ALVA HEALTH

Non-invasive wearable device for real-time stroke detection

NSF   Yale   NIH

KEVIN SHETH, MD
CMO & CO-FOUNDER
www.alva-health.com

PROBLEM

Ischemic Stroke affects **700,000** Americans and **13MM** people globally per year

$67B annual avoidable US healthcare spend

Disability, premature death can be prevented by drug (tPA) within 4.5hr of stroke onset

85% of stroke victims <u>miss</u> the tPA treatment window

EFFECT OF TREATMENT DELAY

20% OF STROKE VICTIMS DIE

160,000 PEOPLE /YR

10% SURVIVORS UNABLE TO CARE FOR SELF, NEED LONG TERM CARE OR SKILLED NURSING

56,000 PEOPLE / YR

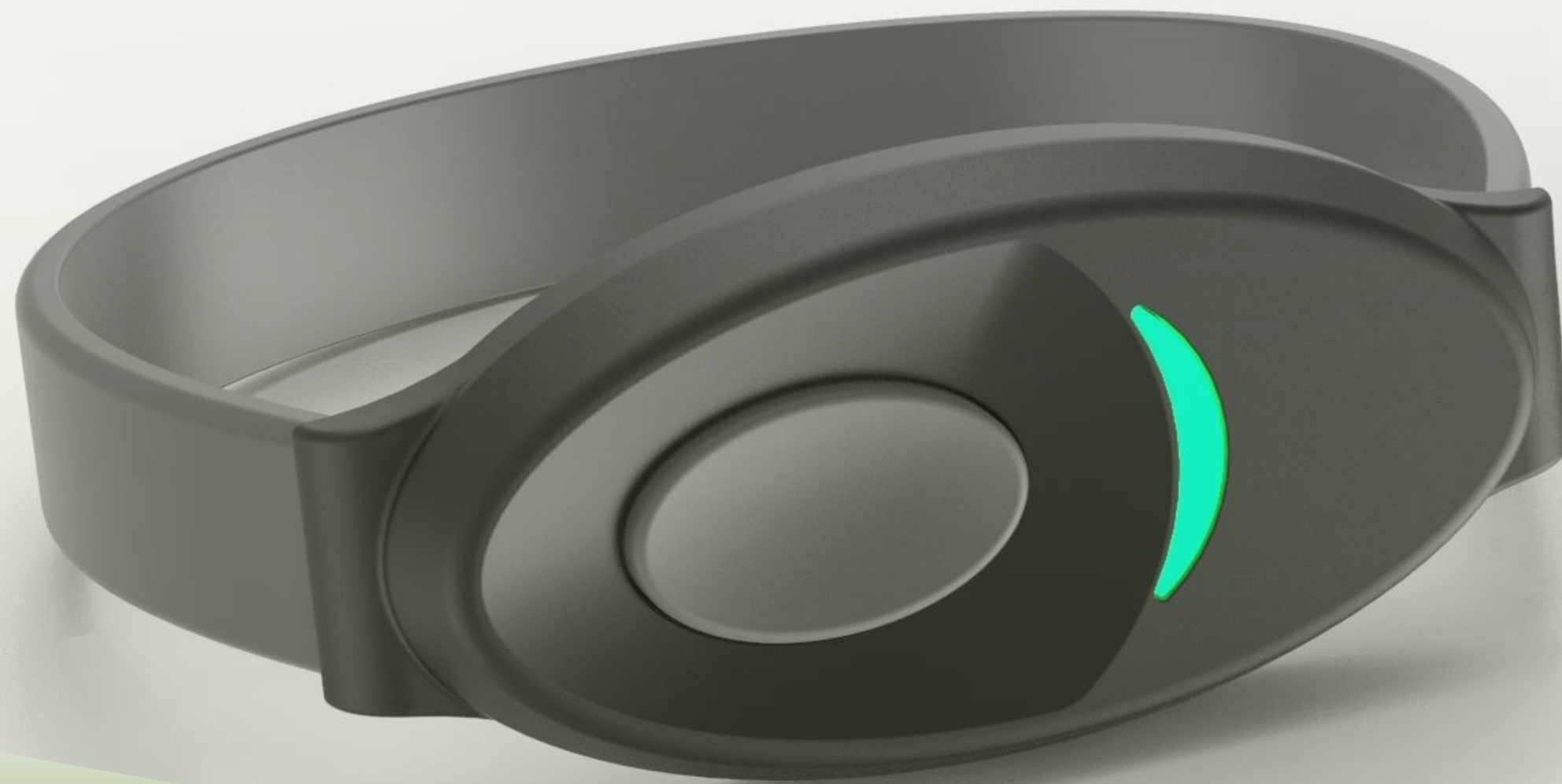**40%** SURVIVORS WITH MODERATE OR SEVERE DISABILITY, NEED SPECIALIZED CARE

224,000 PEOPLE / YR

25% SURVIVORS WITH MINOR DISABILITY
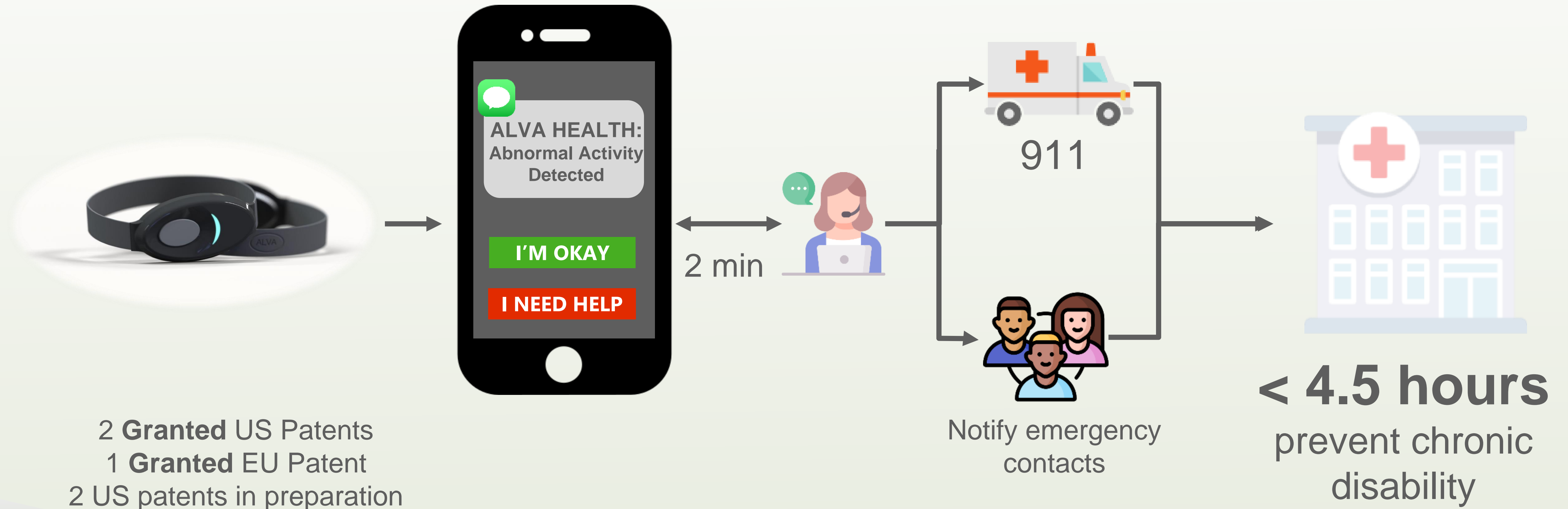
140,000 PEOPLE / YR

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SOLUTION

A non-invasive wearable that identifies stroke within the critical 4.5 hour tPA treatment window

Detects asymmetries in upper body movement, a hallmark of stroke

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HOW IT WORKS

ALVA HEALTH: Abnormal Activity Detected

I'M OKAY

I NEED HELP

2 min

911

Notify emergency contacts

< 4.5 hours
prevent chronic disability

2 **Granted** US Patents
1 **Granted** EU Patent
2 US patents in preparation

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PREVIOUS STUDIES

STROKE PATIENT STUDY

N > 200

TPR = 97%

High sensitivity in moderate-to-severe strokes

HEALTHY VOLUNTEER STUDY

N=50

TNR = 99.8%

Low false positive rate, 1 per 21 days*

* expected to decline before commercialization

UPCOMING STUDIES

DE-CENTRALIZED PILOT STUDY
Initiating 1H 2023

- PURPOSE: Demonstrate monitoring up to 30 days, assess usability & comfort level with Alva's device
- Enroll under 100 subjects, including healthy & stroke survivors

MULTI-SITE PILOT STUDY
Initiating 2H 2023

- PURPOSE: Demonstrate remote monitoring up to 90 days, event detection
- Gather necessary data for algorithm & design lock prior to FDA pivotal study
- 3-5 research sites
- Enroll under 300 high stroke-risk subjects

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INITIAL TARGET MARKET

Patients at risk of recurrent stroke

1.1 M
PATIENTS / YR

$4B
MARKET

640,000 · · · · · · · · · · · stroke survivors

500,000 · · · · · · · · · · · **Transient Ischemic Attacks**

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BARRIERS TO ENTRY

Custom wearable devices with battery life ≥ 30 days

IP: 2 US patents granted, 1 EU patent granted, 2 US in preparation
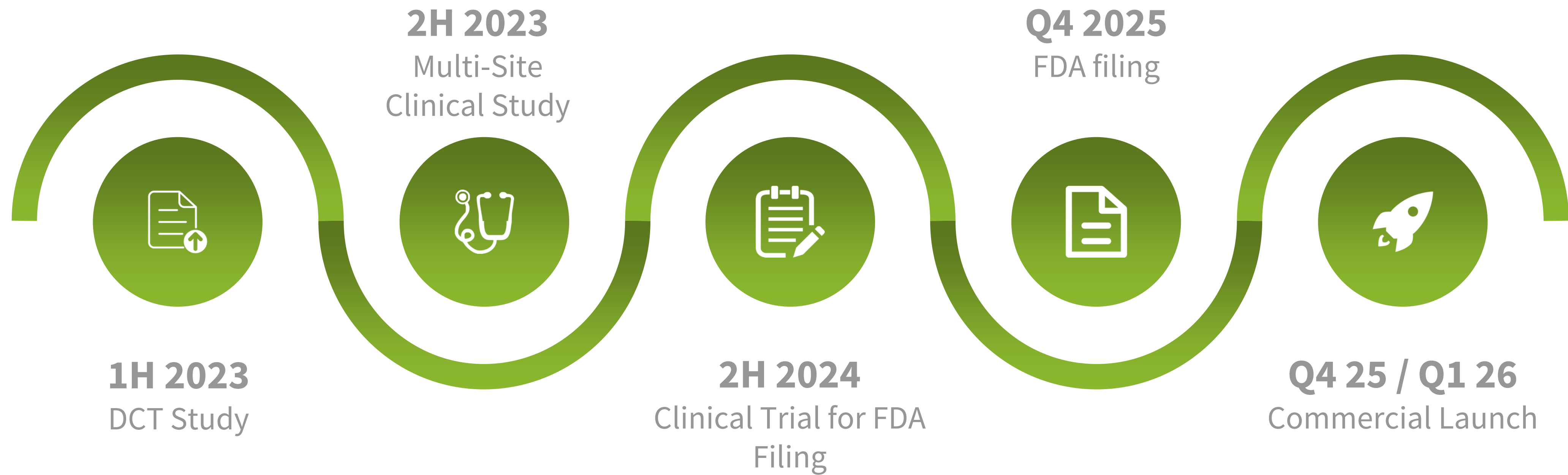
Proprietary stroke detection & fall detection algorithms

Extensive database of wearables data in stroke patients

Cloud based solution on AWS

Cleared informal FTO search

Trademarks in progress

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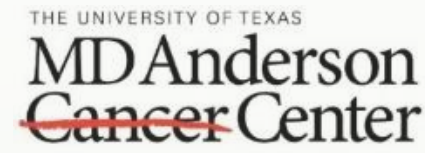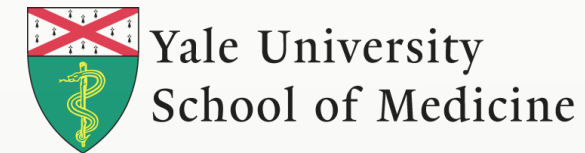HEALTH

Timeline

2H 2023
Multi-Site
Clinical Study

Q4 2025
FDA filing

1H 2023
DCT Study

2H 2024
Clinical Trial for FDA
Filing

Q4 25 / Q1 26
Commercial Launch

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EXPERIENCED & DIVERSE TEAM

CEO SANDRA SALDANA, PHD, MBA
BRAND INSTITUTE
THE UNIVERSITY OF TEXAS MD Anderson Cancer Center
Yale SCHOOL OF MANAGEMENT
CORNELL UNIVERSITY FOUNDED A.D. 1865

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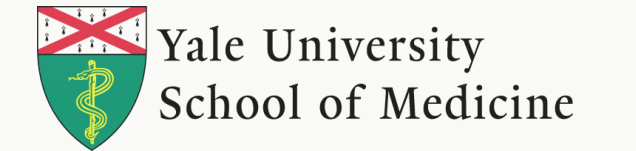
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INDUSTRY RECOGNITION

MEDTECH INNOVATOR

$350,000
GRAND PRIZE WINNER

2021 competition winner among 1100 global medtech startups

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PREVIOUS FUNDING

$2.35 M

NIH National Institutes of Health
Turning Discovery Into Health

NSF National Science Foundation

Oversubscribed Pre-Seed Round

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FUTURE FUNDING

$1.5-2 M

Seed Round
September 2023

$125,000 committed to date

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PARTNERS

THANK YOU

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