaneously within 15d
- **ECCS-50 Efficacy**
  - Hand Function
    - Average 57% improvement in Cochin Hand Function Score at 6 months
    - Improved grip and pinch strength
  - Pain
    - Average 64% improvement in pain at 6 months
  - Vasculopathy
    - 69% reduction in Raynaud's score (frequency and intensity) at 6 months
    - Reduced edema (finger size)
  - Ulcer Healing
    - 53% reduction in number of ulcers and 90% reduction in average ulcer area at 6 months

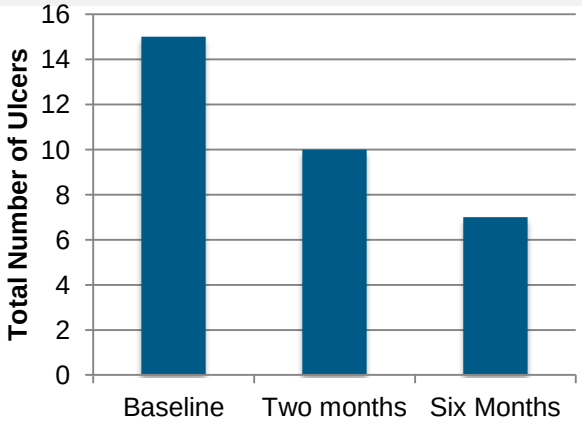


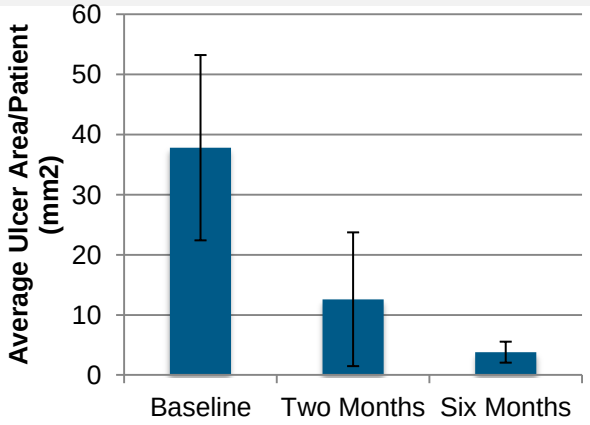
CHFS = Cochin Hand Function Scale
VAS = Visual Acuity Scale (Pain)
RCS = Raynaud's Condition Score
SHAQ = Scleroderma Health Assessment Questionnaire
mean ± std err; p values shown for 6 month data

Granel *et al* (2014); Ann Rheum Dis Aug 11

E.U. SCLERADEC I Pilot Trial Results for Scleroderma (SSc-H)- II

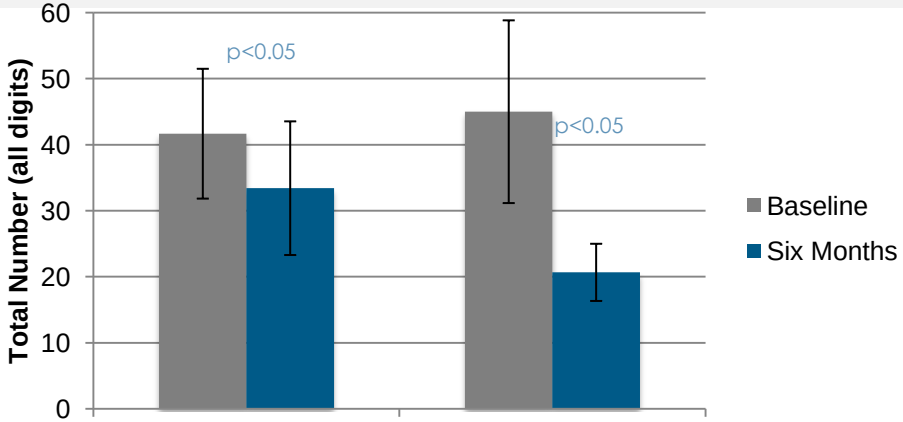
ECCS-50 Treatment led to a progressive decrease in the number of ulcers and average ulcer area





mean ± std err

…and significant normalization of microvasculature



mean ± std err

Granel *et al* (2014); Ann Rheum Dis Aug 11

Phase 3/Pivotal Trial Design for Scleroderma (SSc-H)

	STAR Trial (US Pivotal)	**Scleradec II** (EU Confirmatory)
Study Design	Randomized, double blind, 48 weeks	Randomized, double-blind, 6 months (+6 months open label)
Control	Placebo, crossover 48 weeks*	Placebo, crossover after 24 weeks (cryopreserved)*
Sample size	80 (1:1 randomization)	40 (1:1 randomization)
Sites	up to 20 in USA	6 France
Key Inclusion	Cochin Hand Function Score (CHFS> 20)	CHFS > 20
Initiation	2015	2015
Primary endpoint	CHFS at 6 months	CHFS at 3 months
Key Secondary endpoints	CHDS at other visits Raynaud's Condition Score S-HAQ VAS Modified Rodnan Functional hand assessment HAMIS Adverse events	CHFS at other visits Raynaud's Condition Score S-HAQ VAS Modified Rodnan Functional hand assessment Capillaroscopy Adverse events
Regulatory Strategy	PMA device approval, under CBER	EMEA COMP favorable opinion on orphan drug status

*after all patients have completed the noted time point

Cytori Cell Therapy for Knee Osteoarthritis

Summary of Osteoarthritis Opportunity

- Knee osteoarthritis has high prevalence and market opportunity >$3B
- Opportunity for symptom or disease modification- bridge anti-inflammatory drugs and knee replacement
- Substantial preclinical and proof of concept clinical data
- US phase IIb trial enrolling- data 2016
- Seek commercialization partner(s)

Knee Osteoarthritis

Osteoarthritis (OA) Definition

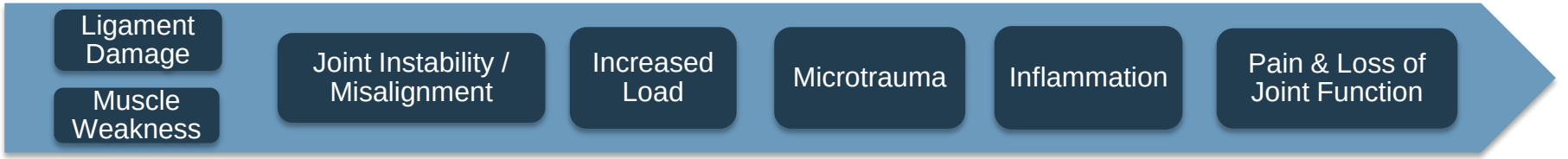
Disease of the entire joint involving the cartilage, joint lining, ligaments, and underlying bone. The breakdown of tissues leads to pain and joint stiffness

Epidemiology

OA is the most common form of arthritis

- 13.9% of adults ≥25 years
- 33.6% (12.4 million) ≥65 years
- Estimated ~26.9 million US adults (2005)

Pathophysiology



Current Therapies

	2014E		
Treatment Modality	**# Patients / Treatments**	**ASP**	**Market Size**
Celebrex/NSAID	3,900,000*	$564	$2.2B
Knee Viscosupplement Injection	898,000**	$935	$0.8B
Total Knee Arthroplasty	780,000	$4,402	$3.4B

* Includes sales of packages for multiple indications: OA, RA, Ankylosing Spondylitis, Acute Pain Management.
** Represents a particular course of therapy performed in the U.S. (i.e., one single-injection or multiple-injection treatment).

Development of ECCO-50 for Knee Osteoarthritis

Study	Phase	Approach	Status	Key Findings	Ref
OA0103	Preclinical (human)	Demonstration of *in vitro* differentiation towards chondrocytes	Complete	Expression of multiple markers characteristic of chondrogenesis	1
OA0203	Preclinical (caprine)	Injured-induced osteochondral defect	Complete	Improved healing at 4 months §	2
OA0205	Preclinical (canine)	Injection into injured intervertebral disc	Complete	Improved disc biochemistry and matrix production	3
OA0501	Veterinary (canine)	21 animal randomized, double-blind trial of OA in the hip	Complete	Improvement in lameness, pain, and range of motion§	4
OA0502	Veterinary (canine)	Open-label multi-center study of 14 animals with elbow OA	Complete	Improvement in lameness, pain, and range of motion§	5
OA104	Clinical Phase I (Pilot)	25 patient, single arm; OUS	Complete	Improvement in activity and knee function (Lysholm) ¶	6
OA105	Clinical Phase I (Pilot)	18 single arm; OUS	Complete	Improvement in pain and knee function (Lysholm and WOMAC) ¶	7
OA106	Clinical Phase I (Pilot)	Higher dose; 25 patient, single arm with 2nd look arthroscopy at 2yrs; OUS	Complete	Improvement in pain and knee function; 64% positive or very positive on 2nd look; only 12.5% 'failed' ¶	8
OA107	Clinical Phase II (Pilot)	Multi-center, USA randomized, double-blind placebo-controlled trial	FDA- IDE approved Projected to begin enrollment in Q1, 2015		

1. Huang *et al* 2004; Plast Reconstr Surg. 113(2):585-94
2. Jurgens *et al* 2013; BioResearch 2 (4) pp. 315-25
3. Ganey *et al* 2009; 34 (21) 2297-304
4. Black *et al* 2008; Vet Ther. 8 (4) pp. 272-84
5. Black *et al* 2008; Vet Ther. 9 (3) pp. 192-200
6. Koh *et al* 2012; The Knee 19: 902-7
7. Koh *et al* 2013; Arthroscopy 29 (4) 748-55
8. Koh *et al* 2013; Knee Surg Sports Traumatol Arthrosc

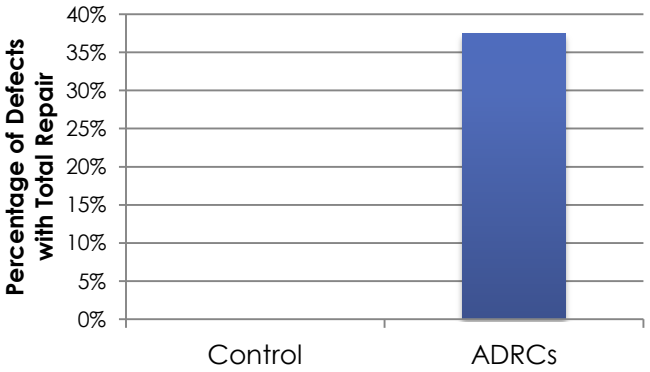
§ *Study executed by Cytori collaborator*

¶ *Study executed independently of Cytori*

Development of Cytori Cell Therapy for Knee Osteoarthritis

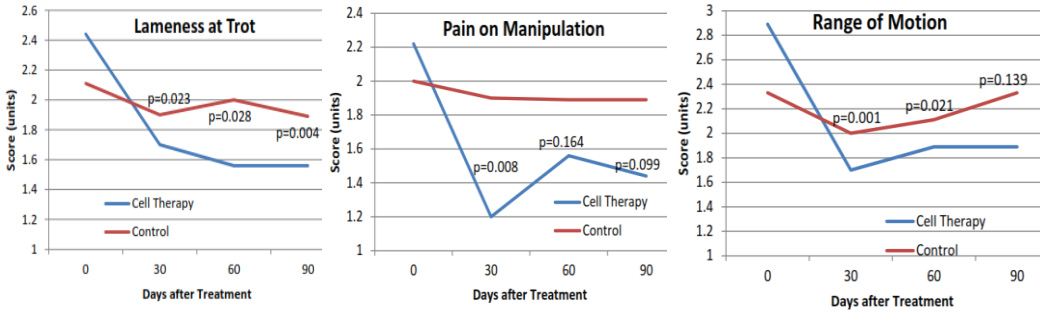
Goat Injury Model

Treatment led to greater healing of cartilage 4 months after injury[1]



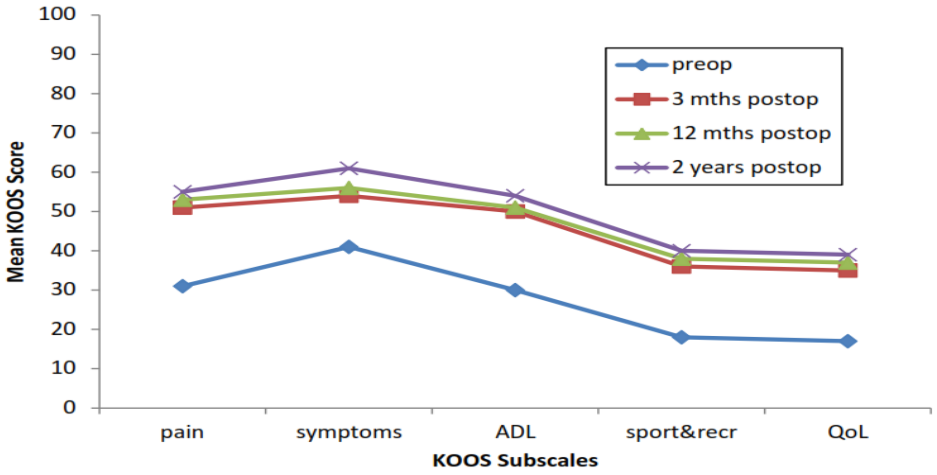
Canine veterinary model (randomized, controlled)

Treatment led to improvements in lameness, pain, and range of motion[2]



Clinical Study

Treatment led to reduced pain, increased function, and potential cartilage repair[3,4]



1. Jurgens *et al* 2013; BioResearch 2 (4) pp. 315-25
2. Black *et al* 2007; Vet Ther. 8 (4) pp. 272-84
3. Koh *et al* 2013; Knee Surg Sports Traumatol Arthrosc
4. Study performed with adipose derived cell therapy with PRP

U.S. Pilot/Phase 2 Trial for Knee Osteoarthritis

ACT-OA (US Phase II)	
Study Design	Randomized, double blind, 48 weeks duration, dose escalation (low and high dose cell ECCO-50 therapy)
Control	Placebo, no crossover
Sample size	90 (1:1:1 randomization)
Sites	Up to 15 in USA
Key Inclusion	OA of Knee, pain $\geq$ 6 months, pain on walking $\geq$ moderate, KL score 2-3,
Initiation	2015
Primary endpoint	KOOS – Pain on Walking at 12 Weeks
Key Secondary endpoints	Observed Pain Scores on 50-foot Walk Test Number of Observed OARSI30 Responders Using the 50-Foot Walk Test Knee injury and Osteoarthritis Outcome Score (KOOS) VAS Assessments (0-100 mm scale) Patient global assessment Number of tablets of rescue medication Short-Form (SF)-36 questionnaire MOAKS scoring (MRI Osteoarthritis Knee Score) at Week 48 Adverse events
Regulatory Strategy	Phase III study leading to PMA (under CBER) and approval in EU, Canada and other markets as appropriate

Cytori Business Development Activity & Financials

Cytori-U.S. Government Collaboration for Thermal Burn Countermeasure

US Government Contract # HHSO100201200008C

- **Goal**
  - Develop a medical countermeasure for use following mass casualty attack involving thermal burn & radiation injury
  - Contract value: up to $106m
  - Goal - United States Government acquisition contract for Cytori Cell Therapy

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- **Status**
  - **$4.7m- proof-of-concept phase completed**
  - **$14m- contract option 1 for additional development activities ongoing**
  - **$8.3m- contract option 2 to fund US Phase I/II clinical trial pre-reviewed and approvable, subject to FDA IDE approval**
  - $69m additional contract options for Phase III clinical trial and for development of countermeasure for combined radiation & thermal injury
  - Other medical countermeasure options possible outside current contract

The BARDA contract provides substantial operating leverage to Cytori's R&D efforts & potential for acquisition contract

Stress Urinary Incontinence

Study objectives

Efficacy and safety of ADRCs for male SUI

Study population

- 11 males
- Persistent SUI (> 2yrs) following prostate surgery for prostate cancer, clean margins, no recurrence

Method

ECCI-50 + fat injected into rhabdosphincter and submucosal space of urethra

Results

At 12 months, a statistically significant:

- 38.8% increase in mean maximum urethral closing pressure
- 40.9% reduction in mean 24-hour pad weight

Increased blood flow visualized in periurethral area after ADRC injection

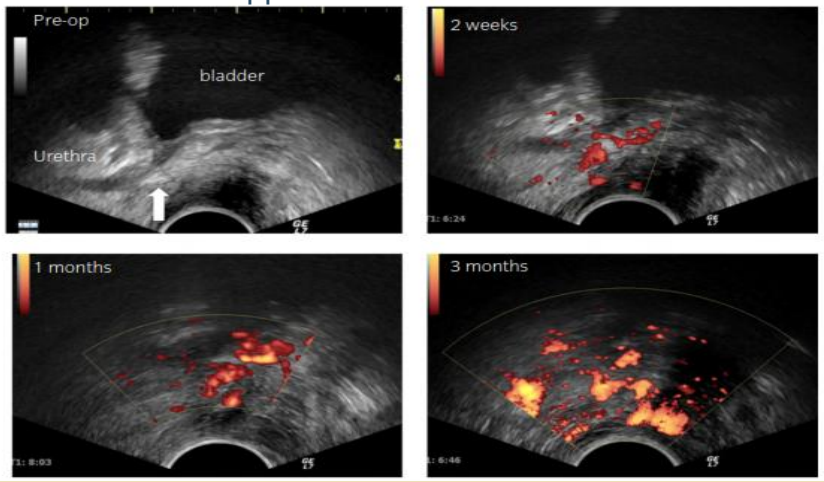
Significant Unmet Needs

New treatment options for patients whose symptoms are not responding to conservative methods

Development Plan

Nagoya University / Pivotal

- Final study design and timing pending continued discussions with Japan's Ministry of Health, Labor and Welfare
- Funded by Japanese government, MHLW
- Combined approval and reimbursement trial



Ongoing pivotal trial at Nagoya University is the most advanced indication in Japan, leverages favorable funding environment.

Source: Gotoh et al. Regenerative treatment of male stress urinary incontinence by periurethral injection of autologous adipose-derived regenerative cells: 1-year outcomes in 11 patients. Int J Urology 2013

ATHENA TRIAL - Heart Failure

ATHENA Trials Summary

Randomized, DB, PC trial in US of OICH-D3 treatment in patients with chronic heart failure- primary endpoint VO2 max.

ATHENA I	ATHENA II
28	**3**
2:1 active:control lower dose	2:1 active:control higher dose

STATUS

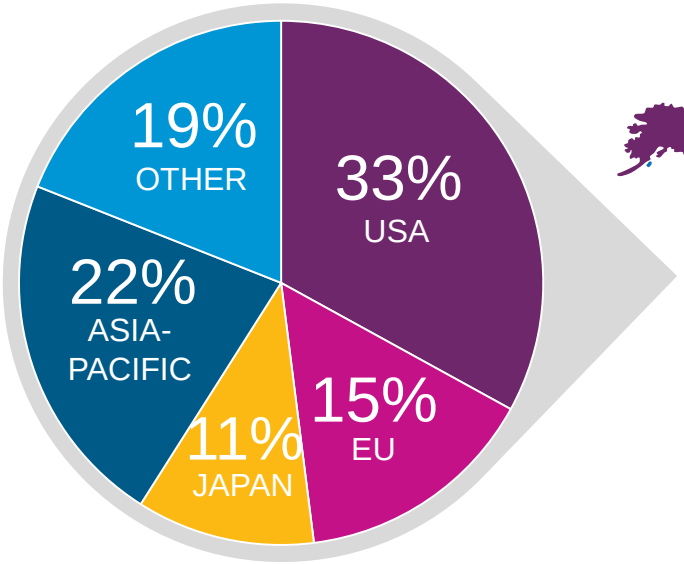
- Enrollment stopped after 31 patients for safety review
- Thorough safety review conducted, permission to proceed with protocol amendments
- Cytori decision – truncate enrollment, evaluate 6 and 12 month data
- Further decisions on investment based on analysis of data, optimization of protocol (as per amendments) and incorporation of next generation technology

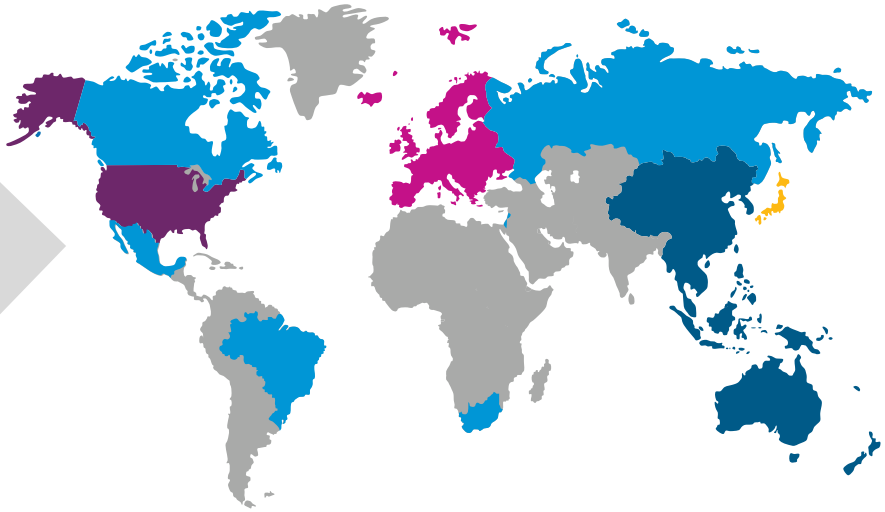
TIMELINES

- **6 month data analysis 1Q2015**
- **12 month data analysis 4Q2015**

Cytori's Global Patent Estate

75 patents issued worldwide; 45 applications pending





Protect Cytori's proprietary methods and devices for manufacturing Cytori Cell Therapy, as well as methods of using Cytori Cell Therapy in the treatment of scleroderma, osteoarthritis, and several other pipeline indications

Business Development & Revenue

Approach to Business Development & Revenue

- Out licensing activity in non-core geographies and indications
- Over $100MM in non-dilutive or premium capital raised
- Restructured and focused direct sales force
- Positioned in Q4 for positive cash flow that mitigates operating burn

Revenue Drivers

- Direct sales- Japan & Europe
- Licensing partners
- US BARDA contract revenue

	Unaudited Financial Information				Guidance
	Q1	Q2	Q3	Q4	FY'15
Government contract revenue:	$403K	$356K	$585K	$1,301K	$6-8M
Product revenue:	$1,031K	$935K	$518K	$2,468K	$5-8M
P/L contribution from S&M organization (*):	($1,202K)	($1,615K)	($1,161K)	$44K	$100K-$300K

(*) Excludes share based compensation.

Operating Expense Reductions & Capitalization

Expense Reductions & Focus: Operating Cash Burn Management

Audited	Unaudited Financial Information					Guidance
FY'13	Q1	Q2	Q3	Q4	FY'14	FY'15
$34.6M	$9.0M	$9.2M	$7.2M	$4.9M	$30.3M	~ $25M

FOCUS - 2015 expectation of >50% OPEX in R&D vs. 2014 (~40%)

Capitalization Summary

Select Data – as of 12/31/14 (unaudited)	
Cash	~ $14.6M
Senior Term Loan	~ $25M (Matures 2017)
Shares Outstanding	~ 99M (108M at 2/28/15)
Fully Diluted Shares Out	~ 154M
Market Cap	~ $120M (at 2/28/15)

Forthcoming 2015 Milestones

- Chinese FDA Class-I clearance, Lorem Vascular PO
- EMEA final opinion on orphan drug status for Cytori's ECCS-50
- Initiate enrolment of scleroderma STAR trial
- Publish SCLERADEC-I 12 month data and initiate enrollment of EU SCLERADEC-II trial
- Complete enrollment of ACT-OA trial, data expected in 2016
- Begin enrollment of MHLW funded Japanese urinary incontinence trial
- BARDA funded research progress presented at American Burn Association meeting
- ATHENA 6 and 12 month trial data available
- Complete development of next generation Celution System

Cytori Corporate Overview
NASDAQ: CYTX

Thank you!

QUESTIONS, please contact ir@cytori.com