

MERMADE

CELL CULTURE

MEDIA RECYCLING SYSTEM

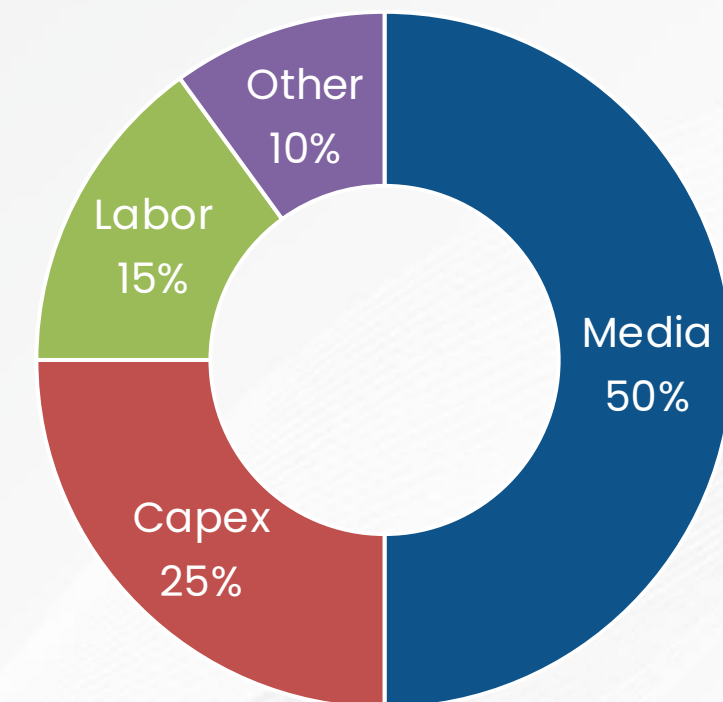
FOR BIOMANUFACTURERS

Daniel Einhorn, CEO



BACKGROUND

1. **Biologics are produced in cells grown in bioreactors, consuming growth media as “fuel” for growth**
2. **It's the #1 COGS driver (20–50%)**
3. **It's poorly utilized**
(30–90c/\$ invested in media is wasted)



PROBLEM

1/2 of all cell culture media consumed worldwide
is **discarded unutilized**

Why?

**No existing technology to separate waste from
nutrients**

This results in:

1. Biomanufacturers are losing billions annually to this problem
2. Hundreds of millions of liters of water needlessly consumed
3. Completely avoidable effluents



SOLUTION

Algae-based media recycling

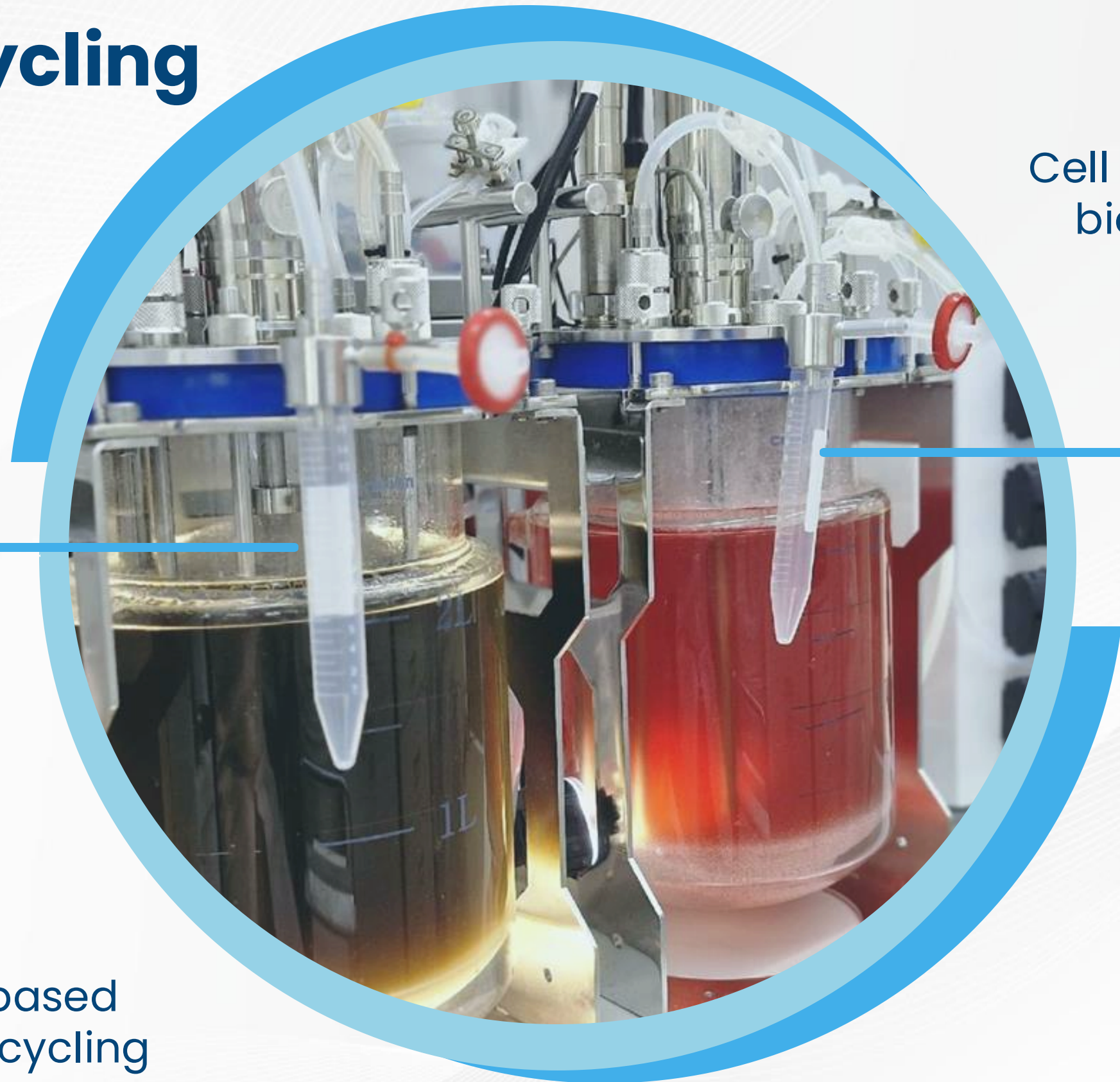
**Recovers >95% of
waste media**

**Reduces water
consumption <93%**

**Zero liquid
discharge**

Cell cultivation
bioreactor

Algae-based
media recycling



TECHNOLOGY

Pending patent protection in 6 territories (National Phase)



RESULTS

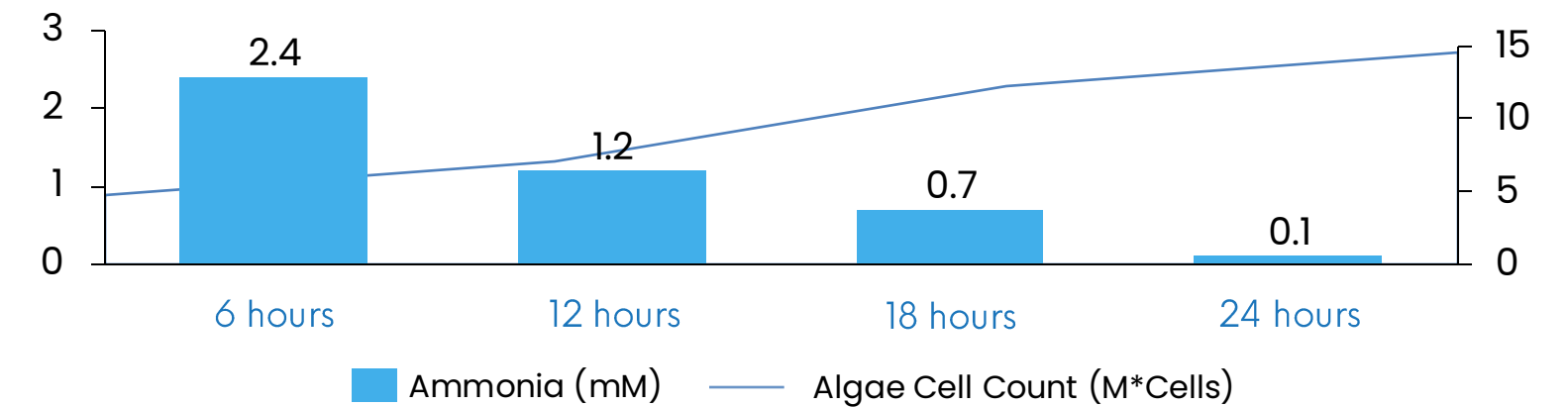
Our algae efficiently remove cell waste in under 24h

↔ **Zero ammonia and lactate in under 24h of treatment**

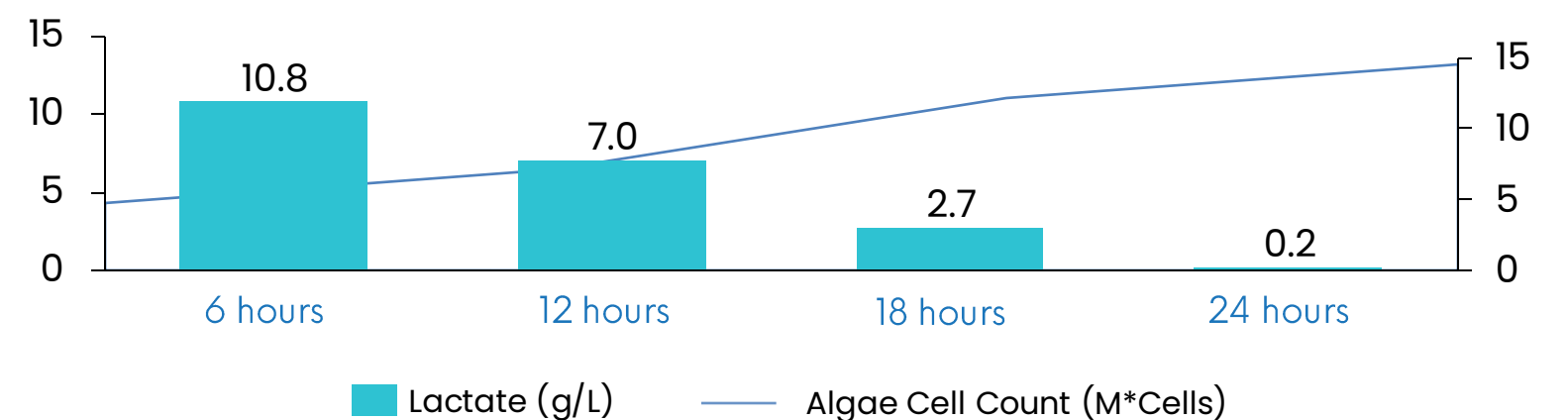
↻ **24% increase in proliferation compared to the current state-of-the-art**

📋 **93% less water ; 75% less nutrients**

Ammonia vs. Algae Concentration



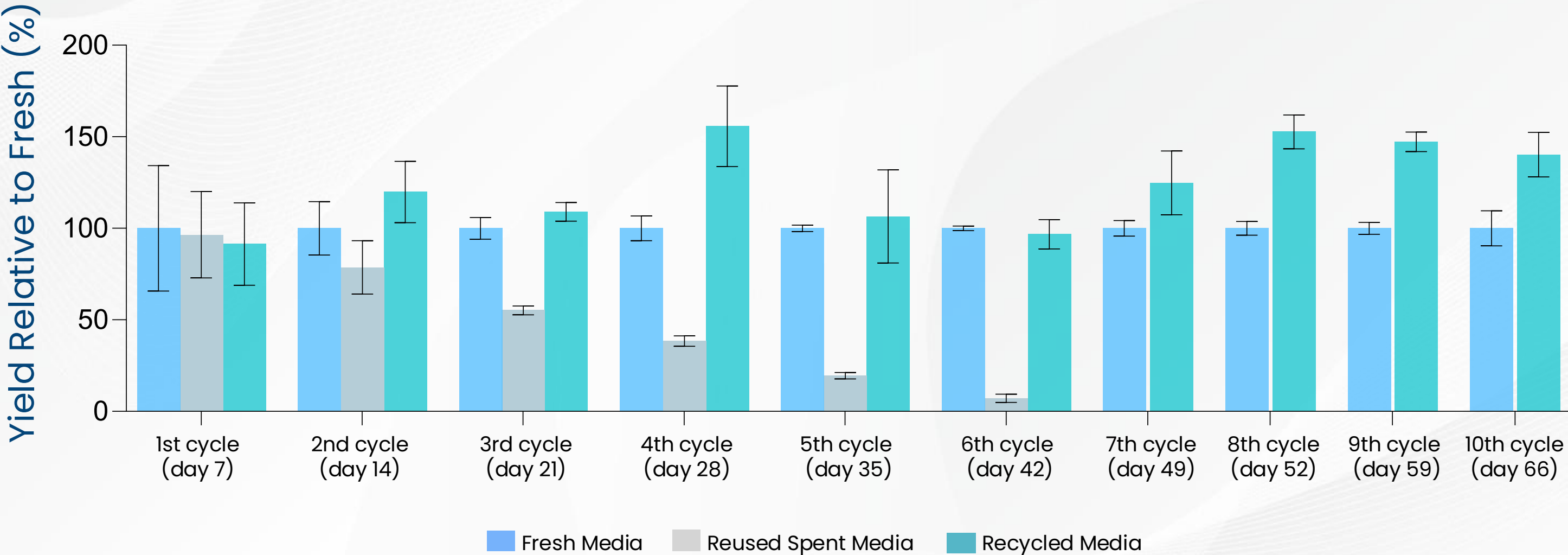
Lactate vs. Algae Concentration



SOLUTION - EVIDENCE

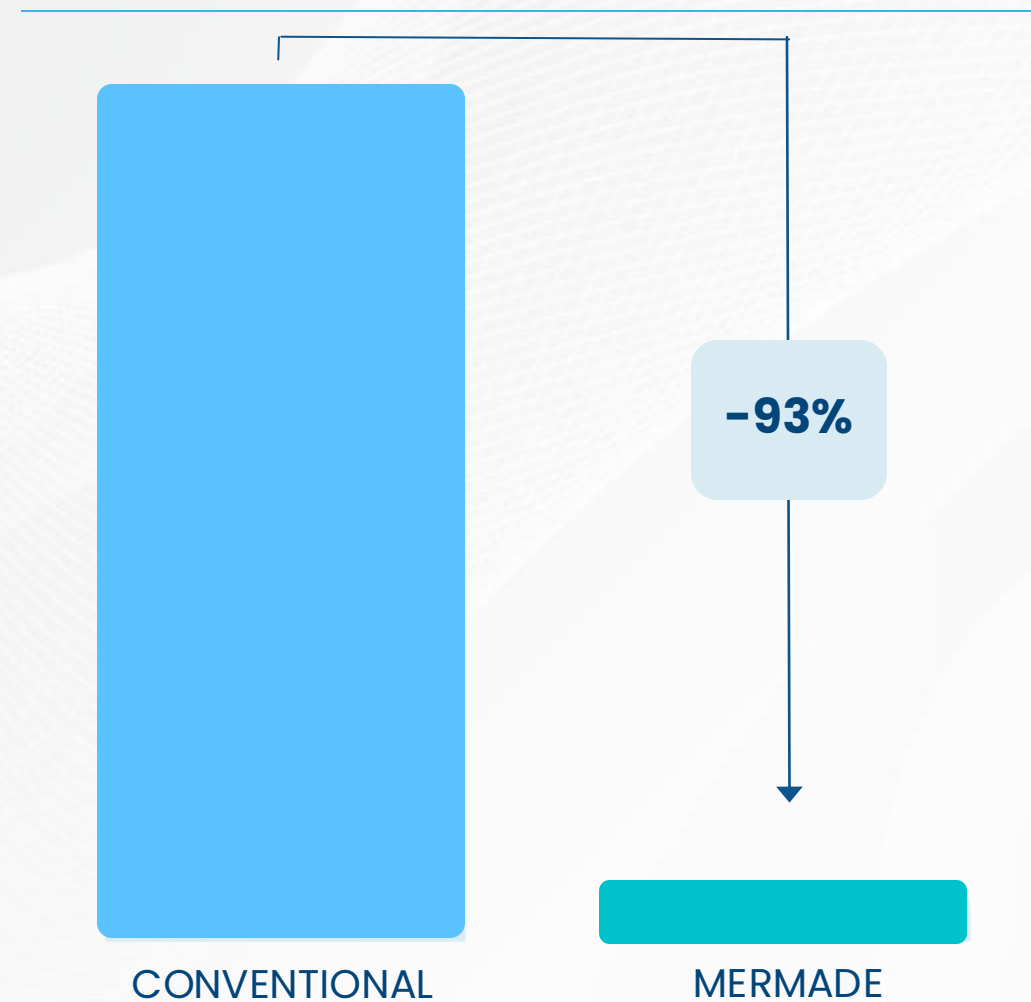
Recycled media supports long-term cellular proliferation without media exchange

Performance of recycled media in comparison to fresh media over 10 cycles of recycling / 66 days

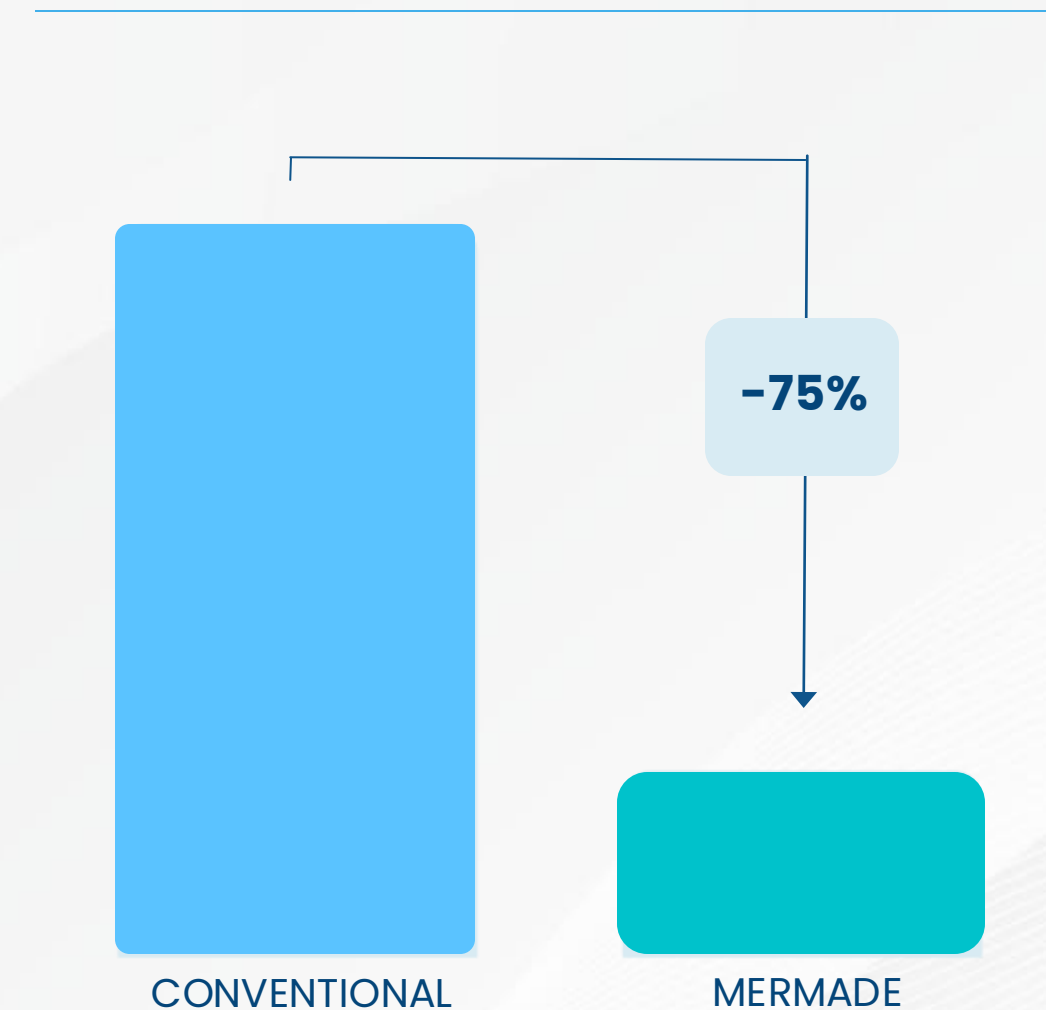


Media recycling reduces water and nutrient consumption substantially

WATER CONSUMPTION (%)



NUTRIENT CONSUMPTION (%)



Based on a 66-day cell cultivation program with 10 harvests at lab scale

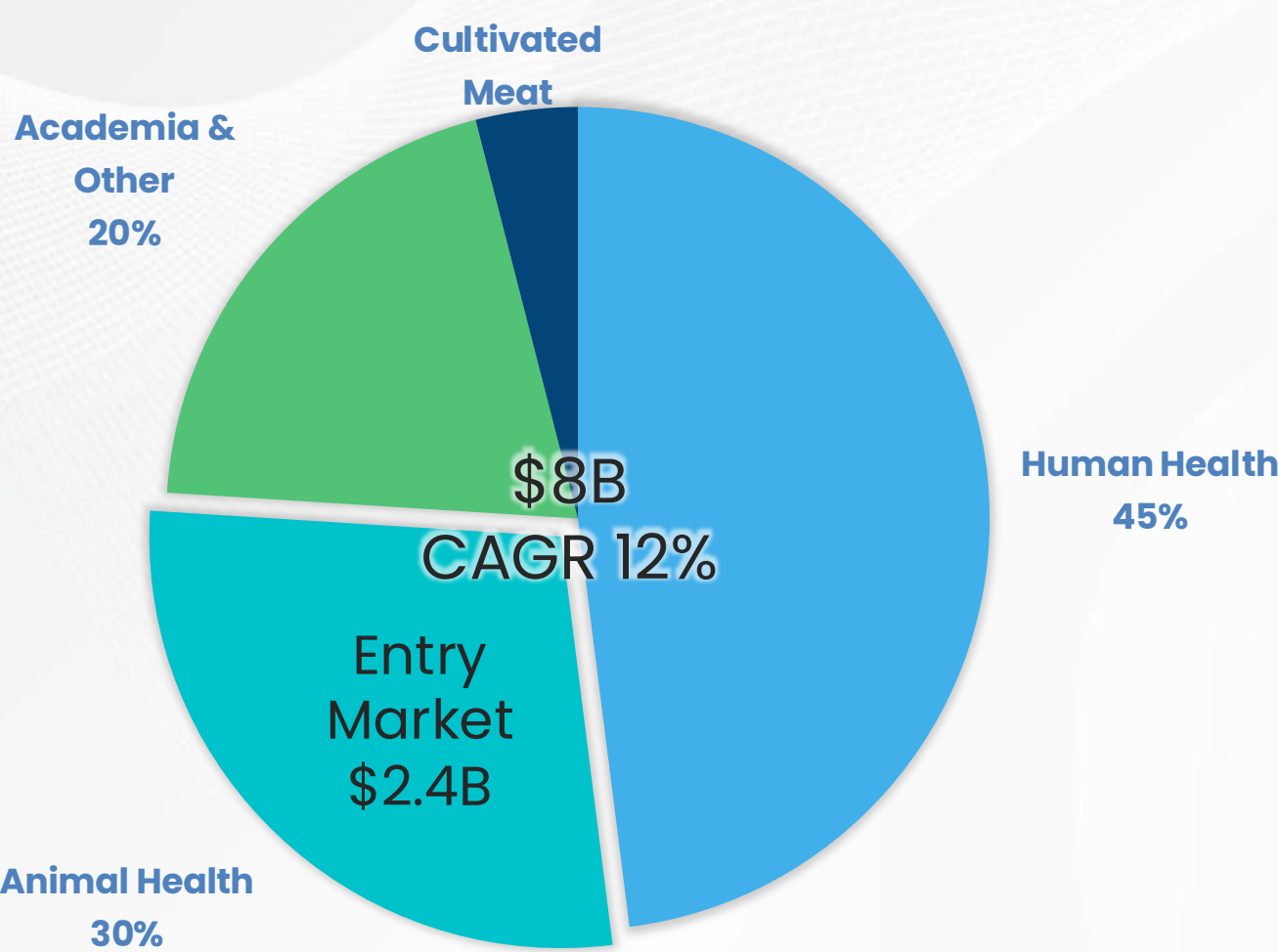
COGS REDUCTION IS

10–45%

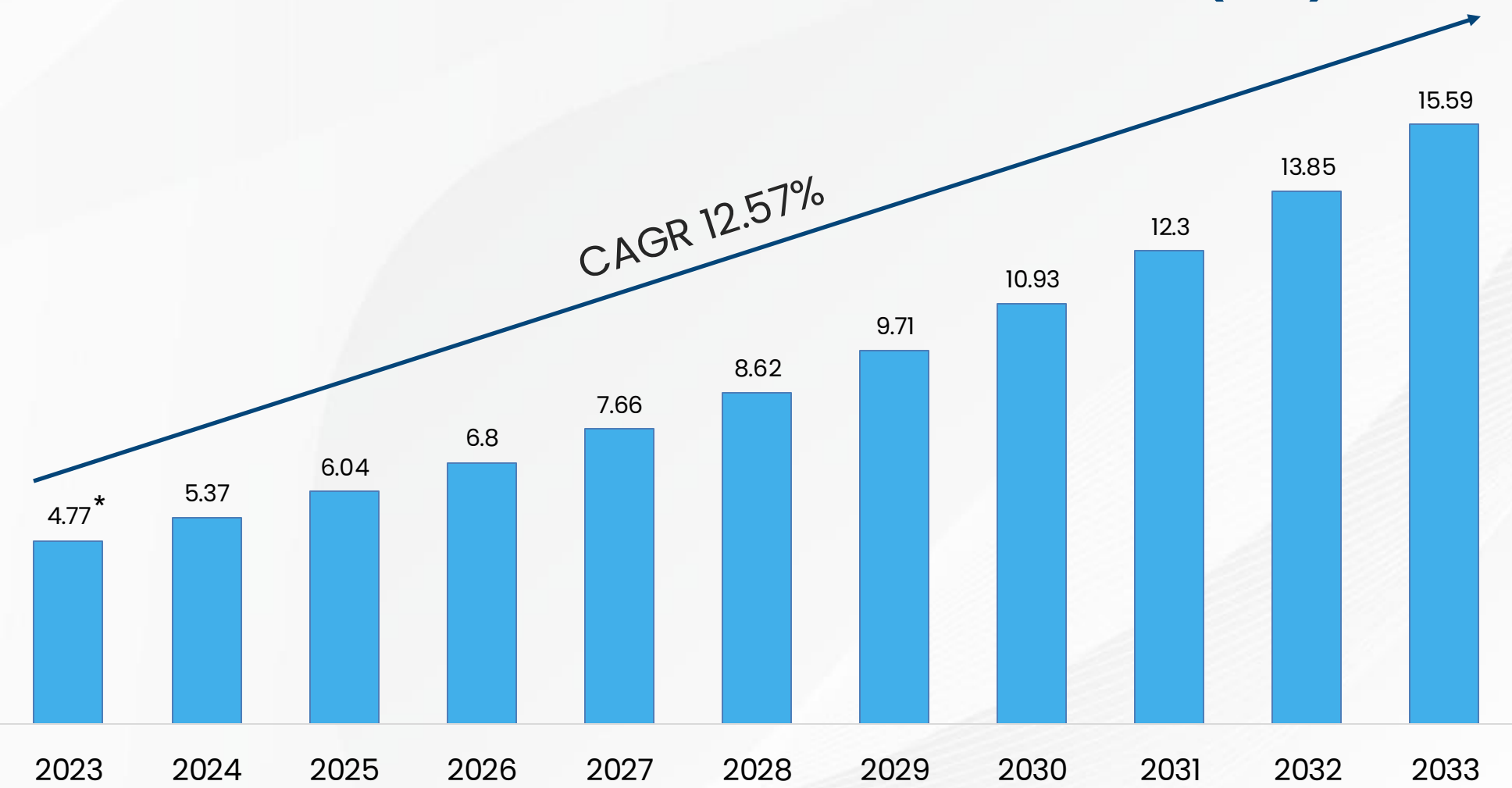
**Worth 5M – 50M\$ annually
per company**

Start with animal health to pave the way for human therapeutics

MEDIUM SPEND IN 2025



CELL CULTURE MEDIA MARKET SIZE 2023 TO 2033 (\$bn)



*Basal media only, excluding sera, factors, proteins



TRACTION

A planned paid pilot with two of the world's biggest animal therapeutics companies

We are here



And more on the horizon...

BUSINESS MODEL

We charge 25% of our clients' savings, ensuring that our goals are aligned with theirs

Onboarding Fee



\$250,000
one-time fee

Equipment

Installation

Implementation

+

Annual License



25%*
of expected savings

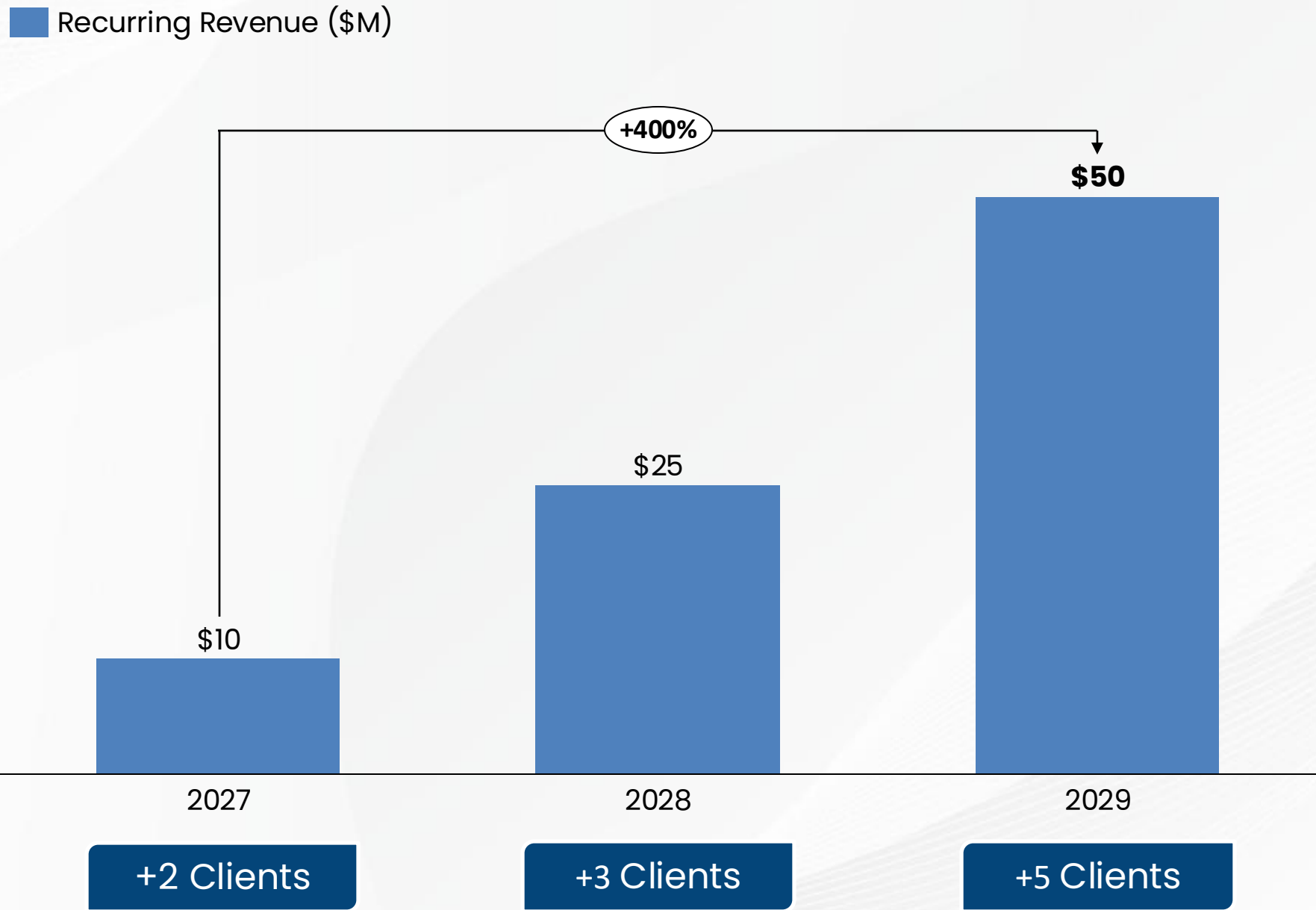
\$1-10M per client per year

*Assessed at the onboarding phase

FINANCIALS

We project \$50M in recurring revenue by 2029

Cashflow
positive in
2027



*based on a \$5M average annual licensing fee

The Dream Team

A team of entrepreneurs, innovators, cell-ag & microalgae experts



CEO—Daniel Einhorn, MBA

Serial entrepreneur, former CEO & Co-founder of Tech7 Venture Studio



COO—Tomer Halevy, PhD

PhD in genetics, created cell-line platform for Supermeat, designed bioprocess from bench scale to 50L



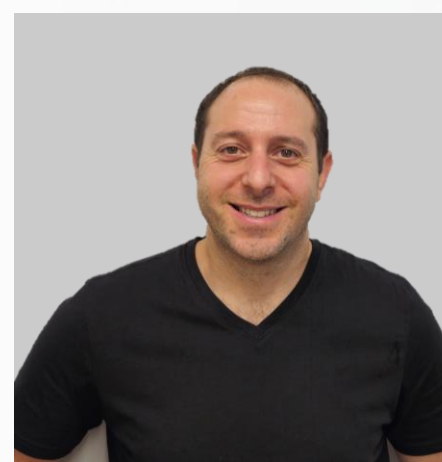
CTO—Rotem Kadir, PhD

PhD in genetics, established Supermeat's R&D lab, former Scientific Manager of Soos and Ovo Technologies



Algae Expert—Yaara Lezer

MSc in Life Sciences, 6+ years at Transalgae, managing cell-line bank, culture room, microalgae cultivation in bioreactors



Bioprocess Engineer—Liad Margalit

MSc in Biotechnology. 3 years of R&D and management of the bioprocessing team at Supermeat, developing and optimizing fermentation processes



Media Specialist—Nadav Neumann

MSc in Biotechnology. Over 3 years at Metabolic Insights as Formulation Specialist. Extensive experience in media optimization, and advanced cell culture techniques

2nd Round of Financing

Transform the economics and eco-footprint of bioproduction globally

- **Raising – \$5M**
- **2 Commercial Systems**
- **TRL 5 >> 8/9**
- **Recurring Revenue – \$10M**
- **Runway – 2 Years**

Supported by:





Thank you for listening !

Daniel Einhorn, CEO

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