

# MuscleMatrix™: Revolutionizing Muscle Regeneration



Ehsan Farjood, Howard Ying, Manasi Kumar, Ryan Granché | Sponsor: Dr. Healy

# Problem: Volumetric Muscle Loss

Volumetric Muscle Loss (VML) is a severe form of muscle loss that affects mostly military personnel and sometimes civilians who lose >20% of their muscle through injury.

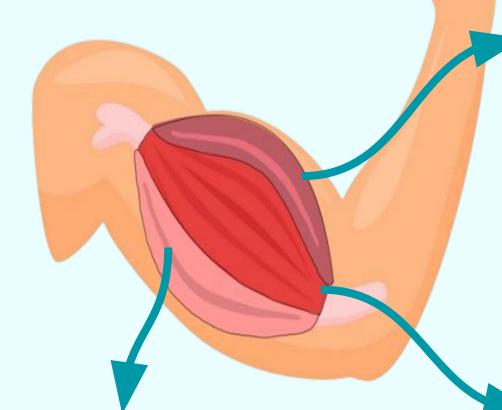
#### >11,000

Military
reports of
VML between
2001 and
2013

#### \$440,000

To 'Treat' a single case of VML using current standards

# Market Analysis



#### SOM:

\$9.3 million
Estimates ~1/₃
adoption of
MuscleMatrix™

#### SAM:

TAM:

\$160 million

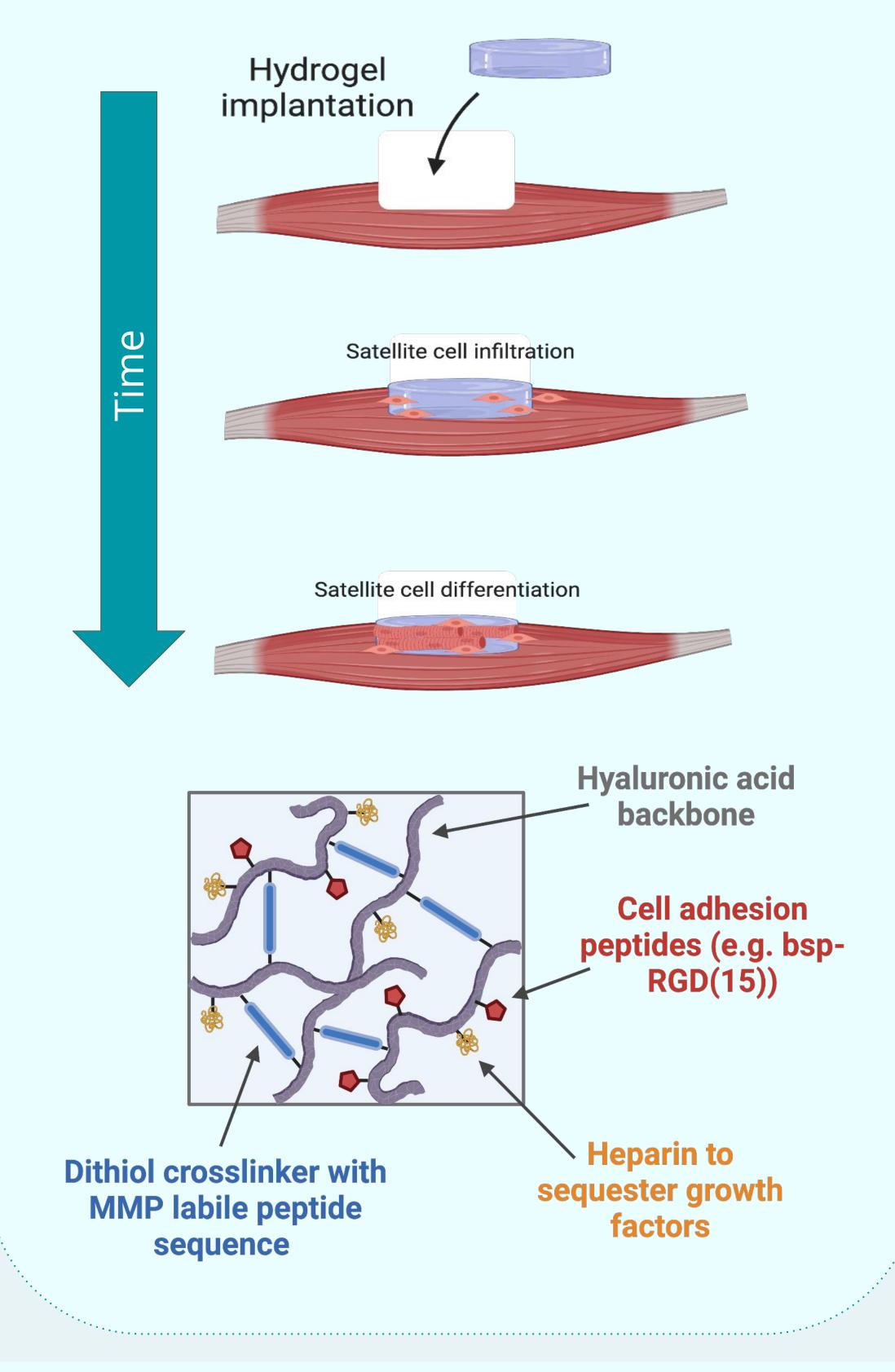
Total cases of

VML in the US

\$27.8 million
Craniofacial
applications of
missing tissue

## Solution: MuscleMatrix™

Our product is an **implantable** Hyaluronic Acid based **scaffold** that **restores native functionality and aesthetic** through muscle cell regeneration.



## **Product Comparison**

No other hydrogel on the market has demonstrated the remarkable VML regeneration we have attained with our biomaterial.

	MuscleMatrix	Hyalomatrix	Grafting	Do nothing (Status Quo)
Description	HyA based acellular scaffold for skeletal muscle regeneration	FDA and Medicare approved HyA based scaffold layer for skin wounds	Free muscle harvested from thigh/donor and implanted	FDA approved acellular scaffold for skin wounds
Functional				X
Aesthetics				X
Vascularization				
Muscle application				

# Project Plan

Our team is focused on these considerations: Regulatory, Manufacturing, Preclinical, Commercialization.

