

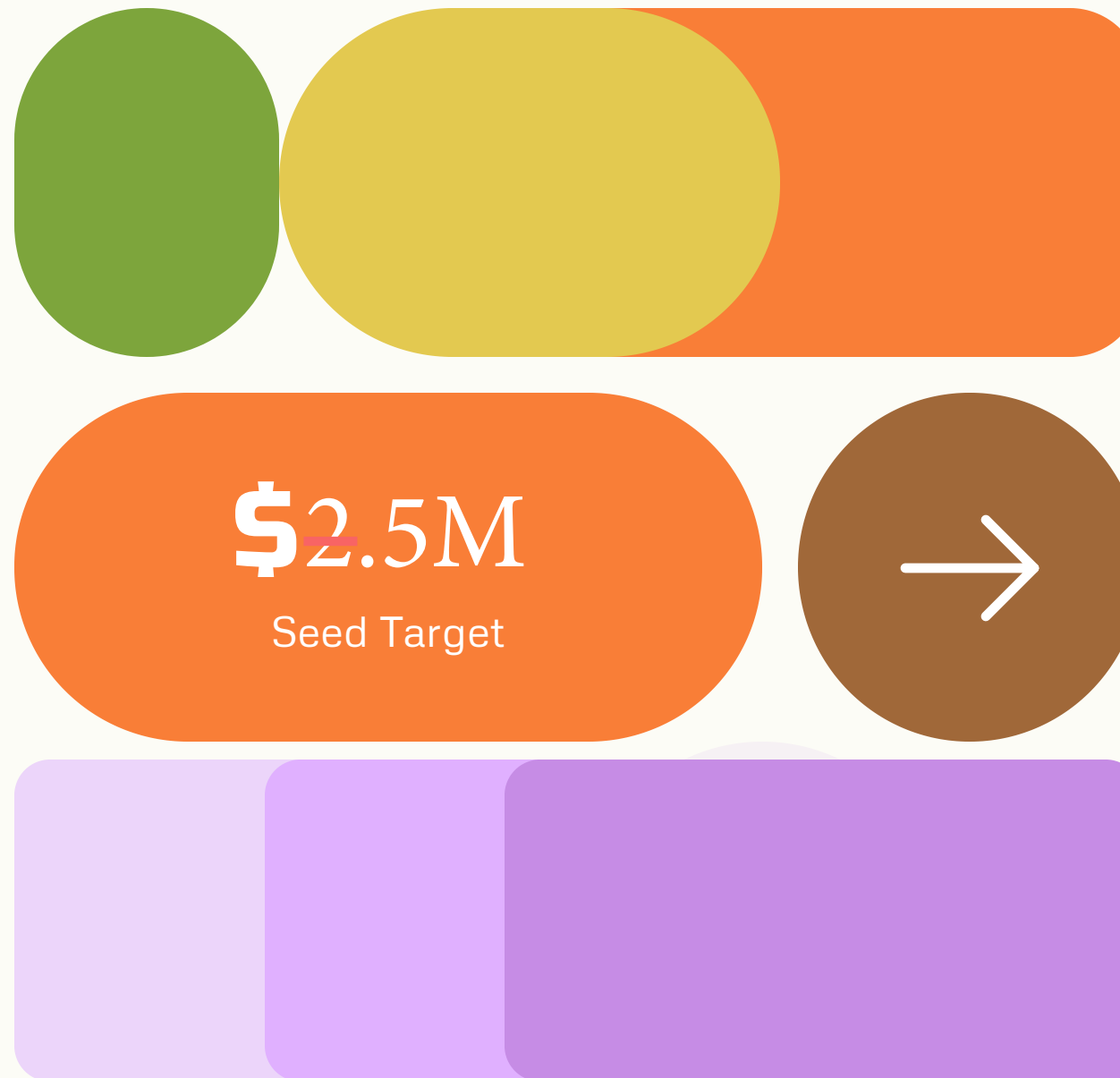
PREMS.AI

AI-Enhanced Neuromuscular
Rehabilitation Technology

Confidential • February 2026

Founder & CTO: William W. Mee, MS BME

SeedfiRoundfiTarget:\$2.5M



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EXECUTIVE TAKEAWAYS

AI-adaptive, proportional EMS rehab—built on a validated 35-year foundation and existing FDA clearance.

WHAT WE DO

Smart wearable sleeve that reads sEMG and delivers proportional stimulation in real time.

DIFFERENTIATORS

- ✓ Existing FDA 510(k) predicate
- ✓ Proportional response IP
- ✓ <10ms latency
- ✓ Home use

MARKET SIZE

\$700M+

Annually

>7% CAGR



TIME TO MARKET

6–9

Months

From funding



SEED ASK

\$2.5M

Investment

Seed Round



TARGET CAPTURE

5%

In 3 Years

→ \$35M+ Potential



COMPANY OVERVIEW



COMPANY

PREMS.AI

Proportional Response Electrical Muscle
Stimulation – AI



HQ & STAGE

Fort Lauderdale, Florida (USA)

Pre-revenue / Seed



FOUNDER

William W. Mee

MS Biomedical Engineering
(University of Miami / Brown University)



LEGACY ASSET

US Patent 4,811,742

(co-inventor)



REGULATORY ADVANTAGE

FDA 510(k): K874212

(1988, VERIMED MYO/PREMS)

Predicate Advantage



OUR MISSION

Restore independence and self-confidence for patients with neuromuscular disorders

THE PROBLEM: NON-ADAPTIVE STIMULATION

One-size-fits-all stimulation cannot match dynamic neurological recovery.



Conventional Devices

Fixed, pre-programmed stimulation patterns



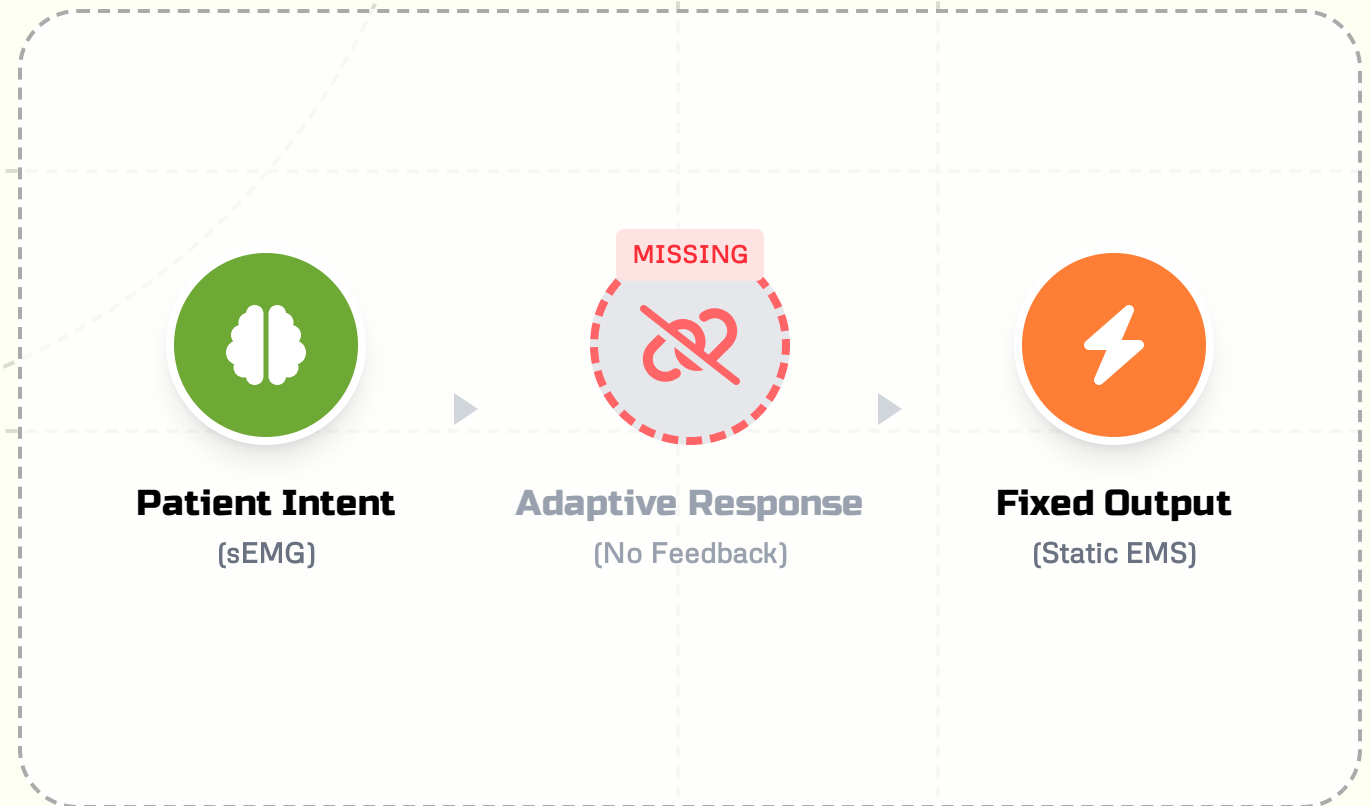
The Gap

No response to real-time muscle activity or recovery progression



The Impact

Suboptimal outcomes and patient frustration



THE PROBLEM: CLINIC DEPENDENCY

Access limits consistency—the key driver of rehabilitation gains.



Clinic Visits

Rehab often requires frequent clinic visits



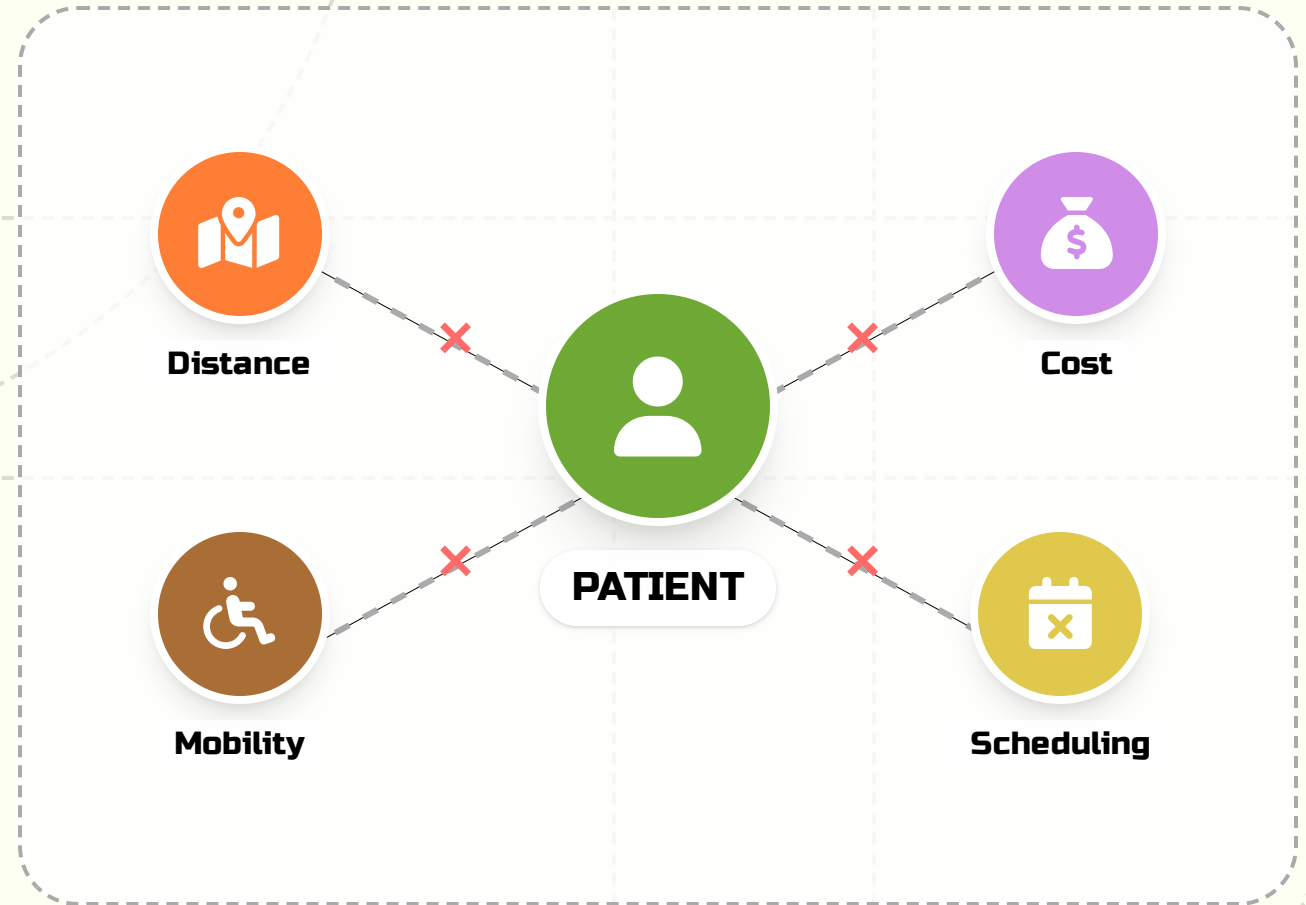
Barriers

Elderly, rural populations, veterans, limited mobility



Impact

Interrupted treatment, slower recovery, reduced outcomes



THE PROBLEM: COST AND SCALABILITY

The unmet need is intelligent, adaptive, home-compatible therapy at scale.



Manual Therapy

Manual therapy is labor-intensive and hard to scale



Constraints

Therapist availability, high cost, insurance limits



Result

Patients don't receive high-frequency personalized therapy



High Labor

Manual intensive process



Limited Slots

Scheduling bottlenecks



Lower Frequency

Reduced therapy sessions



Worse Outcomes

Slower patient recovery

OUR SOLUTION

AI-Enhanced Smart Sleeve

Wearable, sensor-embedded Smart Sleeve



Real-time sEMG signal acquisition



Proportional stimulation delivery

maps sEMG intensity → stimulation



AI-driven adaptive control

learns from history, fatigue, progression



Home-based daily use



Cloud-connected monitoring

for clinicians

"The sleeve responds to what the patient is trying to do—amplifying neural effort."

System Overview



sEMG Sensors

Detects patient intent



Edge AI

Processes & adapts



EMS Electrodes

Delivers stimulation



Cloud Dashboard

Clinician monitoring

SMART SLEEVE ARCHITECTURE — ARM



Embedded Electronics

Electronics embedded within fabric layers (no exposed wires)



AI Control Unit

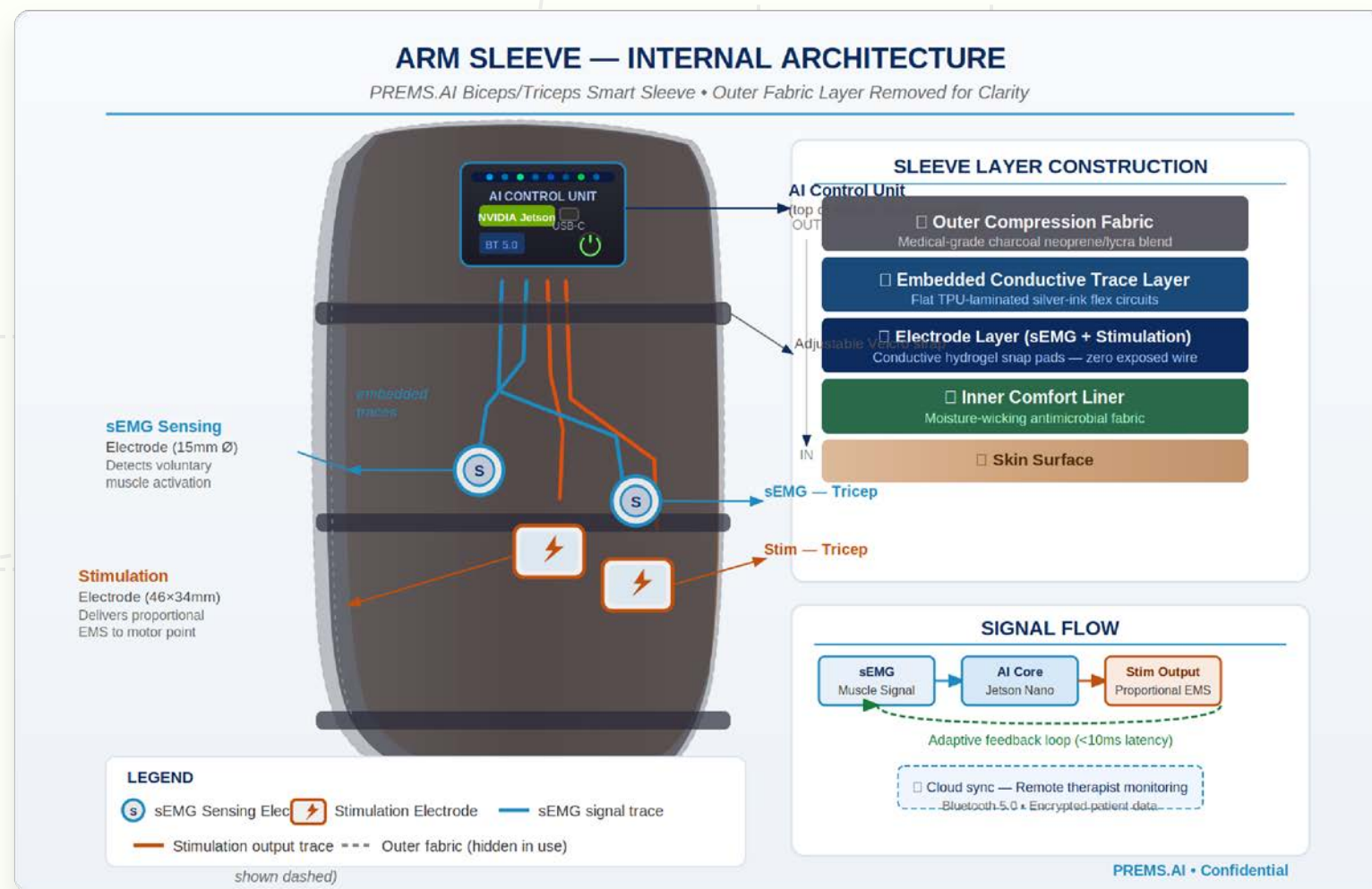
AI control unit flush-mounted at top of sleeve



Precision Design

Designed for clean, repeatable electrode placement

BICEPS / TRICEPS



ARM SLEEVE — PRODUCT VIEW



Sensing Electrodes

Circular sEMG sensing electrodes



Stimulation Pads

Rectangular hydrogel stimulation pads



Integrated Circuitry

Integrated conductive traces under TPU layer



Concealed Design

Outer cover conceals electronics in use

SMART SLEEVE ARCHITECTURE — LOWER LEG



Targeted Placement

Targeted electrode placement for key lower-leg muscles



Integrated System

Embedded routing and flush-mounted AI unit



Stability

Built for stability and repeatable positioning

S

Sensing

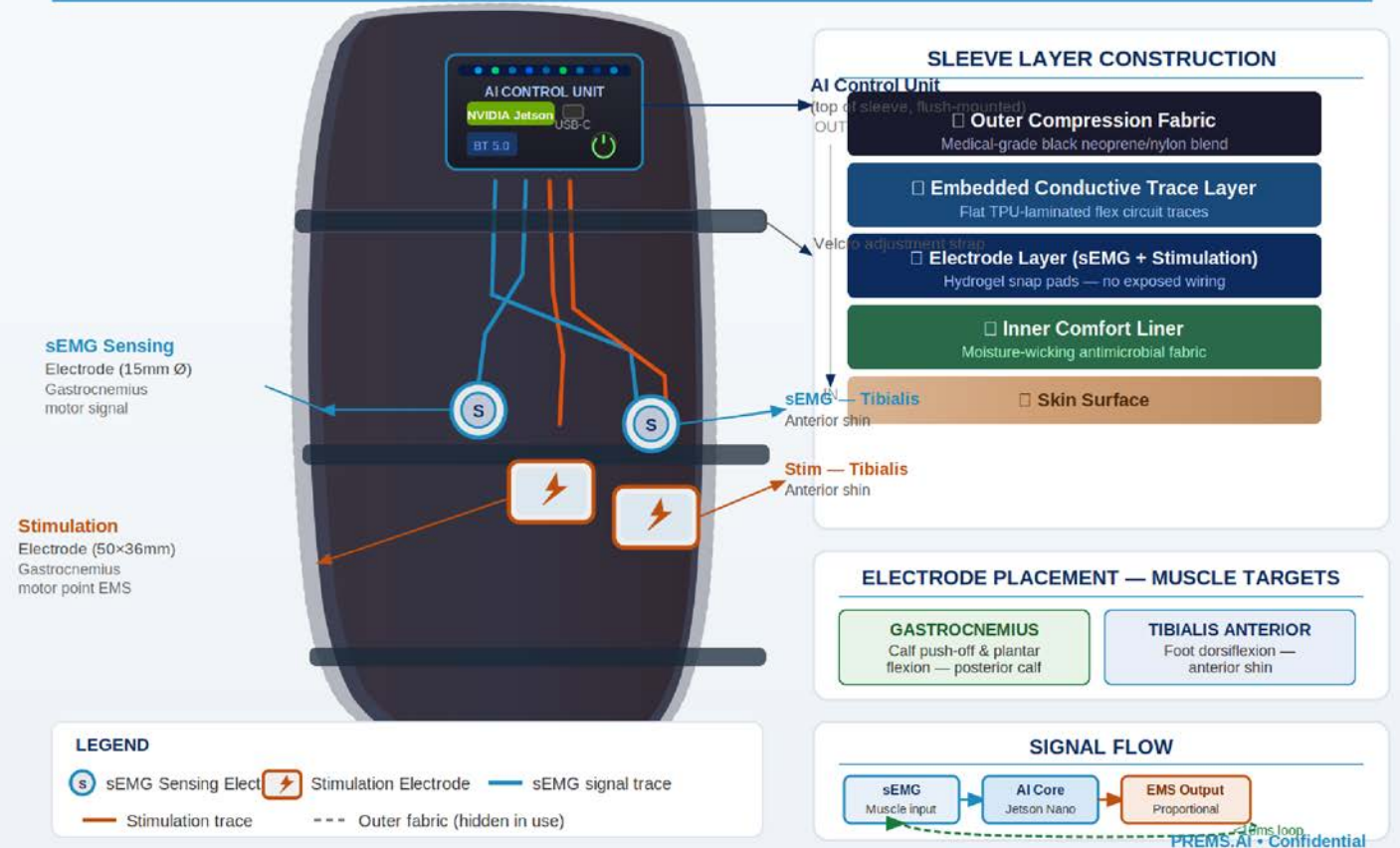


Stimulation

GASTROCNEMIUS / TIBIALIS

LOWER LEG SLEEVE — INTERNAL ARCHITECTURE

PREMS.AI Gastrocnemius/Tibialis Smart Sleeve • Outer Fabric Layer Removed for Clarity



LOWER LEG SLEEVE — PRODUCT VIEW

Targeted Stimulation

sEMG sensing electrodes + stimulation pads targeting motor points



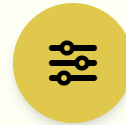
Seamless Integration

Integrated traces



Secure Fit

Three Velcro adjustment straps for secure fit



TECHNOLOGY PLATFORM



sEMG Acquisition

High-fidelity signal capture



Filtering / NN

AI-based noise & artifact removal



Proportional Mapping

US Patent 4,811,742
Algorithm



EMS Output

Real-time adaptive stimulation



Edge AI Core

NVIDIA Jetson Nano enabling real-time inference



Performance

Response latency < 10 ms



Core IP

Proportional Response algorithm (US Patent 4,811,742)



Signal Processing

sEMG capture + AI-based noise/artifact removal

REGULATORY & QUALITY DE-RISKING

FDA (United States)

- ✓ Existing 510(k) K874212 predicate
- New 510(k) substantial equivalence

STANDARDS BY DESIGN

IEC 60601-1, 60601-1-2, 60601-2-10

Quality Systems

- ✱ ISO 9001:2015 implementation
- ✱ ISO 13485:2016 implementation

RISK MANAGEMENT

ISO 14971

EU Access

- 🌐 CE Marking under EU MDR 2017/745
- ⚖️ Rule 9; Class IIa/IIb anticipated

Triple Credential

CE Marking

ISO 13485

FDA 510(k)

Global Market Readiness

MARKET OPPORTUNITY

MARKET SIZE

\$700M+

Annually



GROWTH

>7%

CAGR



3-YEAR TARGET

5% Share

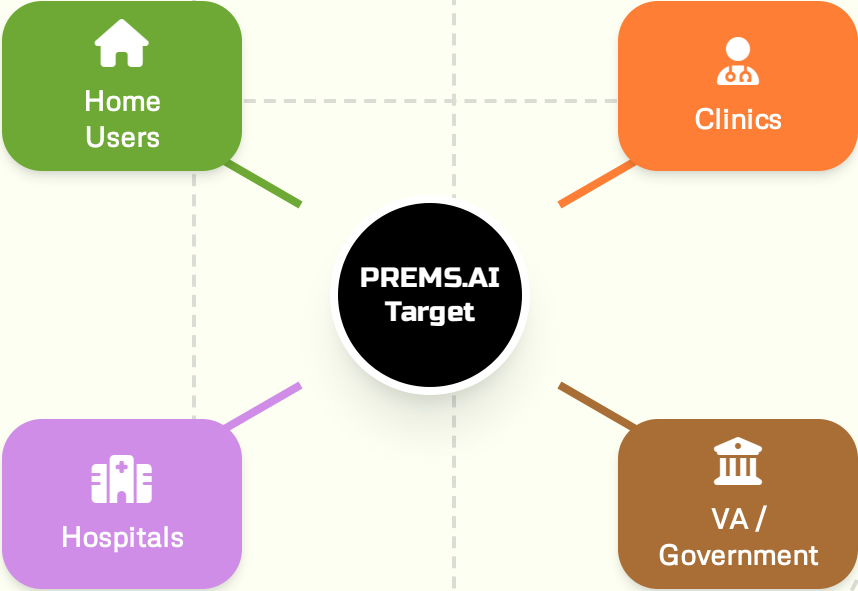
→ \$35M+ Potential



TARGET POPULATIONS

- Stroke survivors:** ~7M in the US; ~15M new global cases/year
- Parkinson's:** 10M+ worldwide; ~60,000 new US diagnoses/year
- Spinal cord injury:** ~300,000 in US; ~18,000 new cases/year
- TBI:** ~2.8M US emergency visits/year
- Veterans:** large, well-funded VA channel

SEGMENTS

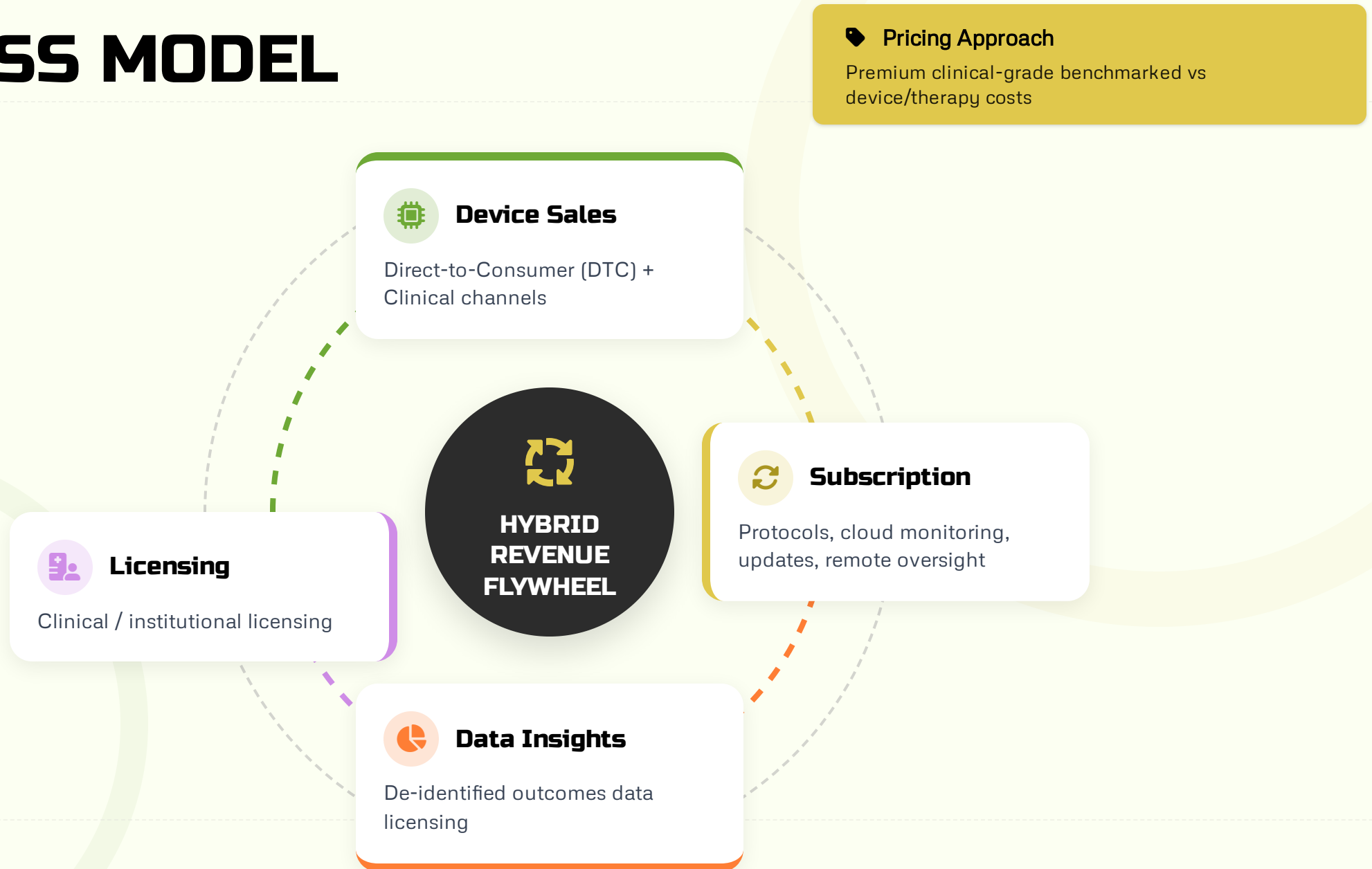


COMPETITIVE LANDSCAPE

Only PREMS.AI combines AI-adaptive proportional EMS + existing FDA clearance + home-use design.

COMPANY	FDA-CLEARED PREDICATE	AI/ADAPTIVE CONTROL	EMG+EMS CLOSED LOOP	HOME USE FOCUS	KEY LIMITATIONS
Bioness (Bioventus)	✓	✗	✗	✓	No AI/adaptive control, clinic-dependent, high cost
Myomo	✓	✗	✓	✓	Upper limb only, no full-body proportional control
Kiio	—	✓	✗	✓	No EMS/hardware, software-only, no EMG feedback
Reflexion Health	✓	✓	✗	✓	No stimulation component, passive monitoring only
Sword Health	✓	✓	✗	✓	No electrical stimulation, no EMG adaptive control
Traditional PT Clinics	—	✗	✗	✗	Expensive, clinic-bound, not scalable, no AI
PREMS.AI	✓	✓	✓	✓	Pre-revenue, seed stage, hardware prototyping phase

BUSINESS MODEL



GO-TO-MARKET STRATEGY

PHASE 01

Start

South Florida DTC launch

Focus on retiree + veteran density in the region.

PHASE 02

Expand

National digital growth

Scaling DTC web/mobile platform across the country.

PHASE 03

Scale

Clinical partnerships + institutional licensing

Integrating with healthcare systems and licensing technology.

CHANNELS

-  DTC web/mobile platform
-  VA / federal procurement
-  Longer-term: technology licensing

-  Clinical referral network
-  Telehealth integration

MARKETING MOTIONS

- ✓ Thought leadership
- ✓ Patient communities
- ✓ Physician outreach
- ✓ PR

TEAM & FUNDING

FOUNDER & CTO

William W. Mee

Co-inventor, 35+ years medical device experience

ADVISORY BOARD

Neurologists, rehab specialists, AI researchers, regulatory experts (in formation)

PLANNED HIRES (POST-FUNDING)

 CEO

 VP Regulatory

 Lead AI/ML

 Head Clinical

 Sales & Marketing

 Hardware Lead

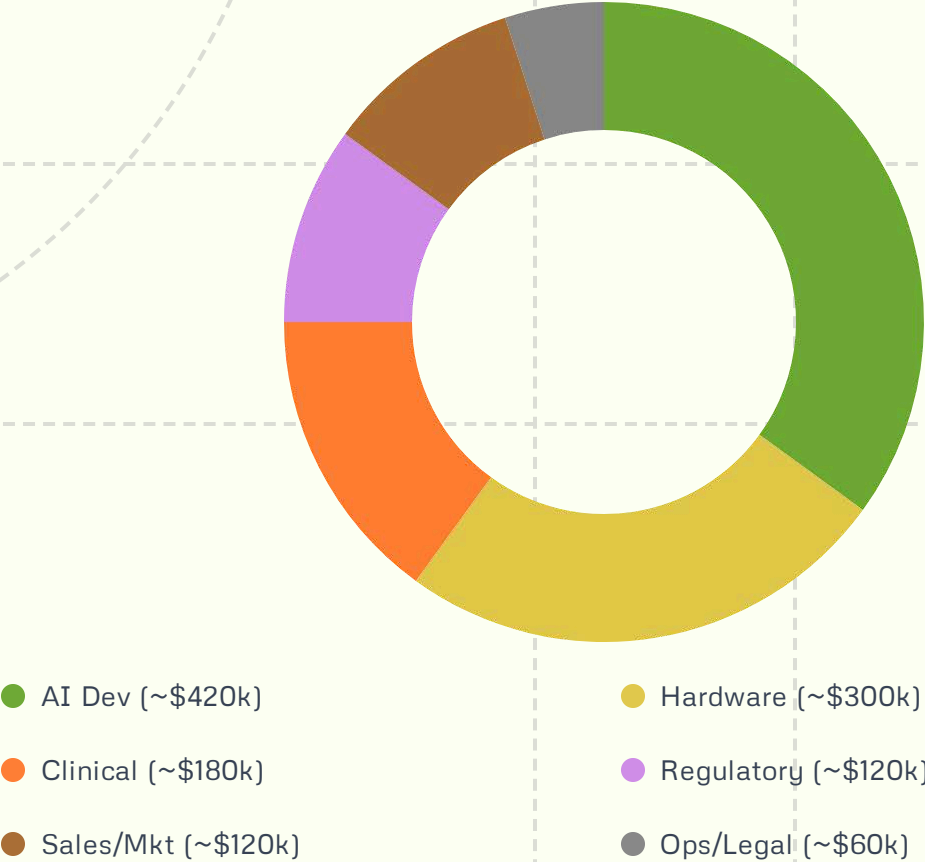
FUNDING ASK

\$5M

Seed (Convertible Debt or Equity)



USE OF FUNDS



EXECUTION PLAN & WHY NOW

Phase 1

Months 1-4

- AI architecture
- Prototype v1
- FDA pre-sub
- QMS framework

Phase 2

Months 5-9

- Prototype v2
- Clinical study (n=30-50)
- Submit 510(k)
- ISO audit target

Phase 3

Months 10-15

- FDA clearance
- Certifications
- Launch
- CE marking steps

Phase 4

Months 16-36

- US/EU scale
- VA, telehealth
- Licensing
- Data insights

KEY RISKS & MITIGATIONS

- ⚠ Regulatory
- ⚠ ISO/CE Timing
- ⚠ Tech Schedule
- ⚠ Competition

Existing 510(k) predicate strategy

Early Notified Body engagement

Modular architecture & proven AI core

IP protection & first-mover AI advantage

**Join us to bring
intelligent, home-
based rehabilitation
to millions.**

THANK YOU

PREMS.AI – Investor Pitch Deck

Contact: (~~William Mee~~)

Location: Fort Lauderdale, Florida • February 2026