

Cytori Therapeutics

Corporate Update I February 2016

Forward Looking Statements and Disclaimers

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 commercialized and pipeline products and technologies; the timing and conduct of our clinical trials, and the associated financial, clinical and regulatory burdens; other parties' abilities to conduct clinical trials involving Cytori Cell Therapy; the various medical indications and markets that may be addressed by Cytori Cell Therapy; the potential effectiveness of Cytori Cell Therapy, including clinical outcomes; our regulatory, reimbursement and commercial strategies and pathways; potential costs and other adverse effects of diseases targeted for treatment by our products, and; anticipated future funding and contract revenues. Some risks and uncertainties related to such forward looking statements include risks and uncertainties regarding the funding, conduct and completion of our clinical trials and other parties' clinical trials involving Cytori Cell therapy, uncertain clinical outcomes, regulatory uncertainties, unfavorable reimbursement outcomes, inability to access sufficient capital on acceptable terms (including inability to fund, or find third party sources to fund, our proposed clinical trials or continued development of our technologies), failure to maintain our substantially reduced cash burn; our partners' failure to launch products in China and other markets where we currently forecast sales; our abilities to service, pay and/or refinance our corporate debt; availability of future government funding and changes in government procurement priorities; the U.S. federal government's ability to reduce, modify or terminate the BARDA contract if it determines it is in its best interests to do so, potential performance issues with our products and technologies, 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.

Disclaimers

Caution: Within the U.S., the Celution System is an investigational device limited by U.S. law to investigational use.

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Cytori Overview

- **Cell therapy technology with viable commercial model**
- **Multiple programs in phase III**
- **Lead Indication- Scleroderma therapy EU introduction 2016, anticipated US approval 2018**
- **Product & contract revenue growth- increasingly off-setting burn**
- **Completed substantial corporate repositioning**

Key Corporate Milestones

2016 Milestones	
1st Half	✓ EU MAP program launch ✓ 24 WK ACT-OA interim data evaluation • 2 YR follow up EU scleroderma trial • Full STAR phase III trial enrollment • Full SD-II enrollment
2nd Half	• 48 WK ACT-OA data evaluation • Japan & MAP progress reported • SD-II data evaluation
2017 Milestones	
	• 1 YR STAR Phase III data • File US FDA PMA approval scleroderma • File full EMEA approval scleroderma • US Phase I Burn enrollment • Full ADRESU enrollment

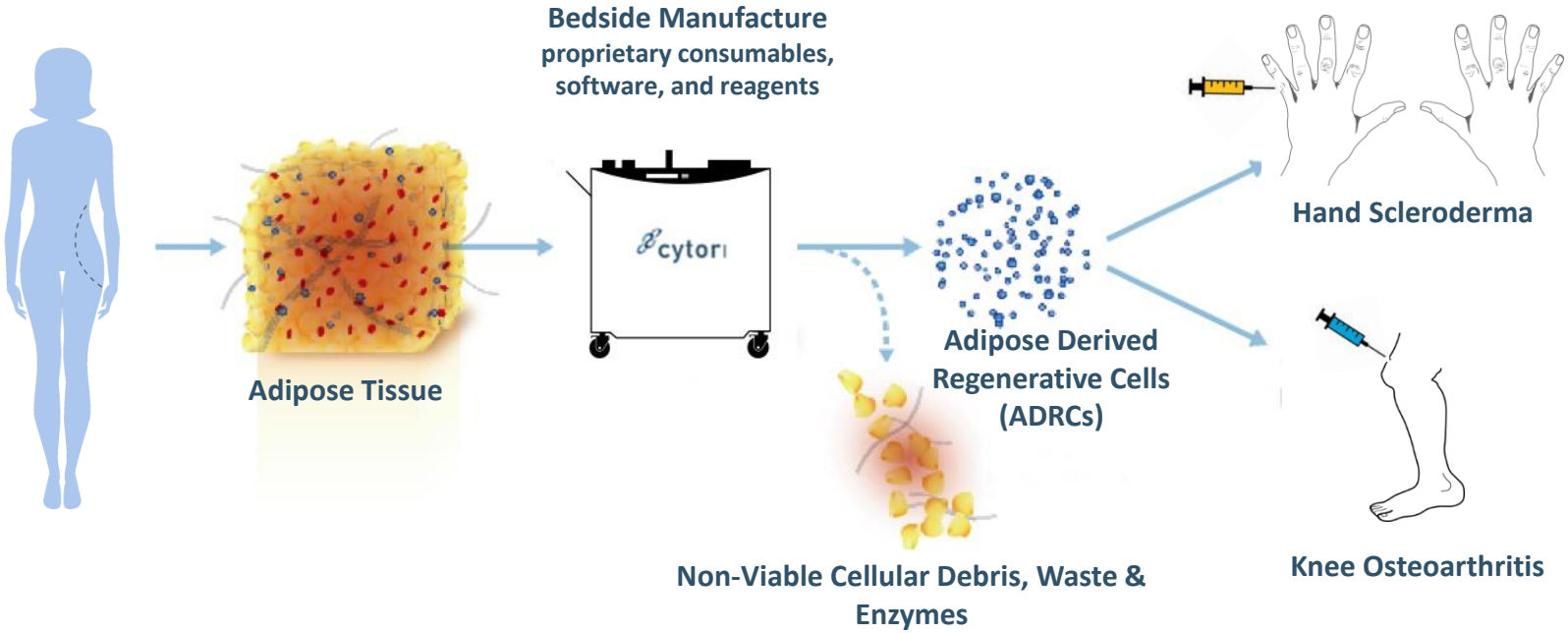
Cytori Cell Therapy: Clinical Pipeline

Therapeutic Agent	Pre-Clinical	Phase I/II	Phase III	Market (Estimate)
Scleroderma Associated Hand Dysfunction				
ECCS-50			Enrolling	>$1B
ECCS-50			Enrolling[1]	>$500M
Knee Osteoarthritis				
ECCO-50		Enrollment Complete		>$3B
Urinary Incontinence				
ECCI-50			Enrolling[2]	>$75M
Cutaneous Radiation & Thermal Injury				
DCCT-10		Preclinical[3]		>$50M

[1] Cytori-funded, Investigator-initiated trial
[2] Japan Govt Sponsorship
[3] Funded by BARDA (US Govt.)

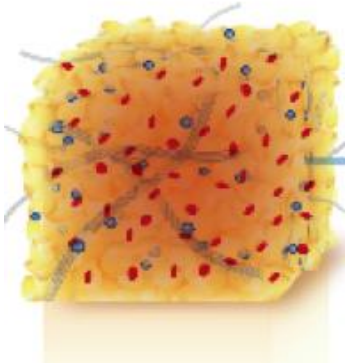
Cytori 3-Step Bedside Process

	1	2	3
PROCESS	**HARVEST** **Small Volume Liposuction (100-360 mL)**	**PROCESS** **Celution® System** **Tissue Processing, Cell Isolation & Dose Preparation**	**DELIVER** **Cytori® Cell Therapy™ Delivery**
TIME	**≤ 30 Min**	**≤ 120 Min**	**5 - 30 Min**

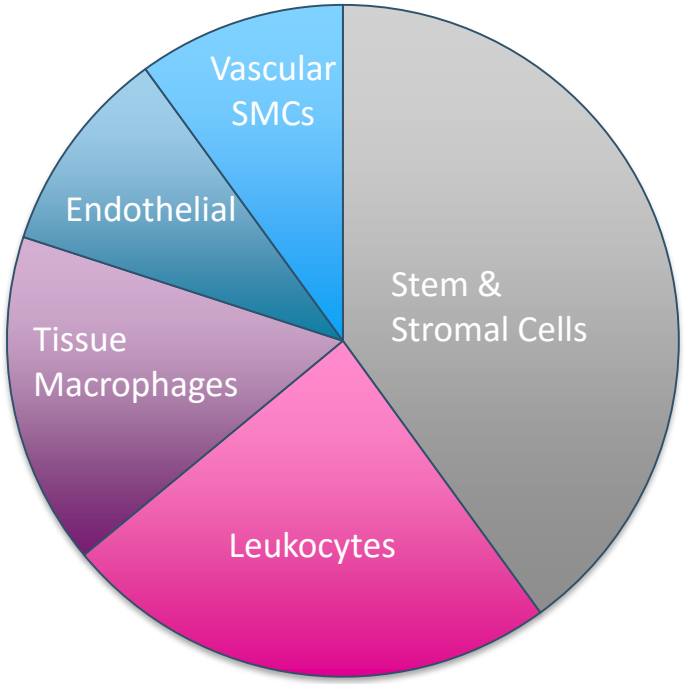


Cytori Cell Therapy: Why Adipose?

Adipose-derived regenerative cells- Clinical grade, heterogeneous cell population highly-enriched for adipose-derived stem, stromal, vascular, and immunoregulatory cell types



- Metabolic reservoir
- High baseline angiogenic potential
- Immune organ
- Stem cells & progenitors

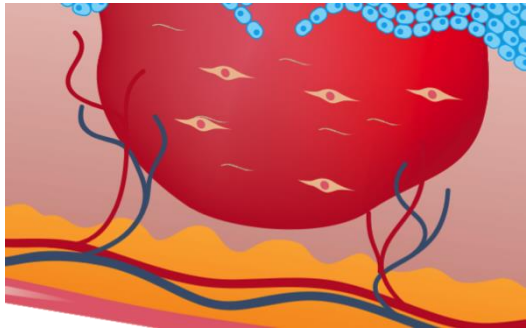


- Cells sourced from **autologous** adipose tissue
- **Heterogeneous and uncultured-** ADRC potency advantage
- Cell therapeutic manufactured in **bedside GMP process**

Cytori Cell Therapy: Mechanism of Action

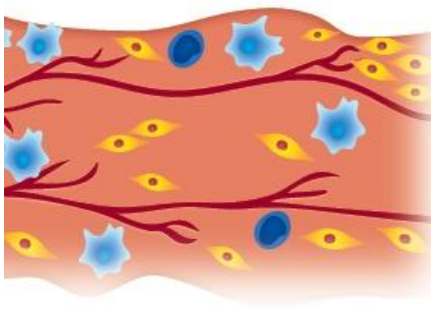
Cytori Cell Therapy beneficially modulates multiple key pathologic processes leading to anticipated sustained reduction in pain and disability and improved quality of life

Angiogenesis/Vasculopathy



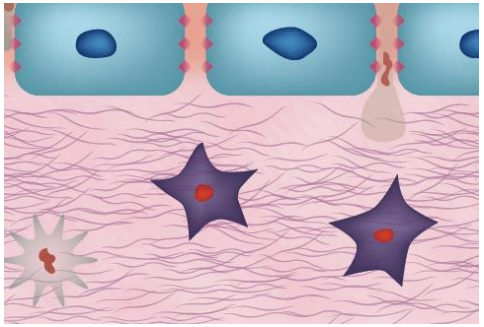
- Promotes angiogenesis
- Normalization of vessel architecture
- Improved vasomotor function[1-5]

Inflammation



- Modulates expression of pro- and anti-inflammatory factors
- Modulates the function of pro- and anti-inflammatory cells[3, 6-9,]

Fibrosis/Wound Remodeling



- Reduces development of fibrosis
- Remodels existing fibrosis[2,10,11]

1. Foubert *et al* (2015); 2. Koh *et al (2011); 3.* Premaratne (2011); 4. Morris *et al* (2015); 5. Eguchi *et al* (2015); 6. Feng *et al* (2010); 7. Hao *et al* (2014); 8. Dong *et al (2013); 9.* Data on file (Cytori); 10. Serratrice *et al* (2014); 11. Data on file (Cytori)

Lead Indication: Scleroderma

Scleroderma

Scleroderma or Systemic Sclerosis

- Rare autoimmune condition
- Affects Women: Men, 4:1
- US Prevalence: 50,000 patients
- >90% of patients have hand disability
  - Fibrosis, pain, and edema result in diminished mobility and hand function even with standard medical care
  - Severe vasomotor symptoms



Raynaud's Phenomenon



Ulceration and Edema

Pathophysiology

Endothelial Dysfunction → *Vascular Damage* → *Chronic Inflammation* → *Fibrosis* → *Diminished Hand Function* → *Ulcers & Amputation*

Cytori Cell Therapy

Preclinical and in vitro studies report modulation of perivascular inflammation, improved endothelial function, and reduction of extracellular matrix (fibrosis)

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Image on left by D Niklas, https://commons.wikimedia.org/wiki/File:Raynaud-Syndrom.JPG used under CC license
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Scleroderma: Market Overview

Current Standard of Care

- No therapies approved for treatment of hand dysfunction in scleroderma patients
- Existing 1st and 2nd line treatments for treatment of Raynaud's Phenomenon or other aspects of scleroderma are often inadequate and poorly tolerated
- Existing 3rd line treatments are costly ($30-$100k) and often very poorly tolerated

Diagnosis

- Average age: 30's-50's

1st/2nd Line Therapies

Inadequately effective or poorly tolerated in ~50% of patients[1,2]

- Calcium channel blockers (eg: nifedipine)
- PDE5 inhibitors (eg: sildenafil)
- Topical nitrates

- Side effects: headache, dizziness, flushing, tachycardia, and edema

3rd Line Therapies

Expensive, often poorly-tolerated; doses titrated to tolerance rather than to symptom relief

- Intravenous (IV) prostaglandin (PG) analog (eg: Iloprost)
- Endothelin-1 receptor antagonist (eg: Bosentan)
- Surgical sympathectomy
- Pain due to severe ischemia may require the use of narcotic analgesics
- Immunosuppressive agents (eg: methotrexate, cyclophosphamide)

1. Thompson et al Arthritis Rheum. 2001;44(8):1841-7
2. Herrick (2008) BMJ Clin Evidence 09:1125

Scleroderma: Treatment Approach

- Ambulatory
- Procedure room
- Local or mild conscious sedation
- Single administration ECCS-50
- 0.5cc injection to each NVB
- No bandage



Pilot/Phase I SCLERADEC I Trial

	SCLERADEC I
Study size	12
Randomization	Open label
Administration	Single administration (~4m cells/finger)
Sites	Single site (IIS) - Marseille, France
Endpoints	• Cochin Hand Function Scale • Raynaud's Condition Score • Scleroderma Health Assessment Questionnaire • Pain • Modified Rodnan Skin Score • Capillaroscopy • Adverse events • Other
Follow-Up	24 months
Status	**Complete**

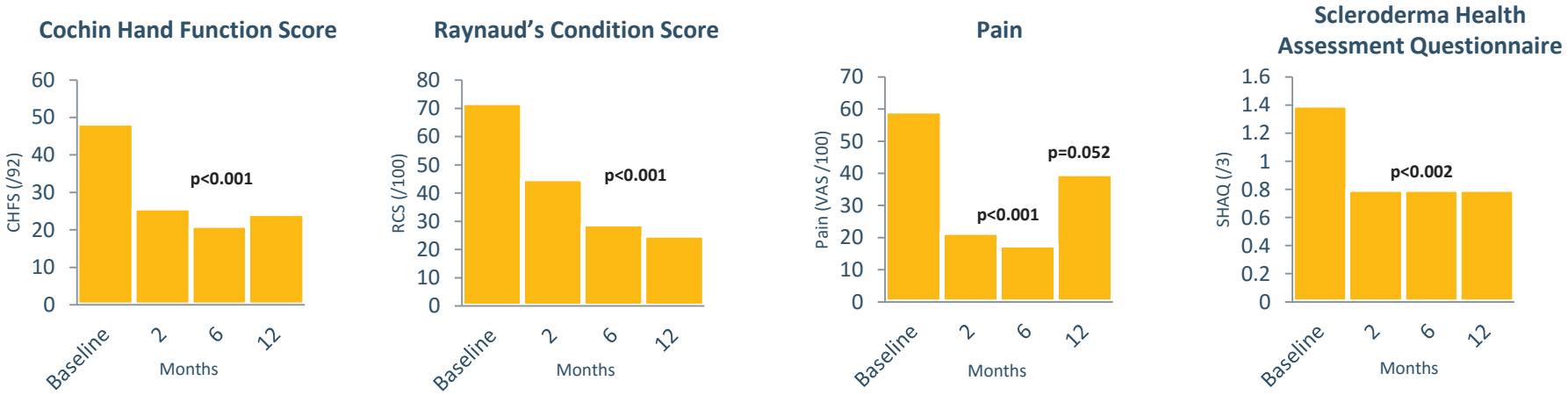


- **Six and 12 month data published[1,2]**
- **24 month data to be presented at Systemic Sclerosis World Congress in Lisbon, Portugal, February 19, 2016**

1. Granel et al (2014); Ann Rheum Dis Aug 11: doi: 10.1136/annrheumdis-2014-205681
2. Guillaume-Jugnot et al (2015) Rheumatol. 10.1093/rheumatology/kev323

SCLERADEC I Improved PROs over 24 months

ECCS-50 Treatment led to improvement in hand function, Raynaud's phenomenon, and pain



Key Observation:

- Concordant reduction (~50%) in four key symptomatic patient reported outcomes
- Topline data show efficacy sustained to two years following a single treatment

Granel *et al.* Ann Rheum Dis 2014; Guillaume-Jugnot *et al.* Rheumatology 2015
mean ± std err

SCLERADEC I- Other Endpoints

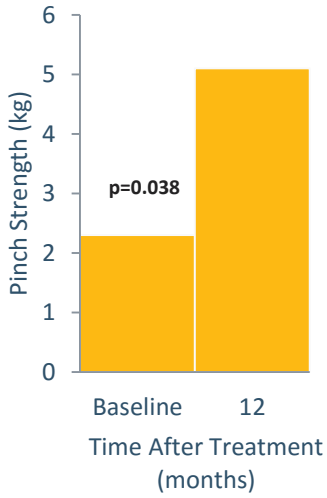
Sustained improvement in hand strength & skin stiffness

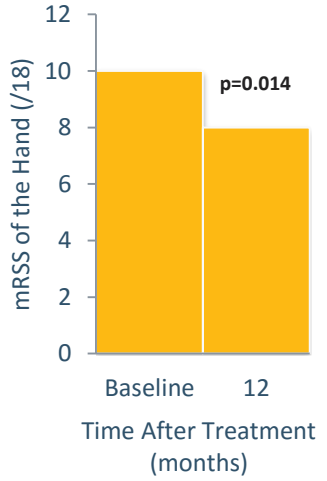


- **130% improvement in pinch strength**
- **30% improvement in grip strength**



- **23% improvement in mRSS of the hand**





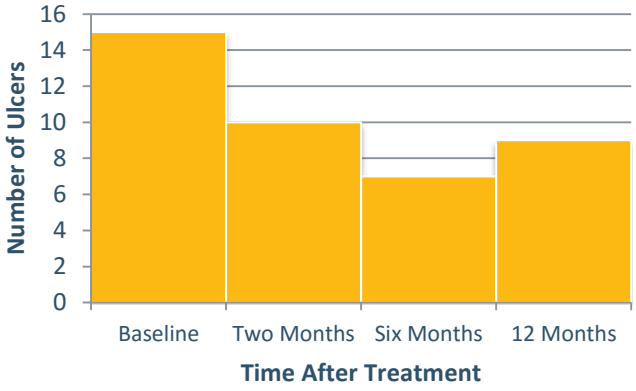
Granel *et al.* Ann Rheum Dis 2014; Guillaume-Jugnot *et al.* Rheumatology 2015
All data presented as mean ± std err

SCLERADEC I- Other Endpoints

Reduction in digital ulcers, improved microvascular architecture

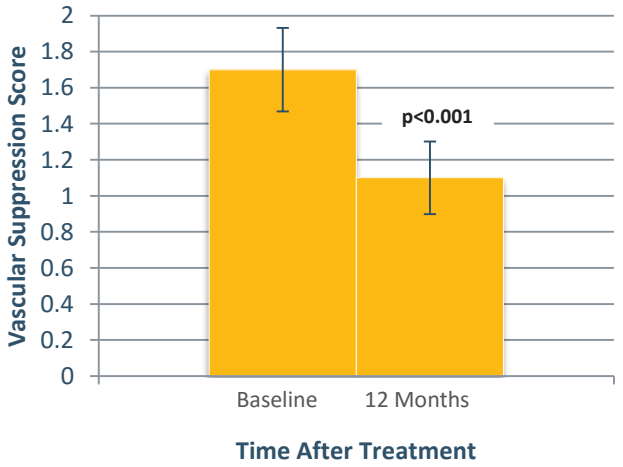


- ***40% improvement in number of ulcers***





- ***30-35% improvement in vascular suppression score***



All data presented as mean ± std err

Granel *et al.* Ann Rheum Dis 2014; Guillaume-Jugnot *et al.* Rheumatology 2015

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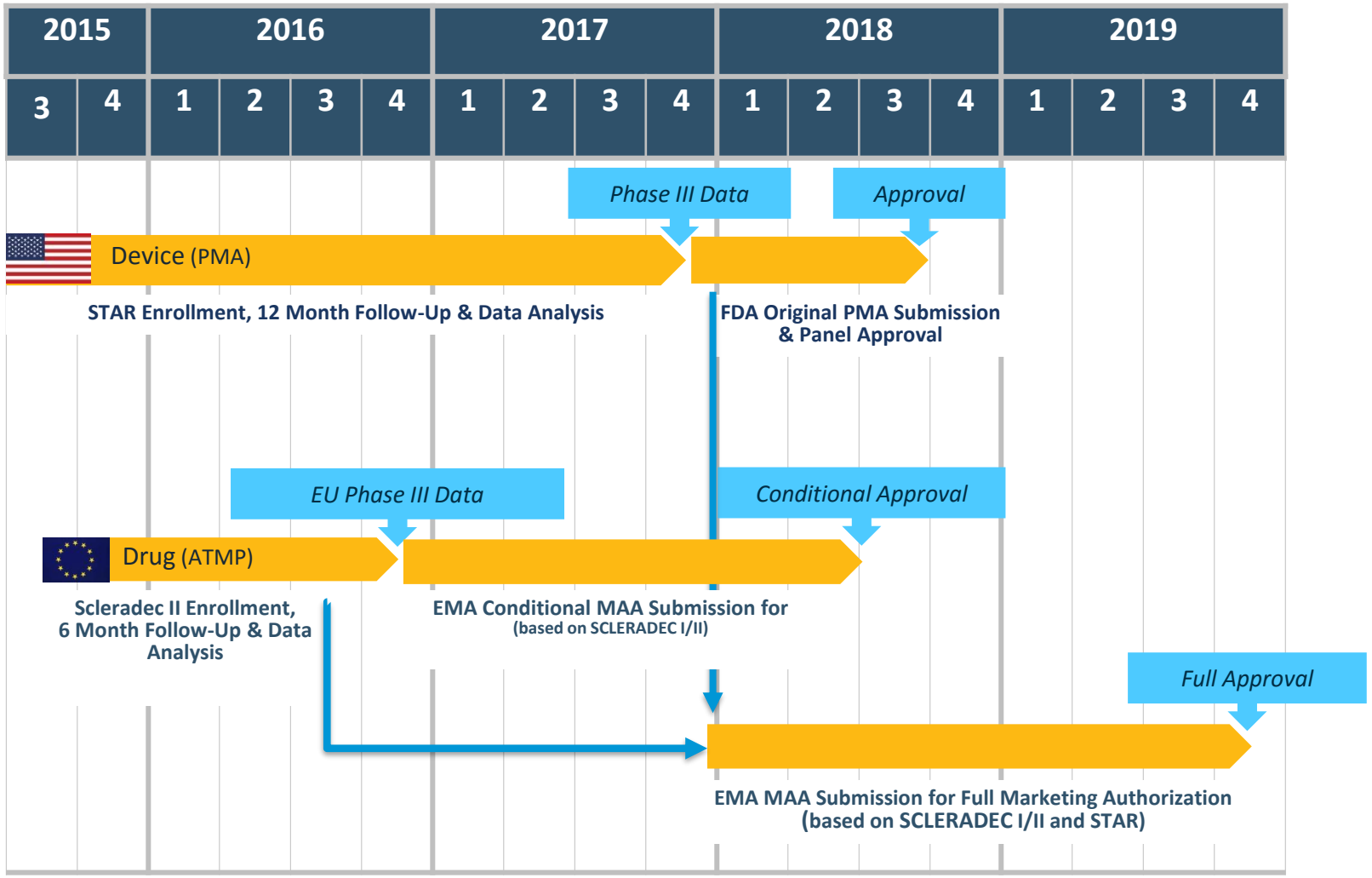
Scleroderma: Ongoing Clinical Trials

Clinical/Regulatory Strategy

- EU SCLERADEC I trial data used to support US FDA STAR trial approval
- US FDA STAR trial for US PMA approval
- US STAR trial ± SCLERADEC II to obtain EU Conditional Marketing Authorization/Normal Marketing Authorization

	STAR (Phase III)	SCLERADEC II (Phase III)
Study size	80	40
Randomization	1:1, active: placebo	1:1 (dose from Pilot, placebo)
Crossover	Placebo, crossover at 48 weeks	Placebo, crossover at 24 weeks (cryo)
Sites	Up to 20 in USA	6 France
Primary Endpoint	Cochin Hand Function Score (CHFS) at 6 months	Cochin Hand Function Score at 3 months
Secondary Endpoints	CHFS, Raynaud's Condition Score, Scleroderma Health Assessment Questionnaire, Pain, Modified Rodnan Skin Score, Hand Mobility in Scleroderma Test, Adverse events	CHFS, Raynaud's Condition Score, Scleroderma Health Assessment Questionnaire, Pain, Modified Rodnan Skin Score, Capillaroscopy, Adverse events
Follow-Up	48 weeks	24 weeks
Status	**Enrolling**	**Enrolling**

Scleroderma: Development Timeline

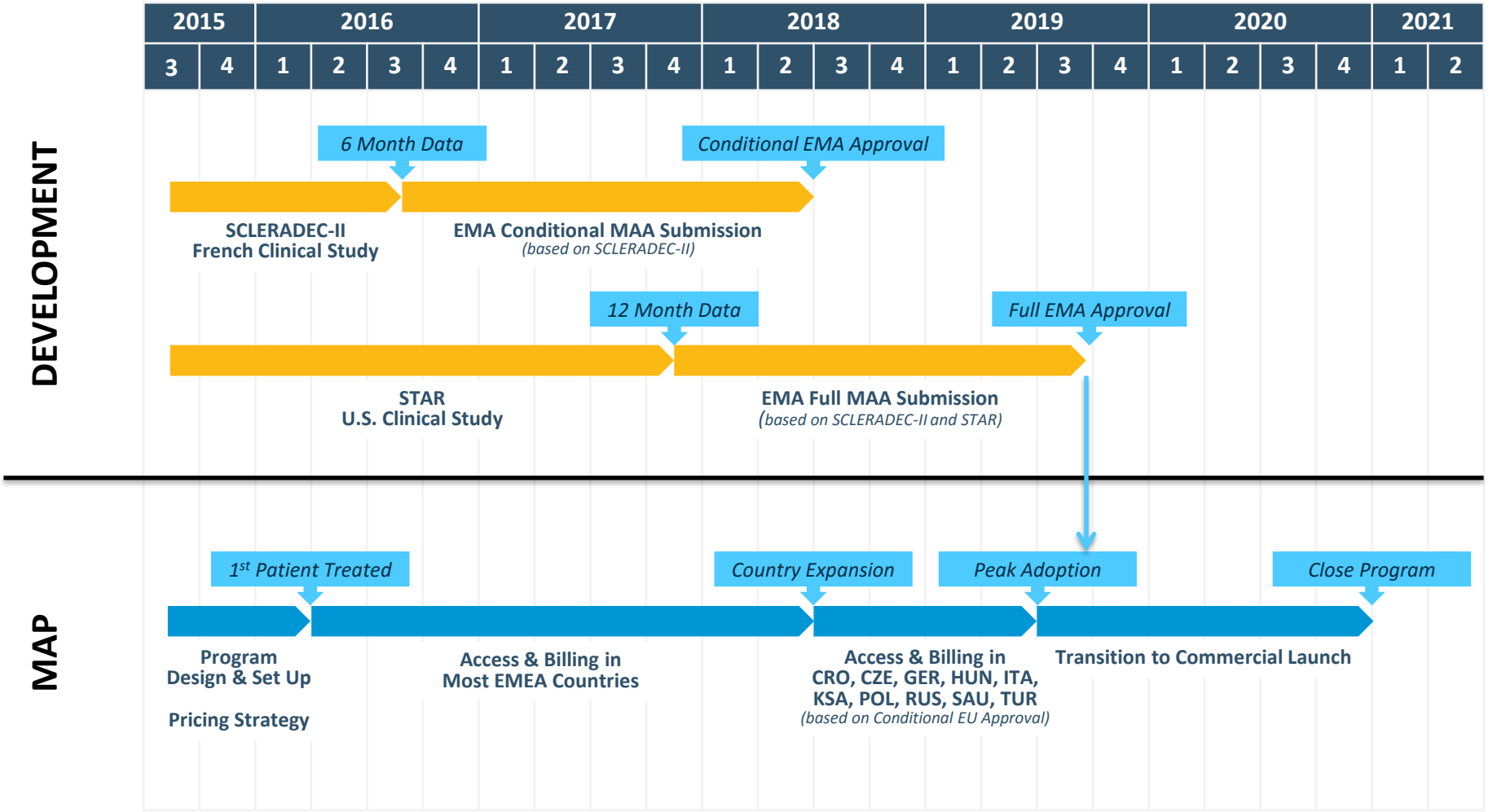


Managed Access Program Objectives

1. **Provide ethical and compliant access** to Cytori Cell Therapy™, ECCS-50, for hand scleroderma patients prior to EMA marketing authorization
2. **Increase awareness of and facilitate a positive experience** with Cytori Cell Therapy™ among healthcare providers in advance of commercial launch
3. **Track and collect key program data and documentation** providing valuable insight regarding the demand for and use of Cytori Cell Therapy™
4. **Implement a chargeable program** in EMEA countries where regulations allow
5. **Launch the program in Q1 and begin treating patients in Y1** and close the program once reimbursement is attained in each EMEA country

IDIS — Managed Access

Scleroderma Managed Access Program Timeline



Pipeline Indications

Knee Osteoarthritis

Urinary Incontinence

Radiation/Nuclear Burn

Knee Osteoarthritis

Osteoarthritis

Progressive loss of joint function

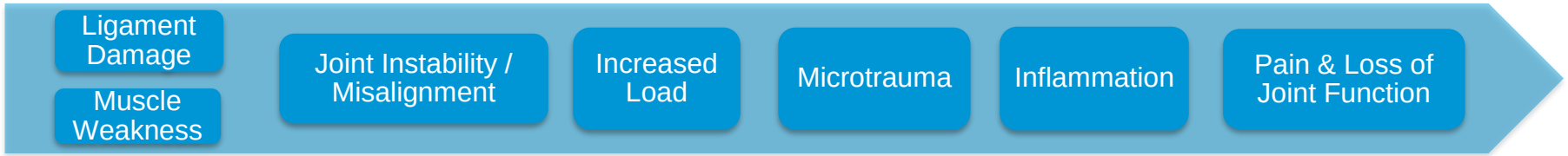
Imbalance between anabolic (cartilage-forming) and catabolic (cartilage-destroying) processes driven by synovial inflammation

Epidemiology

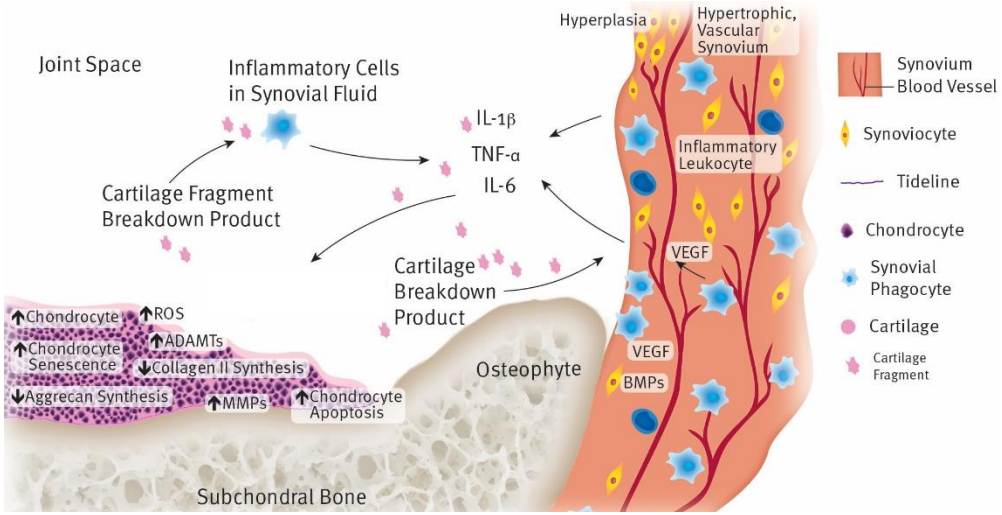
OA is the most common form of arthritis

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

Pathophysiology



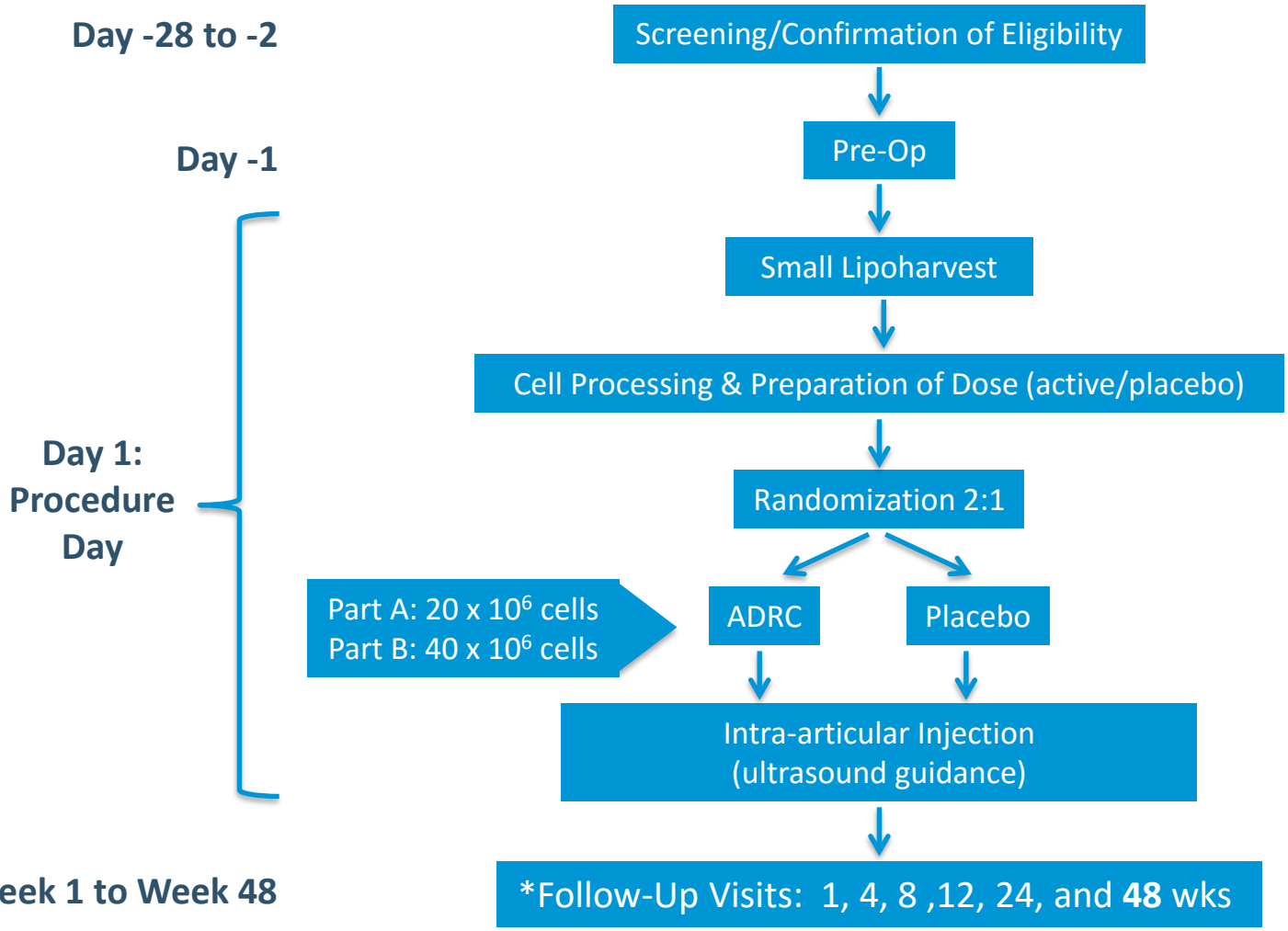
Scientific Rationale: Cytori Cell Therapy in OA



- **Pathophysiology of OA (persistent synovial inflammation leading to cartilage destruction) overlaps with other clinical indications in which Cytori Cell Therapy shown to have impact**
- **Combination of veterinary, preclinical, *in vitro*, and pilot clinical data indicate significant potential for symptomatic improvement and perhaps disease modification**

Opportunity: Biologic/Cell Therapy to better address gap between oral analgesics and surgical management

ACT-OA Trial Design



Not powered for statistical significance

ACT-OA Trial & Top-line 24 Week Interim Analysis

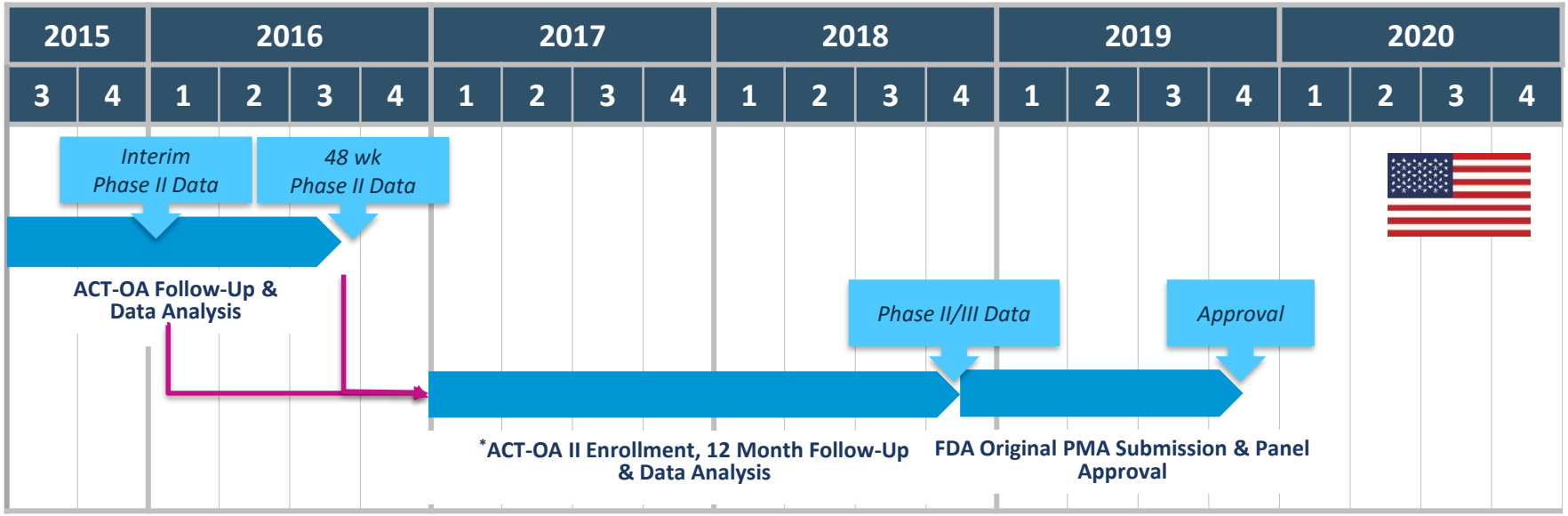
	Phase II (ACT-OA)
Study Size	94 enrolled
Randomization	1:1:1 (low dose, high dose, placebo)
Sites	12 US
Primary Endpoint	KOOS - pain on walking @ 12 weeks
Secondary Endpoints	KOOS, pain/function questionnaires, disease activity pain meds, SF-36, MRI@ 48 weeks
Follow-Up	48 weeks
Status	Enrolled- 48 week data Q3/16

24 Week Interim Data- Top-line Results From Partial Unblinding

- Patient allocation equal
- No safety concerns
- Pain on walking endpoint @12 weeks- not statistically significant
- Consistent 12, 24 week trends favoring cell therapy effect
- Strong placebo response ~50% in certain endpoints
- Cell therapy benefit over and above placebo effect

Osteoarthritis Development: Next Steps

- Full un-blinding & complete analysis after 48 week data collected (~3Q2016)
  - Evaluation of individual responder rates & patient subset analyses
  - Evaluate continued symptomatic improvement vs. placebo
  - 48 week MRI assessment for effect on cartilage



*Pending 48 week data, funding, and FDA approval

Stress Urinary Incontinence Program

'ADRESU' Trial Objectives

- Approved, reimbursed therapy for SUI in men following radical prostatectomy
  - Significant need for patients not responding to conservative methods
- Support proof of concept in female incontinence

Progress/Data

- Pilot clinical trial data published [1,2]
  - Increase maximum urethral closing pressure
  - Reduction 24-hour pad weight
  - Increased blood flow
- Ongoing 45 pt. Multicenter Pivotal Trial
  - Enrollment started Q3/2015
  - 2 years to enroll

Support

- Investigator initiated with Cytori support
- Substantial funding via Japanese Ministry of Health, Labour and Welfare

Development Plan

- Ongoing pivotal anticipated as approval/reimbursement trial
- Assuming positive data, seek approval and reimbursement based on 12 month assessment
- Seeking commercial partnership with Japanese company

1. Gotoh *et al.* (2014) Int J Urology 21 (3) 294-300
2. Yamamoto *et al.* (2012) Int J Urology 19 (7) 652-9

Radiation/Nuclear Burn Program

Objectives

- Development medical countermeasure for mass casualty event- thermal burn ± radiation exposure
- Proof of concept clinical data for use of Cytori Cell Therapy in wound healing

Support

- Funded by $106MM contract from Biomedical Advanced Research and Development Authority (BARDA)
- $18.7MM of funding allocated through September 2016

Progress/ Preclinical Data

- Improvement in multiple tissue repair parameters following administration of Cytori Cell Therapy[1,2]
- Effective via multiple routes of administration[1,2]
- Efficacy sustained following substantial exposure to radiation dose[3]

Development Plan

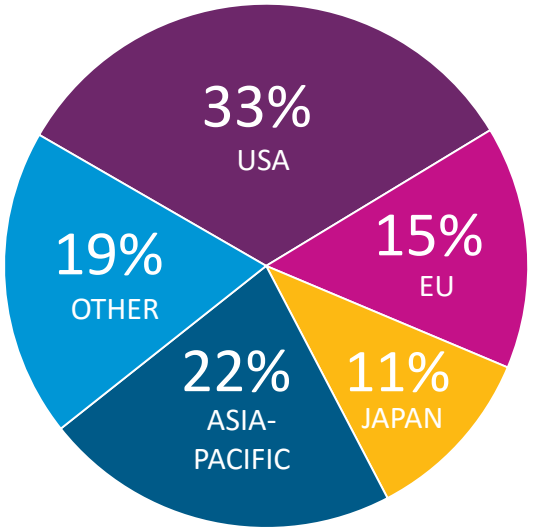
- Submit IDE application in 2016 for a proof-of-concept clinical trial
- Additional $8.3 funding pending receipt of IDE approval for clinical trial

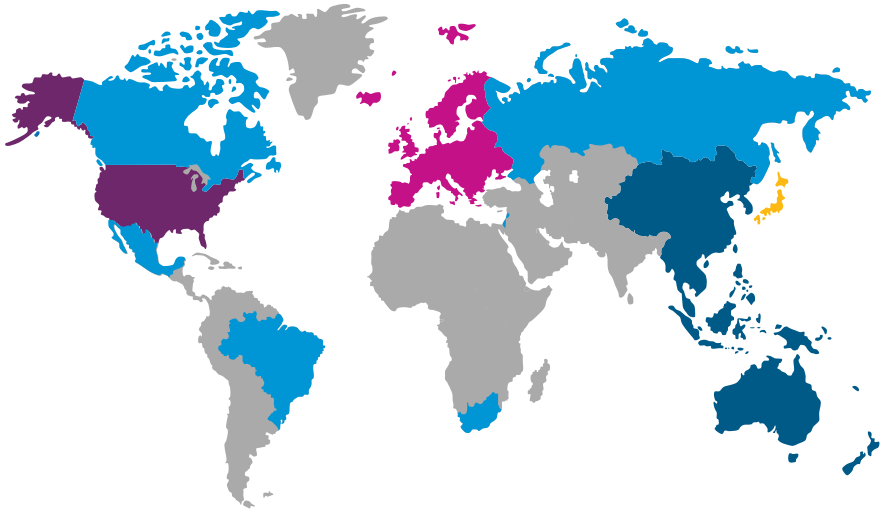
1. Foubert *et al.* (2015) Burns doi:10.1016/j.burns.2015.05.004
2. Foubert *et al.* (2015) Adv Wound Care doi:10.1089/wound.2015.0672
3. Foubert *et al* (manuscript in preparation)

Corporate Information

Cytori Cell Therapy: Global Patent Estate

Over 80 patents issued worldwide; over 55 applications pending





Goal: 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, SUI and several other pipeline indications

Capitalization Summary

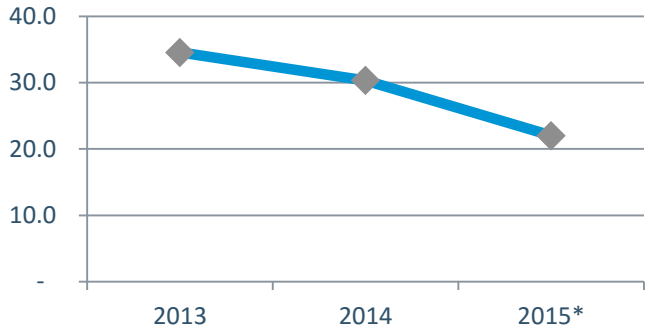
- **Q2 2014- Corporate & management restructuring**
- **Change focus, eliminated/lowered outstanding liabilities and recapitalization**

Select Data – as of 12/31/15	
Cash	~ $19MM*
Senior term loan	~ $17.7MM
Common Shares outstanding	~ 195MM
Outstanding options, RSAs and warrants	~ 13MM
Fully dilutive share count	~ 208MM
Market capitalization	~ $35MM

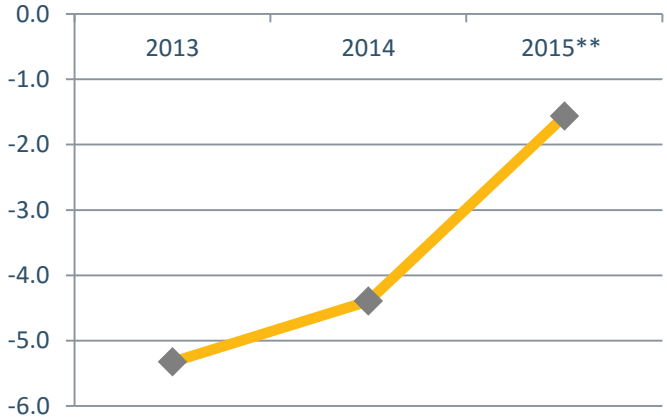
* As of September 30, 2015

Financial & Operational Performance

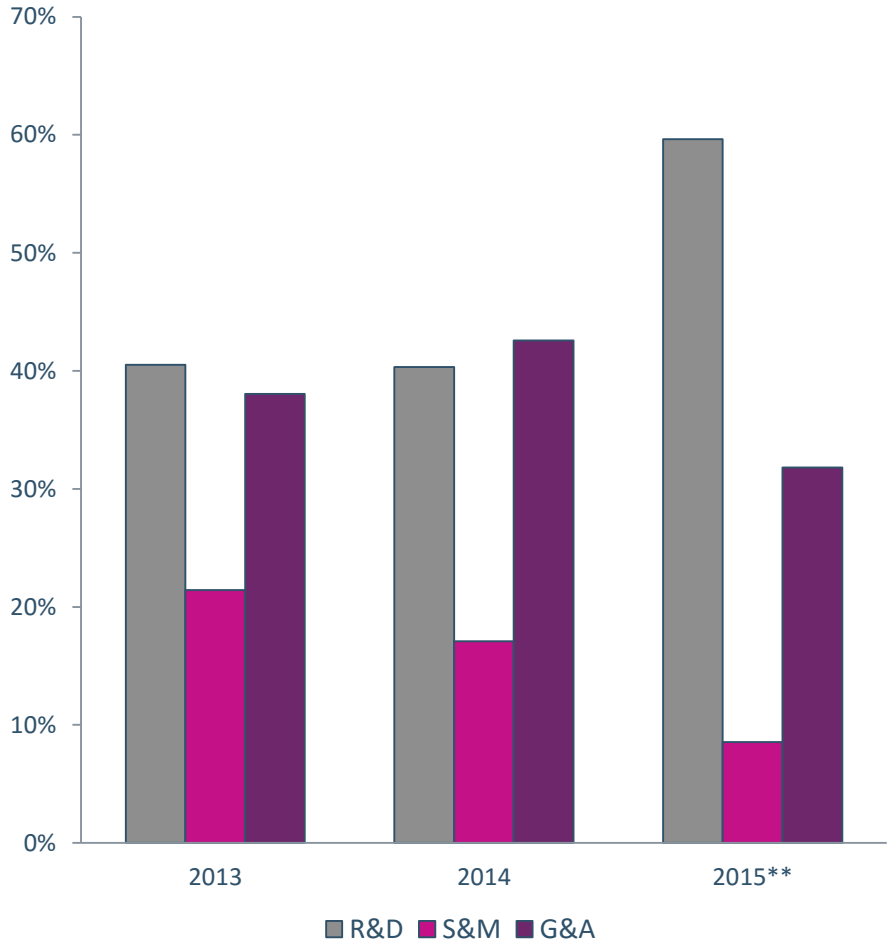
Annual Operating Cash Burn ($MM)



Narrowed S&M Loss ($MM)



Capital Reallocation to R&D



* Based on revised guidance of $22 million in operating cash burn for 2015
** Based on annualized figures from YTD September 30, 2015 financials

Key Corporate Milestones

2016 Milestones	
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2nd Half	• 48 WK ACT-OA data evaluation • Japan & MAP progress reported • SD-II data evaluation
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Thank You