



***June 2018***

# FORWARD LOOKING STATEMENT

*This presentation includes forward-looking statements regarding: future incremental insurance coverage; future size of sales force; future approved indications for use of our products; future products and markets, and the expected size of such markets; and the expected timing of clinical studies, BLA filings and product launches. Other forward-looking statements may be identified by words such as “believe,” “expect,” “may,” “plan,” “potential,” “will,” “preliminary,” and similar expressions, and are based on management’s current beliefs and expectations. These forward-looking statements are subject to significant risks and uncertainties, and we caution investors against placing undue reliance on such statements.*

*Actual results may differ materially. The Company provides additional information concerning factors that could cause actual results to differ materially in the Risk Factors section of the Company’s most recent annual report or quarterly report filed with the Securities and Exchange Commission. Any forward-looking statements speak only as of the date hereof, and the Company assumes no obligation to update any forward-looking statement.*

# COMPANY HIGHLIGHTS

- Leading Developer and Marketer of Regenerative and Therapeutic Biologics based on a Placental Technology Platform
- Addressing Multi-Billion Dollar Market Opportunities in Wound Care, Surgical and Musculoskeletal Pain
  - Core Wound Care Business with Late-Stage Therapeutics Pipeline
- GMP Compliant and US Pharmacopeia (USP) Monograph for Strength, Quality, and Purity of MiMedx Allografts
- Proven Safety Profile; More than 1 Million Allograft Units Shipped
- Over 100\* Issued and Allowed Patents
- Capital Allocation for Shareholder Value Creation
  - Investing for Growth

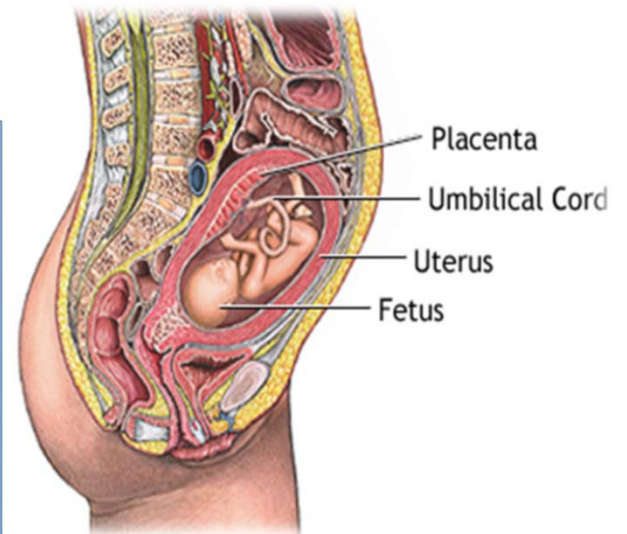
\*owned and licensed

# AMNIOTIC MEMBRANE: MASTER REGULATOR OF BIOLOGY

- Hundreds of Growth Factors and Peptides Associated with Tissue Generation<sup>1</sup>
- Immunologically Privileged<sup>2</sup> - Highly Biocompatible

## Key Actions:

- Modulates (reset) Inflammation<sup>3</sup>
- Regulates Cell Migration, Proliferation, and Metabolism
- Promotes Angiogenesis and Stem Cell Recruitment
- Reduces Scar Tissue Formation<sup>3</sup>
- Offers Barrier Properties<sup>4</sup>
- Enhances Healing<sup>5</sup>



<sup>1</sup>Tao H, Fan H. Eur Spine J. 2009 Aug; 18(8):1202-12. <sup>2</sup>Tseng SC, Li DQ, Ma X. J Cell Physiol. 1999 Jun;179(3):325-35. <sup>3</sup>Hao Y, Ma DH, Hwang DG, Kim WS, Zhang F. Cornea. 2000 May;19(3):348-52. <sup>4</sup>Koob TJ, Rennert R, Zabek N, et al. Int Wound J. 2013 Oct;10(5):493-500. <sup>5</sup>Zelen CM, Serena TE, Denozière G, Fetterolf DE. Int Wound J. 2013 Oct;10(5):502-7.

# INNOVATIVE TECHNOLOGY PLATFORMS

## dHACM Core Technology Equivalent

### **EpiFix®** (*sheet dHACM*)

Flagship Amnion/ Chorion grafts used as a barrier membrane for proven, enhanced healing power

- Smaller wounds
- Various surgical applications



### **AmnioFix®** (*injectable dHACM*)

Same dHACM in micronized, injectable formulation

- Smaller wounds
- Various surgical applications
- Tendonitis and Osteoarthritis\*

### **EpiCord** (*Umbilical Cord*)

Provides a protective environment for the healing process

- Smaller wounds requiring a graft that can hold a stitch
- Longer site coverage timeframe
- When a thicker graft is needed for coverage/ padding



### **AmnioFill®** (*placental tissue-based product*)

Contains same Growth Factors found in PURION®  
Processed tissues

Replaces or supplements damaged or inadequate integumental tissue to provide a scaffold for cells to attach and proliferate

- Larger and uneven surface areas >25cm<sup>2</sup>
- NOT injectable

\* Conducting IND/BLA program for Plantar Fasciitis, Achilles Tendonitis and Osteoarthritic Knee Pain

# TARGETED WELL DEFINED GROWTH STRATEGY

- Gain Market Share
  - Educate Market; Expand Scientific/Clinical Body of Evidence
  - Grow Direct Salesforce (440+ and growing)
  - Increase Insured Lives (new VLU coverage)
- Expand Market Opportunity
  - Increase Use with Current Customers
  - Broaden Physician Practices, IDNs and Clinics
  - Target High-Value Surgical Procedures (4.3M orthopedic, GYN, Plastics, Colorectal and Urology procedures annually)
  - Further Penetrate GPO and IDN contracts (VAC approvals)
- International Expansion, Product Line Expansion, New Uses and Indications

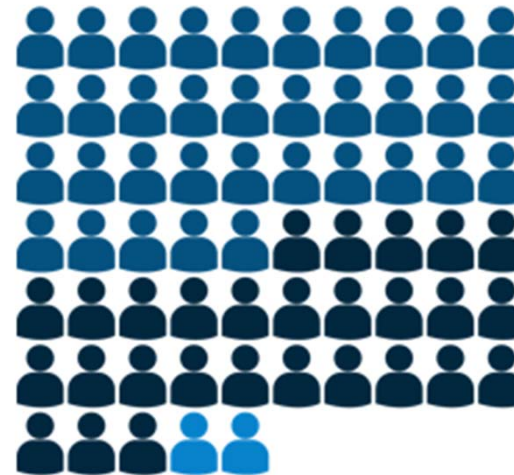
# CHRONIC WOUND MARKET IS UNDERPENETRATED

## *1.4M Chronic DFU/VLU Wounds - \$3B Market Opportunity*

### 2017 U.S. Market Facts

- Skin/Dermal Substitutes is Largest Segment of Chronic Wound Care Market
- Placenta Derived/ Amniotic Tissue Products Major Growth Driver

6.5M US Patients With Chronic Wounds Annually



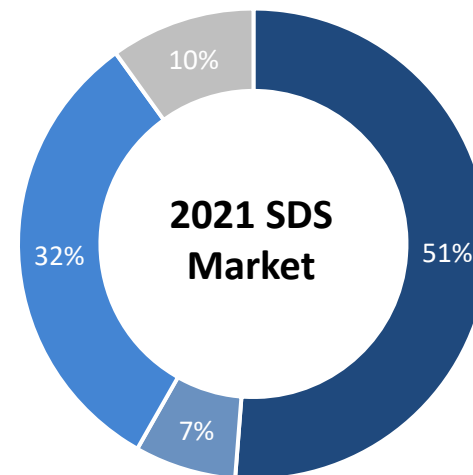
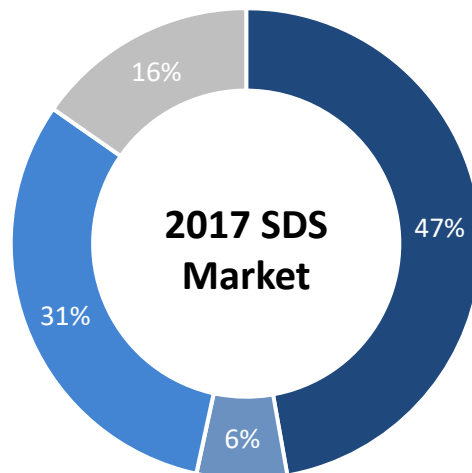
3M Have Non-Healing Wounds

Under 200K are Treated with a Skin or Dermal Substitute

 =100K Patients

# U.S. WOUND BIOLOGICS MARKET DYNAMICS

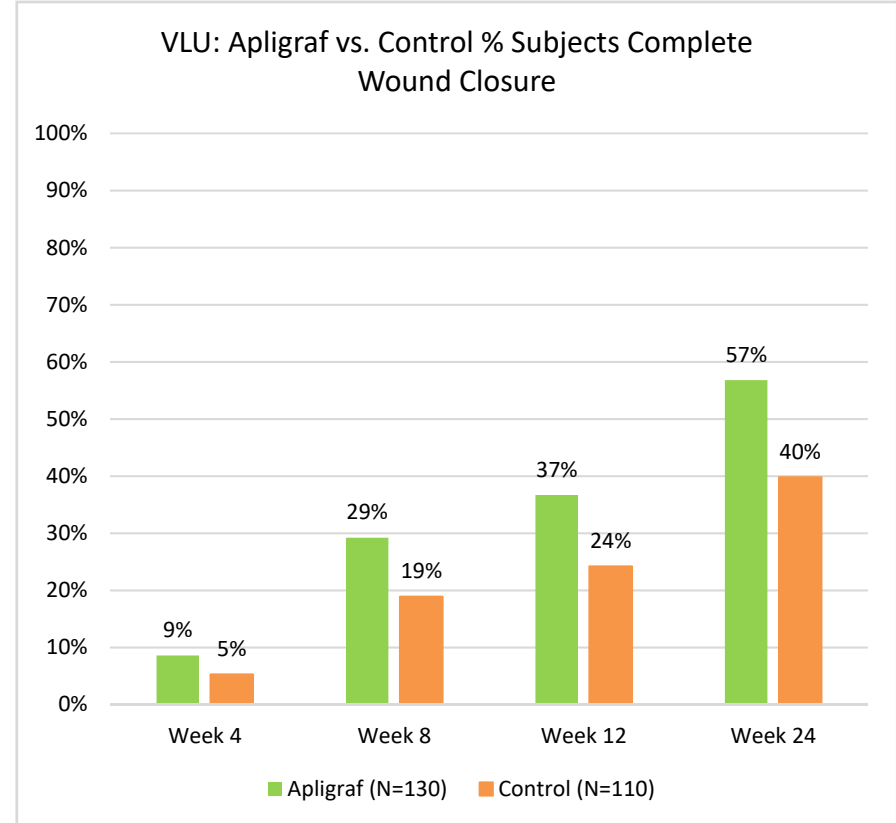
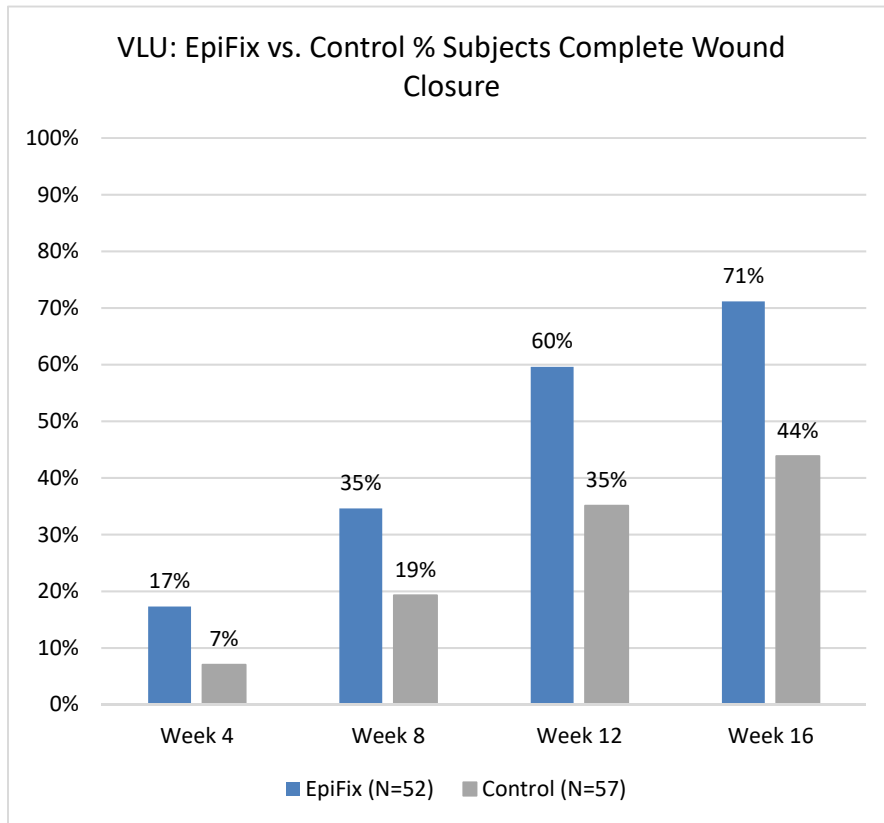
- **\$25 Billion** - Annual Cost of Treating Chronic Wounds in U.S.
- SDS Market (Skin/Dermal Substitutes) growth exceeds overall market growth
- Amniotic Tissue estimated to exceed 50% of market in 2021
- Amniotic Tissue estimated at **\$1.1 Billion** in 2021



■ Amniotic Tissue   ■ Dermal Allografts   ■ Xenografts   ■ Cell-Based Bioengineering



# EPIFIX VLU MULTICENTER TRIAL



The MiMedx Control was More Efficacious than the Apligraf Control

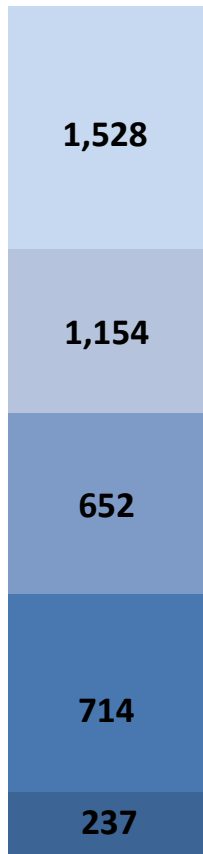
Controls: Multi-Layer Compression Therapy with EpiFix – NuDerm Alginate Apligraf – Moist Gauze with Zinc Paste

Please note: Apligraf and EpiFix studies are independent of one another  
 Apligraf Reference: PMA Supplement (P950032) approval dated 05/22/1998  
 EpiFix Reference: Published Final Data Report, Reported Press Release 08/31/2017

# TARGET HIGH VALUE SURGICAL PROCEDURES

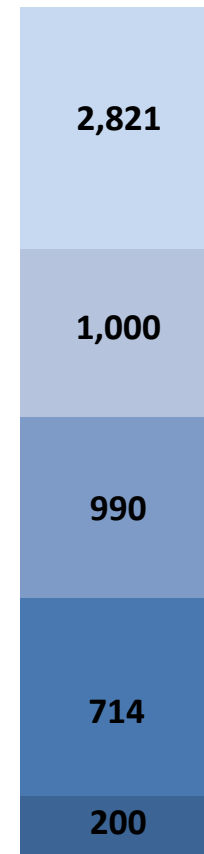
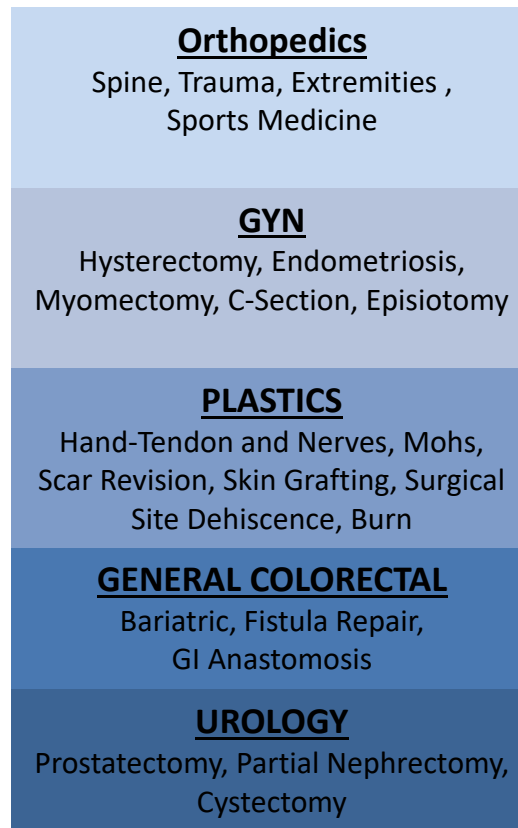
Number of Procedures (000)

4.3M



Addressable Market Value (\$M)

\$5.7B



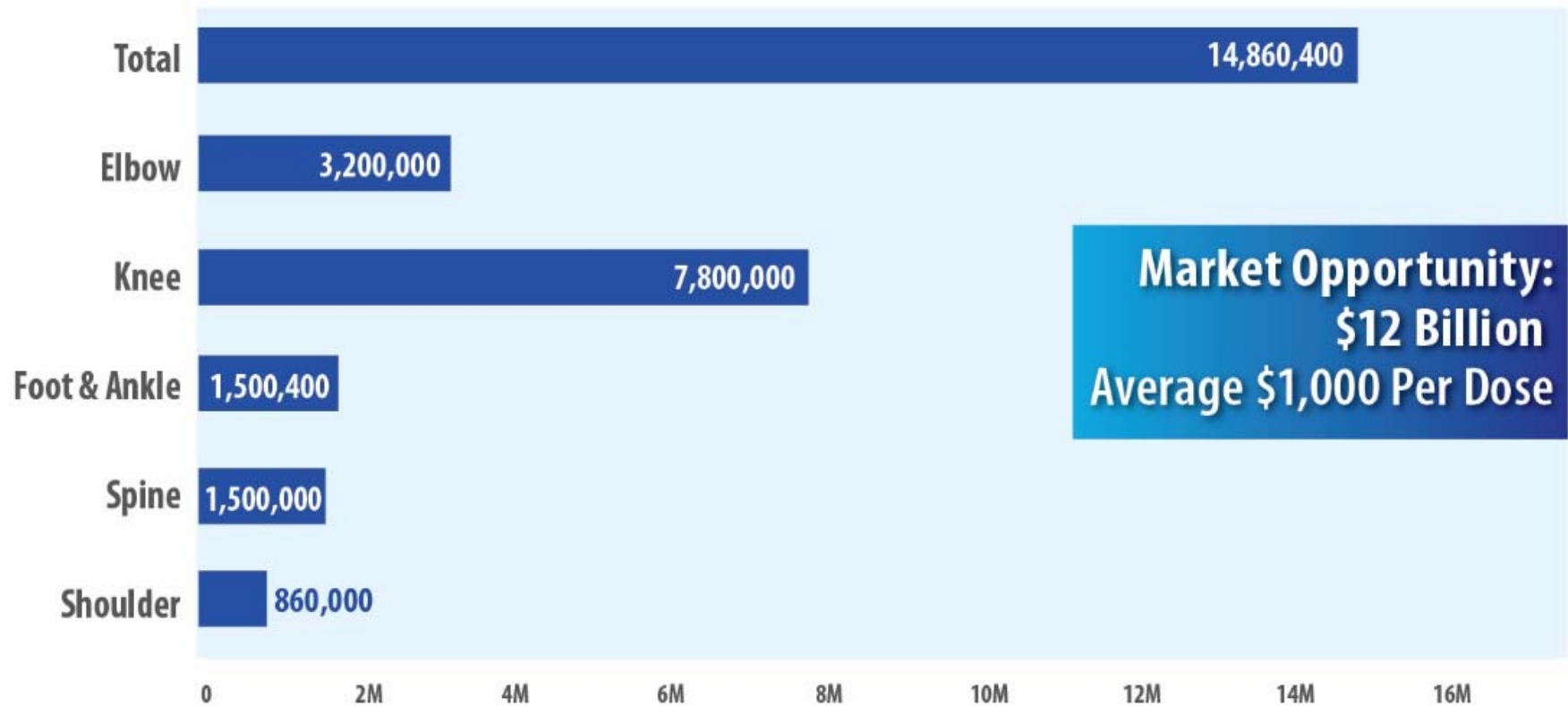
Source: Millenium Research Group, MRG Lap 2014, ASPs Statistics, MiMedx 2015 Annual Plan, MiMedx internal coding data, Management Estimates

# MUSCULOSKELETAL PAIN AND DEGENERATION

- Lead Product Candidate: AmnioFix® Injectable Micronized Amniotic Tissue
  - Cellular Proteins Address Multiple Targets with a Unified Mechanism of Action
  - Includes Factors Required for Soft Tissue Homeostasis and Repair
- 3 BLA Programs Targeting Musculoskeletal Pain
  - Plantar Fasciitis
  - Achilles Tendonitis
  - Osteoarthritic Knee Pain
- **Positive Phase 2B Data from Plantar Fasciitis Study** Validates Therapeutic Effect of AI in Treating Soft Tissue Pain, Restoring Function and Improving Quality of Life
- AI Granted Regenerative Medicine Advanced Therapy (RMAT) designation by FDA for Osteoarthritis Knee Pain
  - Increases Dialogue; May Reduce Time to Gain BLA approval

# U.S. JOINT PAIN INJECTION OPPORTUNITY

*2015 U.S. Joint Pain Injection Market\**



\* SmartTRAK Business Intelligence and Company Estimates – Market Opportunity: 80% of total injections are for tendonitis and osteoarthritic pain

# PAIN MANAGEMENT CLINICAL PROGRAMS

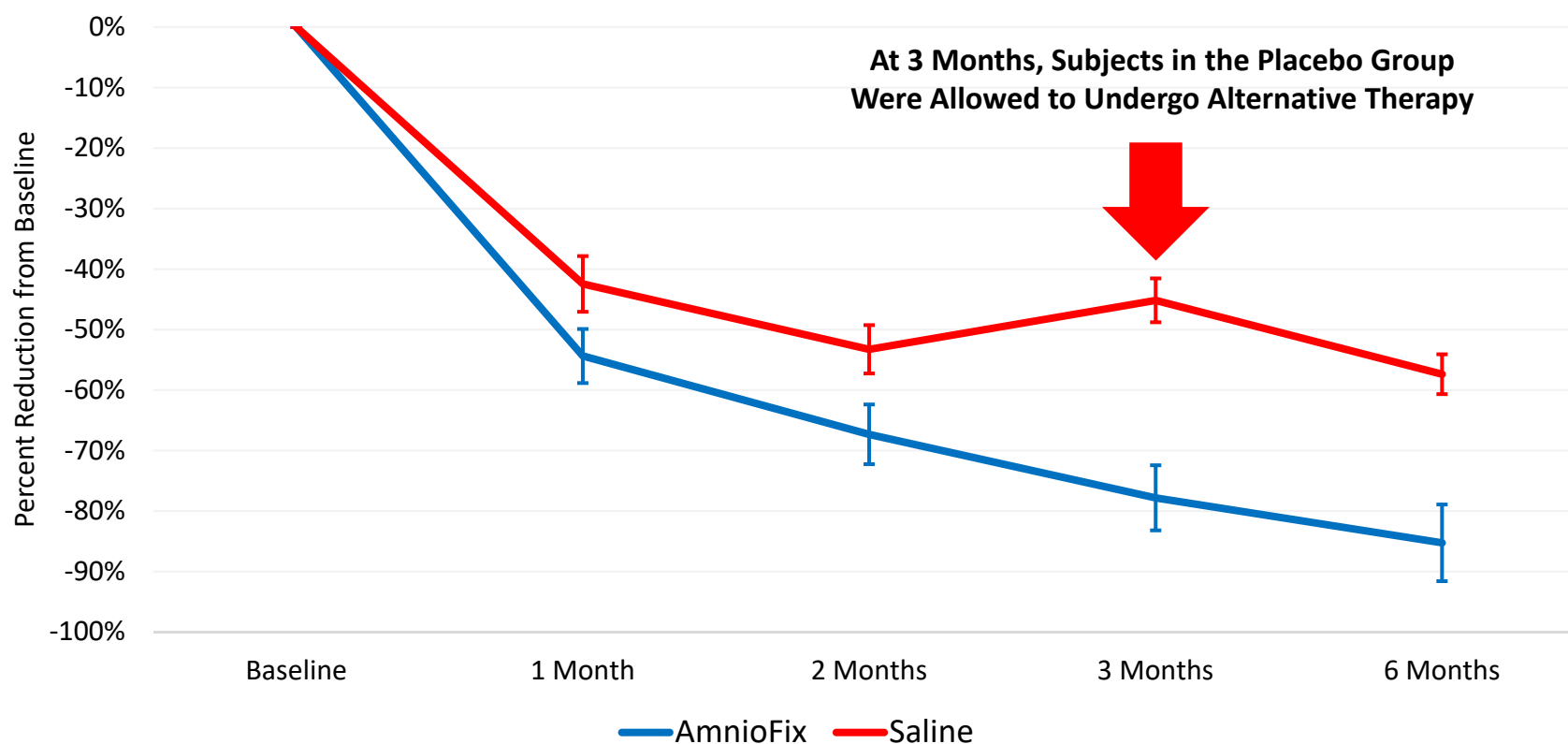
IND #	PRODUCT	PATHWAY	INDICATION	2016	2017	2018	2019	2020	2021
1.	AmnioFix Injectable	BLA	Plantar Fasciitis	Phase 2B		Phase 3	File BLA	Launch	
2.	AmnioFix Injectable	BLA	Achilles Tendonitis			Phase 3	File BLA	Launch	
3.	AmnioFix Injectable	BLA	Knee OA Pain			Phase 2B	Phase 3		File BLA

**D** : Final Data    **L** : Launch

2018-2021: Management's Estimation

# PLANTAR FASCIITIS: FINAL PHASE 2B DATA SHOW POSITIVE PAIN AND FOOT FUNCTION RESULTS

- Clinically Meaningful and Statistically Significant Difference compared to Control Group
- Primary Efficacy Endpoint: Reduction in VAS (visual analog scale) score for pain ( $p < 0.0001$ )
- Secondary Efficacy Endpoint: Improvement in FFI-R (Foot Function Index-Revised) score ( $p = 0.0004$ )
- At 3-month follow-up visit, Average Reduction VAS score for Pain was 76% vs. 45% for Control



# PLANTAR FASCIITIS PHASE 2B STUDY OUTLINE

## A Prospective, Single-Blinded, Randomized Controlled Trial of Micronized dHACM Injection Compared to Saline Placebo Injection in the Treatment of PF

### PURPOSE

- To Determine Whether AmnioFix Injectable (mDHACM) is Effective in the Treatment of Recalcitrant Plantar Fasciitis

### DESIGN

- Randomized, Multi-Center, Single-Blind (Patient)
- 147 Patients with Recalcitrant PF (Confirmed Diagnosis >1 Month and < 18 Months, VAS > 45, Conservative Usual Care > 1 Month\*)
- 2-Arm Unilateral Treatment with:
  - n=73: Placebo (1 ml Normal Saline)
  - n=74: AmnioFix Injectable (1ml of 40 mg AI)

### PRIMARY

- Mean Change in VAS Score from Baseline at 3 Months
- Incidence of Adverse Events at 12 Months

### SECONDARY

- Mean Change in Functional Score by FFI-R at 3 Months
- Immuno-Compatibility of First 20 Patients at 3 and 12 Months
- FFI-R and VAS at 6 and 12 Months

# PLANTAR FASCIITIS PHASE 3 STUDY OUTLINE

**A Prospective, Double-Blinded, Randomized Controlled Trial of Micronized dHACM Injection Compared to Saline Placebo Injection in the Treatment of PF**

## **PURPOSE**

- To Determine Whether AmnioFix Injectable (mDHACM) is Effective in the Treatment of Recalcitrant Plantar Fasciitis

## **DESIGN**

- Randomized, Multi-Center, Double-Blinded (Patient and Reviewer)
- 164 Patients with Recalcitrant PF (Confirmed Diagnosis >1 Month and < 18 Months, VAS > 45, Conservative Usual Care > 1 Month\*)
- 2-Arm Unilateral Treatment with:
  - n=82: Placebo (1 ml Normal Saline)
  - n=82: AmnioFix Injectable (1ml of 40 mg AI)

## **PRIMARY**

- Mean Change in VAS Score from Baseline at 3 Months
- Incidence of Adverse Events at 6 Months

## **SECONDARY**

- Mean Change in Functional Score by FFI-R at 3 Months
- FFI-R and VAS at 6 Months



# ACHILLES TENDONITIS PHASE 3 STUDY OUTLINE

## A Prospective, Double-Blinded, Randomized Controlled Trial of Micronized dHACM Injection Compared to Saline Placebo Injection in the Treatment of Achilles Tendonitis

### PURPOSE

- To Determine Whether AmnioFix Injectable (mDHACM) is Effective in the Treatment of Achilles Tendonitis

### DESIGN

- Randomized, Multi-Center, Double-Blinded (Patient and Reviewer)
- 158 patients with Achilles Tendonitis (Confirmed Diagnosis >1 Month and < 18 Months, VAS > 45, Conservative Usual Care > 1 Month\*)
- 2-Arm Unilateral Treatment with:
  - n=79: Placebo (1 ml Normal Saline)
  - n=79: AmnioFix Injectable (1ml of 40 mg AI)

### PRIMARY

- Mean Change in VAS Score from Baseline at 3 Months
- Incidence of Adverse Events at 6 Months

### SECONDARY

- Mean Change in Functional Score by FFI-R at 3 Months
- FFI-R and VAS at 6 Months

# OA IS A BOOMING EPIDEMIC AND COST BURDEN

- Osteoarthritis (OA) Affects an Estimated 31M Americans
  - Most Common form of Arthritis
  - Leading Cause of Disability in American Adults
  - Prevalence Increases with Age
  - 80% Incidence in Persons Over 75
- 14M Americans Suffer Symptomatic Knee OA
  - Over \$27B in Annual U.S Health Care Expenditures
- Annual Medicare Burden Attributed to Total Joint Arthritis Expected to Exceed \$50B in 2030\*

Source: Arthritis Foundation

\* Wilson NA, Schneller ES, Montgomery K, Bozic KJ. Hip and knee implants: current trends and policy considerations. Health Aff (Millwood) 2008;27:1587–98. doi: 10.1377/hlthaff.27.6.1587

# AI MEETS REQUIREMENTS FOR A NEW FRONTLINE THERAPY

## Knee OA Disease Progression Stage I-IV

Physical Measures	Pharmaceutical Therapy	Surgery
<b>STAGE I/II</b>		
<ul style="list-style-type: none"> <li>• Physical Therapy</li> <li>• Weightloss</li> <li>• Exercise</li> <li>• Acupuncture</li> </ul>	<ul style="list-style-type: none"> <li>* Acetaminophen</li> <li>* OTC NSAID</li> </ul>	
<b>STAGE II</b>		
	<ul style="list-style-type: none"> <li>* COX-2 Inhibitors</li> </ul>	<ul style="list-style-type: none"> <li>** Arthroscopic Irrigation and Debridement</li> </ul>
<b>STAGE III/IV</b>		
	<ul style="list-style-type: none"> <li>* Opioid Analgesics</li> <li>* Intra-articular Corticosteroids</li> <li>** Intra-articular Hyaluronic Acid</li> </ul>	
<b>STAGE IV</b>		
		<ul style="list-style-type: none"> <li>• Joint Replacement</li> </ul>

**AVAILABLE PHARMACEUTICAL TREATMENTS ARE *EITHER TOXIC OR HABIT FORMING***

\* Toxic side effects and limited efficacy    \*\* Limited efficacy

# AI GRANTED RMAT DESIGNATION FOR KNEE OA

- FDA granted Regenerative Medicine Advanced Therapy (RMAT) Designation to AmnioFix<sup>®</sup> Injectable to Treat Osteoarthritis (OA) of the knee
  - Promising Therapies in Areas of Considerable Unmet Medical Need
- RMAT designation includes a comprehensive discussion with FDA on clinical trials and strategy for expediting manufacturing development

Designation	Facilitate Dev. & Expedite Review (e.g. Rolling)	Intensive FDA Guidance on Dev.	FDA Senior Mgmt. Involvement	Surrogate Endpoints	Early Approval
RMAT	X	X	X	Possible	Possible

	Treat, Modify, Reverse, or Cure Serious Condition	Address Unmet Need	Regenerative Medicine Therapy	Preliminary Clinical Data Needed
RMAT	Treat, Modify, Reverse, Cure	X	X	X

# OSTEOARTHRITIS PHASE 2B STUDY OUTLINE

## A Prospective, Double-Blinded, Randomized Controlled Trial of Micronized dHACM Injection Compared to Saline Placebo Injection in the Treatment of Osteoarthritis

### PURPOSE

- To Determine Whether AmnioFix Injectable (mDHACM) is Effective in the Treatment of Osteoarthritis

### DESIGN

- Randomized, Multi-Center, Double-Blinded (Patient and Reviewer)
- 318 Patients with Osteoarthritis (Diagnosis of Osteoarthritis (OA) Defined as Grade 1 to 3 on the Kellgren-Lawrence Grading Scale, VAS > 45)
- 2-Arm Unilateral Treatment with:
  - n=159: Placebo (1 ml Normal Saline)
  - n=159: AmnioFix Injectable (1ml of 40 mg AI)

### PRIMARY

- Mean Change in VAS Score Between Baseline and 3 Months
- Mean Change in WOMAC 3.1 Score (Pain, Stiffness and Physical Function)
- Incidence of Adverse Events at 12 Months

### SECONDARY

- Mean Change in Functional Score as Measured by KOOS at 3 Months
- Long Term KOOS and VAS at 12 Months

# KEY 2018 MILESTONES

- ✓ Patient enrollment started in early January for our Pivotal Phase 3 BLA clinical trials for both Plantar Fasciitis and Achilles Tendonitis
- ✓ Favorable settlement of lawsuit upholding validity of patent and IP rights
- ✓ AmnioFix Injectable Granted RMAT Designation by FDA for Osteoarthritis Knee Pain
- ✓ Positive Pain & Foot Function Results from Phase 2B Plantar Fasciitis Trial
- ✓ First Patient Enrolled in Phase 2B Osteoarthritis Knee Pain BLA Trial
  - Reporting DFU Multicenter Data
  - Additional “Reimbursement Wins”
  - Continued International Expansion

# SUMMARY HIGHLIGHTS

- Leading Developer and Marketer of Regenerative and Therapeutic Biologics
- Proprietary PURION® Process Retains a Milieu of 520+ Proteins (Growth Factors, Chemokines and Cytokines) within Placental Tissue Allografts
- Proven Product Safety Profile; Over 100\* Issued and Allowed Patents
- Addressing Multi-Billion Dollar Market Opportunities in Wound Care, Surgical and Musculoskeletal Pain
- Strong, Core Regenerative Product Portfolio with Pipeline of Therapeutic Biologics for Continued Growth Beyond 2020

The logo for MiMedix features the company name in a bold, blue, sans-serif font. A thick, grey, curved line arches over the text, starting above the 'i' and ending above the 'x'. The dot of the 'i' is a small grey circle. The 'x' is rendered in a lighter grey color, matching the arch.

**MiMedix**