

# MuscleMatrix™

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## UNMET CLINICAL NEED



Goel et al. Current Trauma Reports 2018

Canonico et al. Skin Grafts 2013

Poor cosmesis

Insufficient local tissue

Significant morbidity

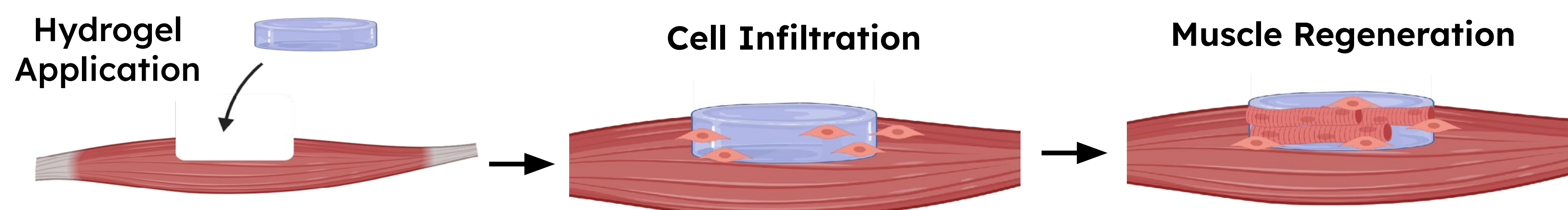
Exposed bone or tendon

Over 250,000  
Lower Extremity  
Trauma Cases Per  
Year in USA

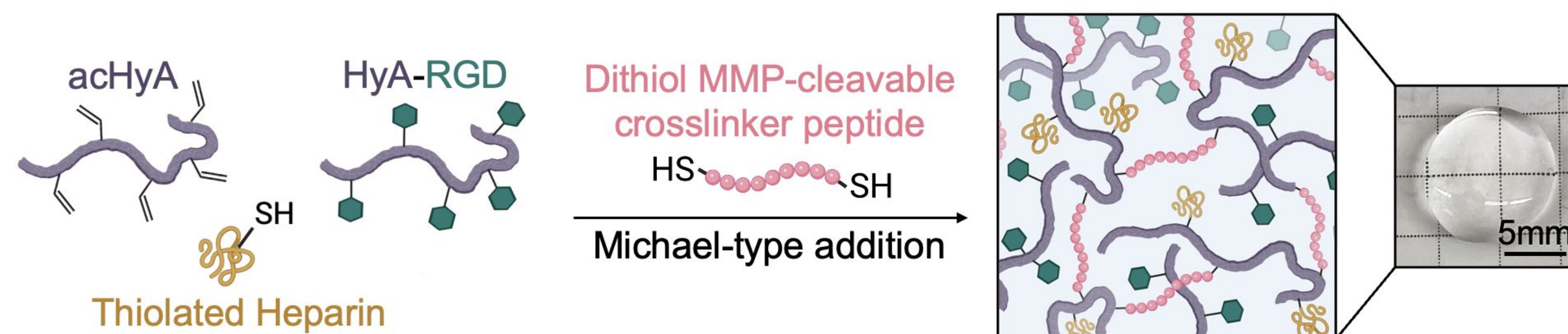
Current solutions  
involve invasive,  
insufficient  
surgical methods

## OUR SOLUTION - MUSCLEMATRIX™

For patients suffering from **insufficient soft tissue coverage**, we provide a **hyaluronic acid-based hydrogel** that regenerates a **vascularized wound bed**



**Figure 1: Treatment of volumetric muscle loss requires hydrogel implantation to actively guide tissue regeneration.** Our HyA hydrogel can be administered as a regenerative hydrogel to conduct soft tissue growth.



**Figure 2: Highly tunable hyaluronic acid (HyA)-based hydrogels and scaffold.** HyA hydrogel that allows independent control over several biomaterial properties. Hydrogel can be cryogelled to create a scaffold form factor, MuscleMatrix™, that can be implanted as a medical treatment.

## MARKET ANALYSIS - EXTREMITY TRAUMA



### Total Addressable Market:

Represents 1.3-1.9% of total extremity trauma hospital costs.

### Serviceable Addressable Market:

Assuming 25-50% of product penetration.

### Serviceable Obtainable Market:

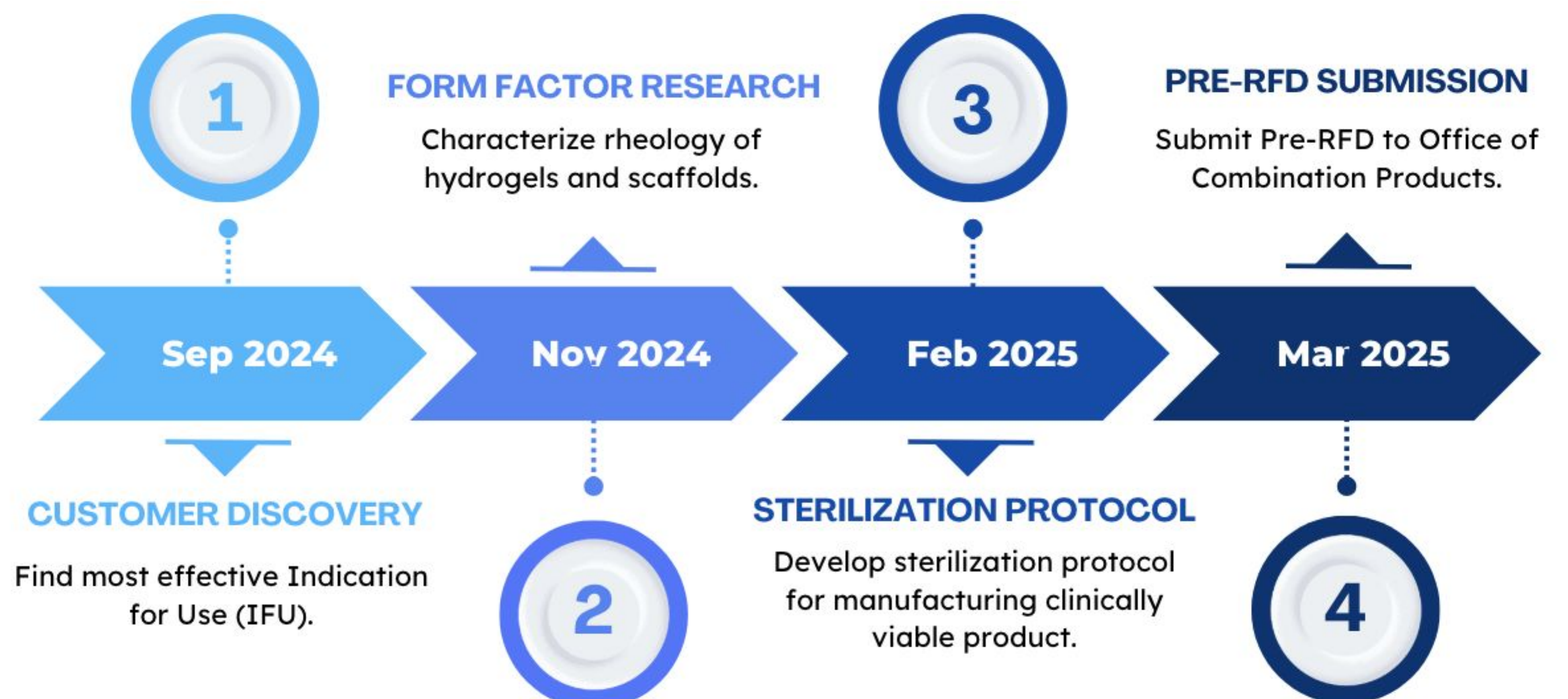
Assuming product can capture 10% of SAM.

## COMPETITOR LANDSCAPE

Features	MuscleMatrix™	Integra	Matrigel	Surgical Interventions
Low Cost	—	—	✓	✗
Minimally Invasive	✓	✓	✓	✗
Wound Healing	✓	✓	✓	✓
Muscle Tissue Regeneration	✓	✗	✗	✗
Promotes Revascularization	✓	✓	✗	✓
Infection Resistance	✓	✗	✗	✓
Improved Cosmesis	✓	✗	✗	✗

## FUTURE DIRECTIONS

“The priority in lower extremity trauma is wound closure and patient stabilization rather than muscle regeneration”  
- Customer Discovery Interview



## REFERENCES

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- Weir, S., et al., *Expert Rev. Pharmacoecon Outcomes Res.* 10(2), (2010).
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## FUNDING

