



# Measuring the missing vital sign

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INVESTOR PRESENTATION

**I founded  
Hydrostasis  
because I needed it**





# We believe hydration is the missing vital sign



Heart rate

**60-100**

beats per minute



Blood pressure

**120/80**

mmHg



Respiratory rate

**12-16**

breaths per minute



Blood oxygen

**95-100%**



Body Temperature

**98.6°**

mmHg



Hydration

**?**



Why is hydration essential?



# Improper hydration impairs everyday function



Heart health



Weakness



Kidney health



Brain function



Performance

## Even worse, it increases the risk of hospitalization and death

### 20%

increased risk of  
premature death

### 10M

seniors hospitalized or  
due to dehydration each  
year



# Clinical hydration tests are outdated and inaccurate

Skin Turgor / Pinching skin

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Tracking weight

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Swollen ankles

# Consumers spend extensively on hydration

**\$37B**

Global **electrolyte**  
market size est.in  
2024

**5.9% CAGR**

**\$8.2B**

Global **water bottle**  
market in 2022

**4.5% CAGR**

**\$2.8B**

Global in  
**hydration**  
**therapy** market

**8.7% CAGR**

**\$61B**

Global **wearables**  
market in 2022

**14.6% CAGR**



Introducing our first product:



Equipping everyone  
to measure **the**  
**missing vital sign**



PRODUCT

# New Geca Watch™ 2.0

We keep you In the Blue™

**Sleeker look**  
smaller footprint,  
custom band

**Generative AI algorithms**  
for preventative alerts

**Background**  
calibration process

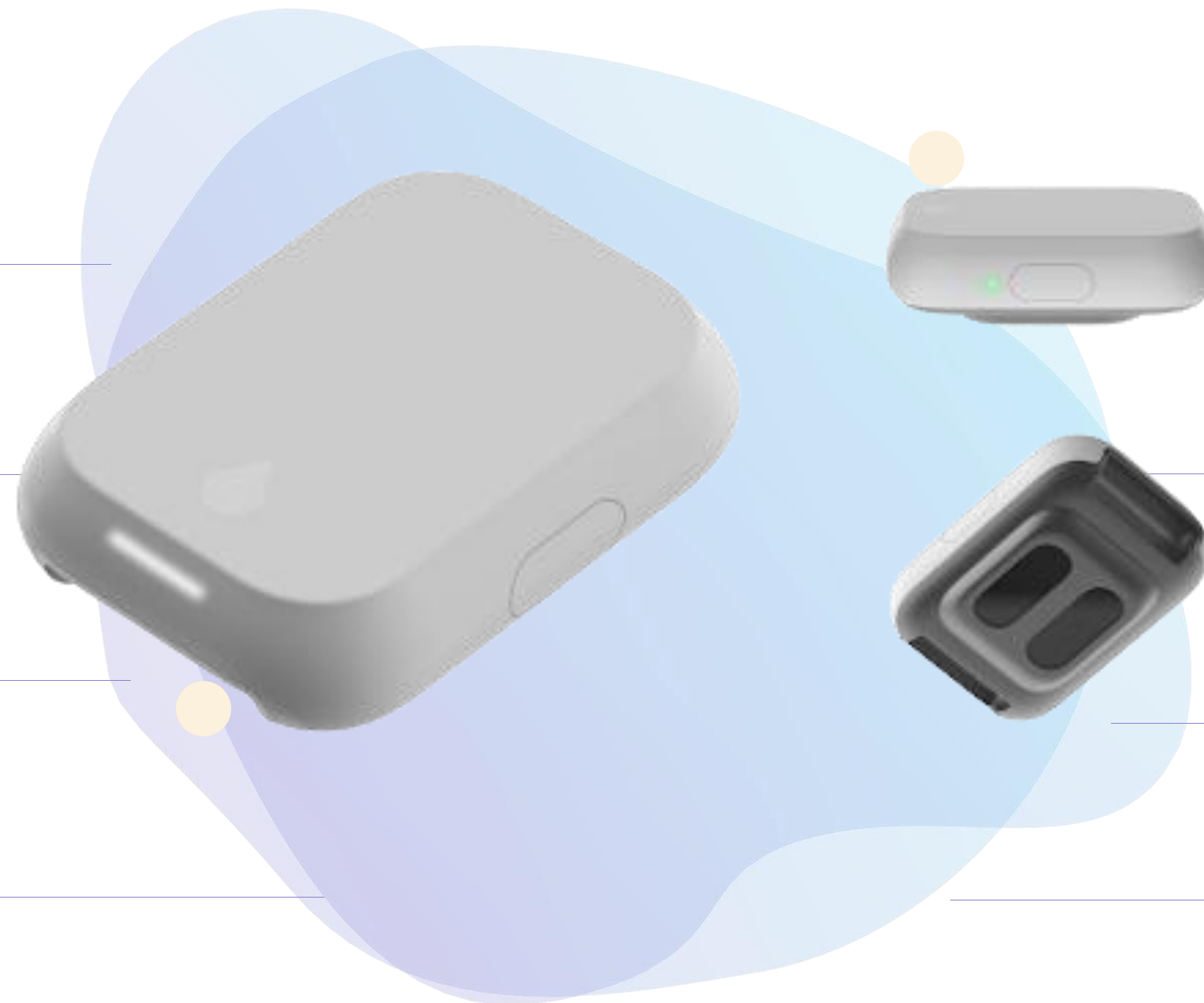
**On-device algorithm**  
increased security & privacy

**Skin temperature sensor**  
for better heat-related  
predictions

**Accelerometer**  
to track physical exertion

**Personalized** instructions on  
optimal water intake

**Water Resistant**  
IPX7: can be submerged up to  
1 meter of water up to 30min







**Debbie K. Chen, Ph.D**  
Founder and CEO



**TJ Varghese**  
COO



**Michael Shirman**  
Co-Founder and CTO



**Michelle Hoogenhout, Ph.D**  
Lead Data Scientist



**Mathias Ciliberto, PhD**  
Data Scientist



IP

# A robust IP defense strategy

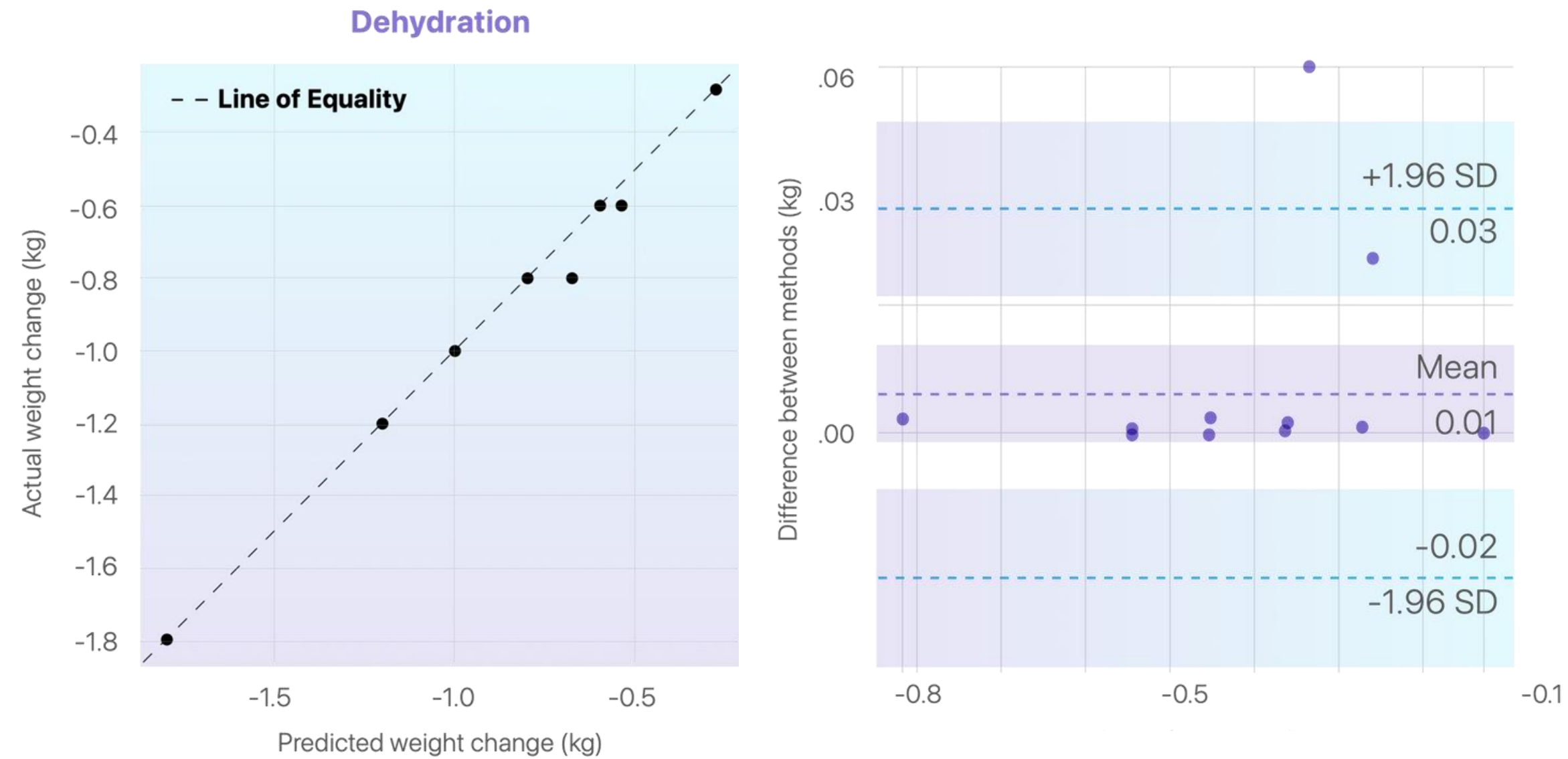
- US Utility Patent Issued (2021)
- Europe Utility Patent Published (2021)
- US Design Patent Issued (2022)
- US Utility Patent Issued (2023)
- 3rd Party Freedom to Operate (2024)
- China Utility Patent Issued (2024)

# Becoming the “intel inside” of hydration

**TIMEX****WHOOP®****OURA**



Successfully  
predicted fluid  
changes in 100+  
users in both  
lab and at-home  
settings



87%

Sensitivity and  
specificity in  
detecting  
hydration

0.01

Average error  
of 0.01kg (0.02  
lbs)  $\pm$  0.03kg  
(0.07 lbs)

# Following customer demand, we're starting by selling D2C before moving upmarket

**D2C Wellness  
(2024-25)**



**B2B/B2B2C Channels  
(2025-2026)**



**Remote Patient Monitoring  
(2026-2028)**

## Clinical Studies & Regulatory

**Phase 1 SBIR  
(2021-2022)**



**Phase 2 SBIR  
(2026-2028)**



**FDA listing / clearance  
(2026-2028)**



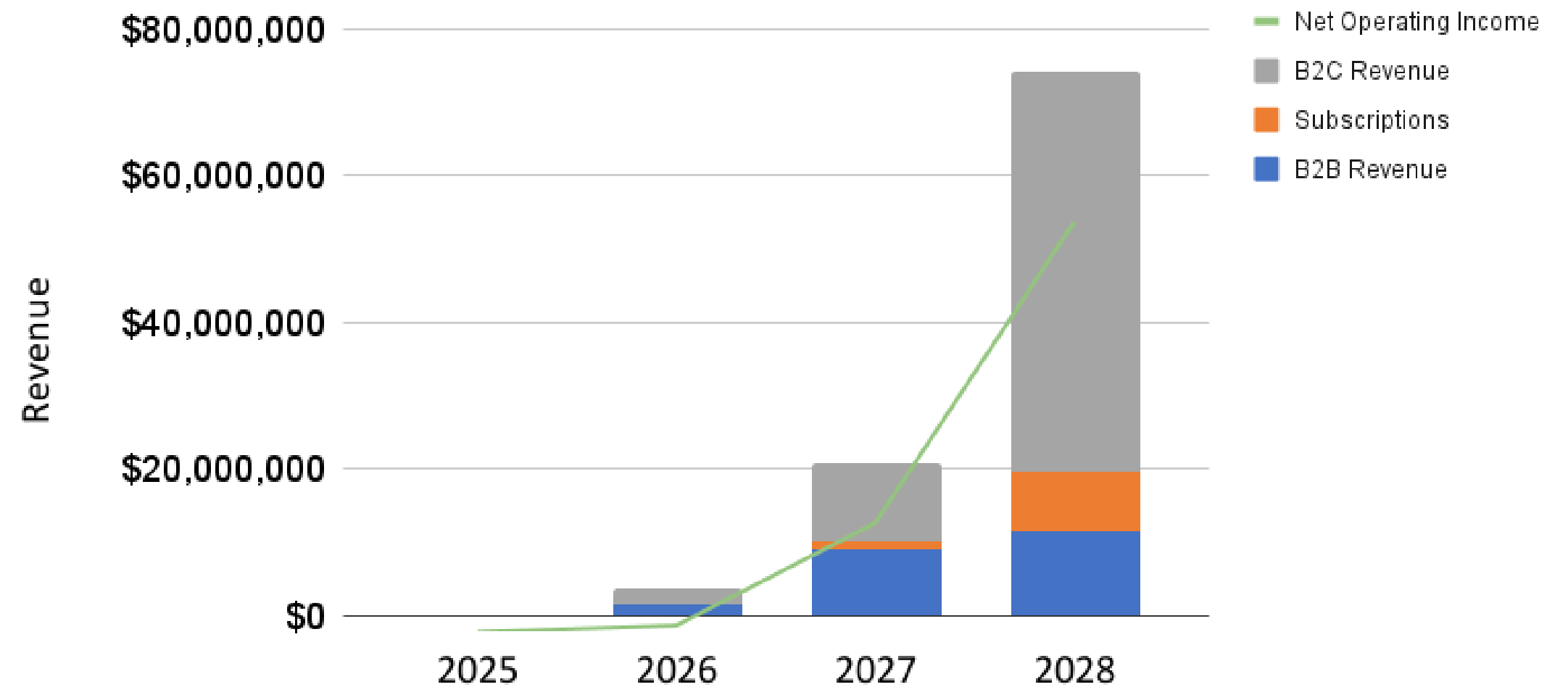
# We're raising \$2.5M to reach profitability

## Deal Terms

- Raising \$2.5m equity
- \$1m lead check in the bank

## Milestones

- Profitability in 2026
- 2 B2B contracts signed



# 87M people in the US suffer from chronic conditions that impact hydration

These chronic conditions are all authorized for remote patient monitoring

**7M**

Alzheimer's Disease  
and related Dementia

**36.5M**

Chronic Kidney Disease

**37M**

Diabetes

**6.5M**

Heart failure

**With existing reimbursement codes, this is a >\$17B market**



# Join Us!

## In Establishing Hydration As A Vital Sign

Contact

Debbie Chen | [dchen@hydrostasis.com](mailto:dchen@hydrostasis.com)





# Appendix

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# The cost of dehydration and fluid overload are huge

## Economic burden of dehydration

**518K**

Hospitalizations  
due to dehydration  
(2004)

**\$5.5B**

Cost of  
dehydration due to  
hospitalizations  
(2004)

## Economic burden of fluid overload

**\$1.3B**

Cost of  
hyponatremia for  
Medicare (1991)

**\$16.6B**

Cost of  
hyponatremia due  
to hospitalizations  
(2015)

## Adjusting for population, hydration costs the US \$31B per year



# The power of hydration: Billions saved in healthcare costs

A long-term care group, Azalee, developed and implemented “functional recovery” into their long-term care plans and discovered that proper hydration was key to many patients’ recovery. Hydration led to massive health and economic benefits.

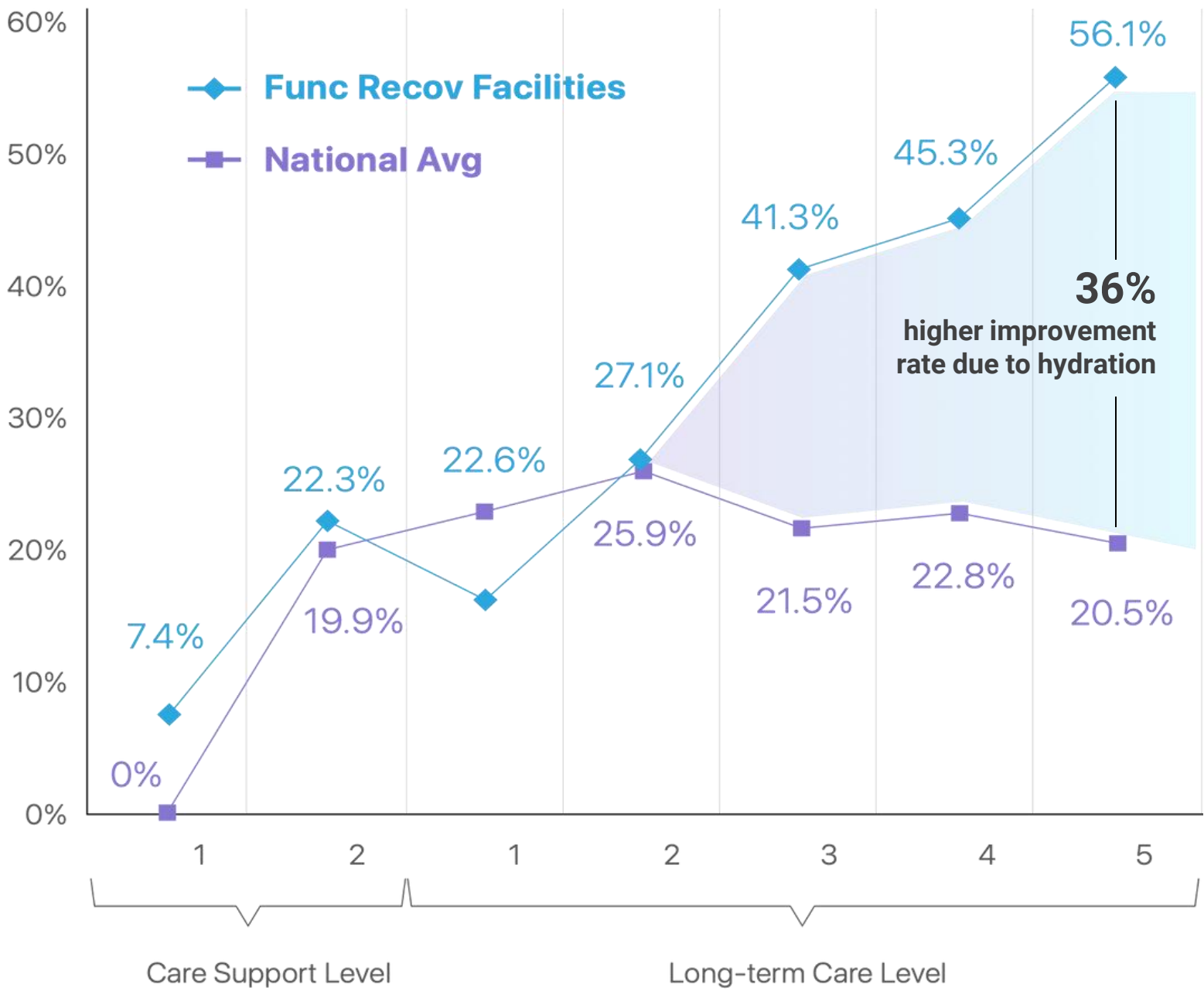
\$11B

Reduced long-term care costs in Japan

48%

of patients in the nursing home showed improvement after only 6 months


Improvement rate by degree of care required



Functional recovery support facilities are highly effective in improving the level of long-term care required for people with moderate or severe long-term care needs, and are expected to significantly reduce long-term care costs.



# No one else is offering a preventative solution

		 	  	
Technology	Optical - H2O	Sweat	Impedance/Optical- SpO2	Saliva
Personalized				
Continuous Monitoring				
Predictive Analytic				
Path to Healthcare			  	
Integrate into 3rd Party Devices				

# Path to \$100M in ARR through remote patient monitoring

U.S. Clinical business model:

Patients		Reimbursement per month		Months		Annual Recurring Revenue
42K	×	\$200	×	12	=	\$100M
This is only 0.05% of the 87M patients with chronic conditions that impact hydration in the US						
		Existing remote monitoring reimbursements codes justify a conservative estimate of \$200-400 per month				

# Improving health outcomes with early warning signs using Generative AI algorithms

## Proof of Concept Achieved

Using Geca signals and transformer networks, we predicted 45 seconds of future data based on 30 seconds of previous data.

This can be scaled to use previous 5 min of data to predict 15min into the future for early warning signs of dehydration or fluid overload.

Pre-grant



H2O, Hb, LIP

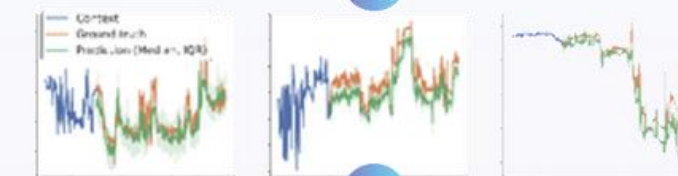
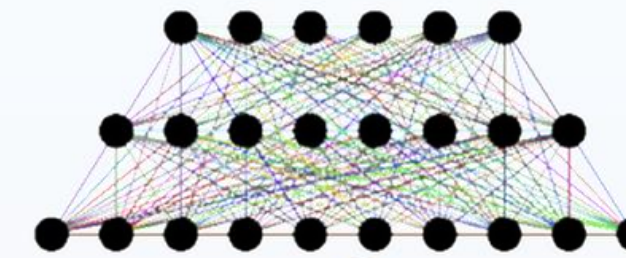
X Subjects



Accelerometetry

X Total hours of recordings

Self-supervised training of transformer network on signals



Grant

Fine-tune network to predict hydration indicators



Post-grant

Shrink network for edge device deployment

