

*"Pioneering real time biochemistry that drives AI-led,
personalized healthcare technologies"*



October 2025

NASDAQ: PFSA

INVESTOR PRESENTATION



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KEY INVESTMENT HIGHLIGHTS

- Platform technology yields multiple commercial revenue opportunities in the US and Europe
 - >\$10.5B+ global TAM in tissue and pulse oximetry oxygen monitoring by 2030 ⁽¹⁾
 - 500M+ people globally with diabetes in 2024, growing 45% by 2050 ⁽²⁾
- Commercial stage Oxygen Platform with large addressable markets
 - Projected revenue \$0.5 - 2 million in 2026, growing to \$200 – 250M by 2030
 - Lumee™ tissue oxygen monitoring launch: expected 1Q2026E (Europe) and 1H2027E (US)
 - Sales from research only use: expected 1Q2026
- Pipeline opportunities
 - Lumee™ continuous glucose monitoring (CGM) clinical data
 - Robust data discovery platform
- Capital Investment - \$150M+
 - \$22M PIPE - \$12M drawn
 - \$100M Equity Line of Credit - \$5M drawn
 - Bitcoin treasury strategy
 - Strong Family Office and Venture Capital support
 - National Institutes of Health (NIH). Defense Advanced Research Projects Agency (DARPA)
- 67 global patents issued and 18 pending

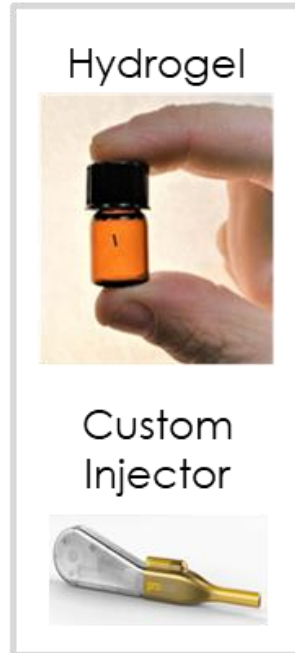
(1) <https://www.grandviewresearch.com/industry-analysis/pulse-oximeter-market>; <https://growthmarketreports.com/report/wearable-tissue-oxygenation-sensors-market>; <https://www.reanin.com/reports/global-medical-oxygen-sensors-market>

(2) <https://diabetesatlas.org/resources/idf-diabetes-atlas-2025/>

INJECTABLE HYDROGEL MICRO-SENSOR

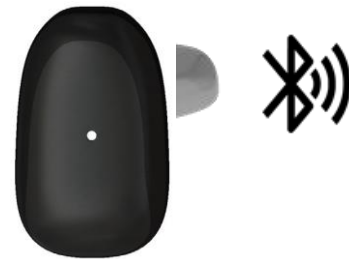
Low-cost novel subcutaneous biologically compatible hydrogel micro-sensor

9+ months functionality



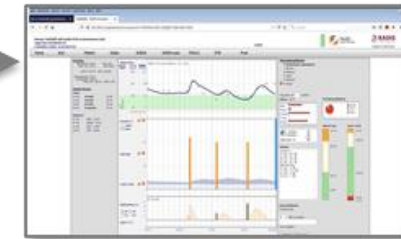
REUSABLE OPTICAL READER AND DATA MANAGEMENT

Low-cost optoelectronic reader, reusable consuming only an on-body adhesive



Continuous monitoring and data management of body chemistry

PERSONALIZED CLINICAL INSIGHTS



AI and Machine Learning enables personalized clinical insights



Low maintenance, cost effective, AI adaptive personal health management platform

ARTIFICIAL INTELLIGENCE (AI) DRIVEN DIGITAL HEALTHCARE



LUMEE PRODUCT PORTFOLIO

- Machine learning to create algorithms for enhanced monitoring
- Accounting for variations of the tissue composition for continuous accuracy while still using the single injectable sensor
- Multiple calculations around other physical variables and fluctuations with regard to creating accurate oxygen and glucose measurements
- Providing real-time comparison across data sets

DATA DISCOVERY PLATFORM

- Building using best-in-class Nvidia technology backbone
- Potential of large volume of real-time data for clinical insight
- Profusa's critical body of data enable future AI-driven healthcare
- Planned physician portal to link real-time biochemistry with EMR and published clinical literature
- Machine discernment between privacy-protected data and useable data across any given network

OPERATIONAL FOCUS TO DRIVE REVENUE



**Q1 '26 Revenue;
Projected \$200-250 million by 2030**

AI and Data Science	Revenue/ Commercial	Finance/ Resources	Regulatory/ Clinical	Manufacture/ Operations
<ul style="list-style-type: none"> • <i>NVIDIA Collaboration for AI backbone</i> • <i>AI-driven decision and insight portal</i> • <i>AI-driven data algorithm</i> 	<ul style="list-style-type: none"> • <i>3 collaborations with high volume centers in key EU markets with additions planned</i> • <i>Distribution network covering ~35% of EU market</i> 	<ul style="list-style-type: none"> • <i>\$22M PIPE</i> • <i>\$100M ELOC facility</i> • <i>Bitcoin treasury management strategy</i> • <i>Access to additional public equity</i> 	<ul style="list-style-type: none"> • <i>EU clinical studies for application expansion</i> • <i>US regulatory studies underway</i> • <i>Q1 '26 expected EU MDR certification</i> 	<ul style="list-style-type: none"> • <i>In-house Sensor manufacturing clean room certified</i> • <i>Excess manufacturing footprint to meet demand</i>

85 global patents granted or pending
Addressing large unmet global clinical needs

Advanced proprietary technology
More than \$100 million invested, \$30 million from DARPA

REVENUE PLATFORM BY CLINICAL INDICATION

Platform Opportunity

Users in Glucose, Oxygen (US/EU)

Other opportunities: Lactate, CO₂, Sodium, Ethanol

**Clinical-Grade Real-Time Data; Long-Term Usability;
Simple Deployment; Cost Advantage; Substantial
Support from DARPA and NIH**

OXYGEN PLATFORM:

- Planned 1Q2026 Critical Limb Ischemia (CLI) launch in EU
- Planned 1Q2027E CLI launch in US
- Wound care applications
- Home remote monitoring potential
- Other potential applications: cell hydration, physical performance, infection surveillance

GLUCOSE PLATFORM:

- Large, high-growth global market potential
- Clinical need for continuous glucose monitoring >270 days
- Applications beyond Type I diabetes
- Low-cost position provides accessibility for global users

DATA DISCOVERY:

- Potential true enablement of AI-driven health care
- Enables remote monitoring
- Mass-adoption potential due to cost advantage
- Wide-ranging applications
- Potential of simultaneous sensing of multiple analytes
- Planned AI Integration for physician portal and coaching

MISSION DRIVEN EXECUTIVE MANAGEMENT



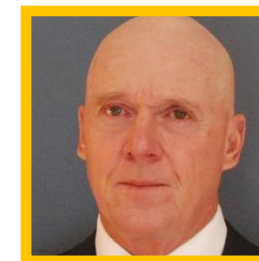
Ben Hwang Ph.D.,
Chairman, CEO

From his early exposure as an undergraduate research fellow at the lab of Leroy Hood at Caltech, where the automated DNA sequencer was developed, to bringing cutting edge life sciences tools to the market at Life Technologies Corp. (acquired by Thermo Fisher Scientific, Inc.), Ben has seen first-hand the transformative impact that science and technology have to change our world.



Bill McMillan
Co-founder, CSO & Head of Research

Bill was the initial driving force behind Profusa, he built the company road map, enlisted top talent & secured seed funding. A co-inventor of Profusa's biologically integrated sensor & optical reader, Bill is a biotech pioneer whose career has spanned more than three decades in the development of next-generation diagnostic, medical device technologies and products, the last 20 years as an entrepreneur.



Fred Knechtel
Chief Financial Officer

Fred led finance and operations activities from start-ups to multi-billion dollar publicly traded companies. As CFO, he guided organizations operating in the life sciences, automotive, consumer products and aerospace industries through profitable growth, capital restructure, mergers/acquisitions/sales and IPOs. Companies include Northrop Grumman, Stanley Black and Decker, DuPont, Remy International, Sims Metal Management and GENEWIZ (Azenta)



Sean Givens
Head of Government Business

Sean comes to Profusa with 20 years of experience in government accounting and contracting, as well as extensive operations experience in consumer electronics, medical devices and drug development. Most recently Sean was a co-founder and COO of MIODx, a company focused on immune repertoire,



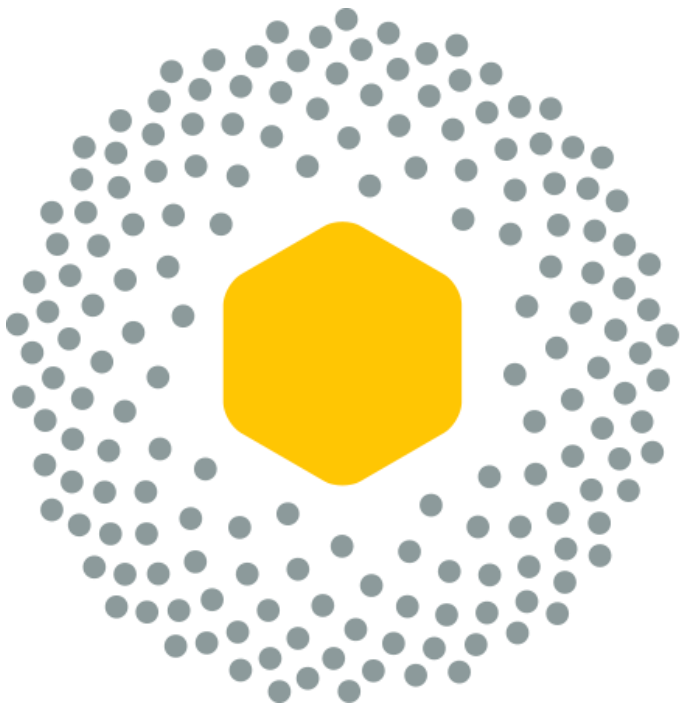
Kerstin Rebrin, M.D., Ph.D.,
VP of Medical Affairs & Clinical Development

Kerstin is responsible for developing & executing Profusa's Medical & Clinical strategies. Dr. Rebrin is a seasoned physician-scientist with clinical & research experience in the field of diabetes & other metabolic diseases. She is known for her pioneering artificial pancreas research with introducing continuous glucose sensing & therapy algorithms based on glucose monitoring for various routes of insulin delivery.



Aide Sordet
GM OF EUROPE

Aude brings extensive international experience in commercial strategy, marketing, and business leadership across Europe and Asia in senior roles at Bayer, M8 Pharmaceuticals and GC Aesthetics. Aude has successfully led cross-functional teams, driven market growth, and forged strategic partnerships to expand regional presence. Aude combines medical insight with strategic vision to advance innovative healthcare solutions and strengthen Profusa's European operations.



Tissue Oxygen Monitoring

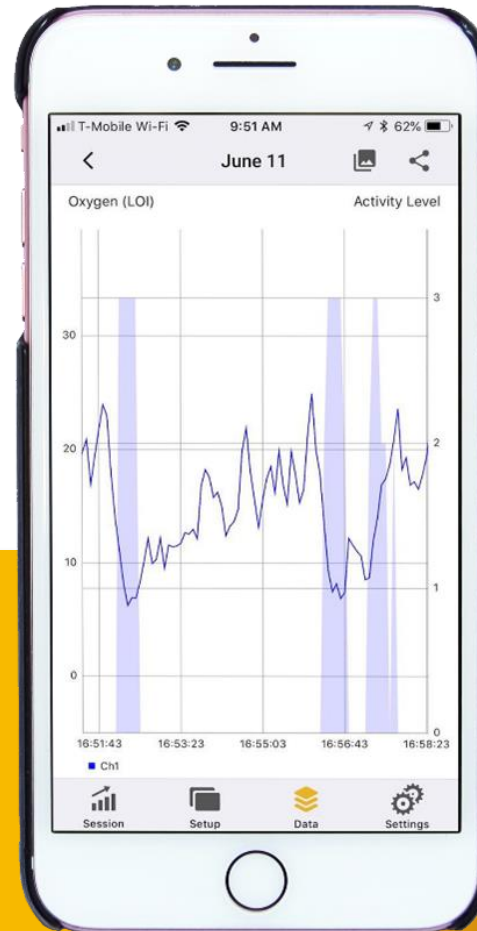
Lumee™ Patch



Lumee™ Oxygen



Lumee™ App



Lumee™ Pen



charger

LARGE UNMET NEED

- ~6.5 million patients with Critical Limb Ischemia (CLI) in US, Europe, and Japan ⁽¹⁾
- ~\$4.9 billion market in 2022 growing at 8% CAGR ⁽³⁾
- ~1.1 million CLI procedures in US and EU in 2025 ⁽¹⁾⁽²⁾⁽³⁾
- Lack of decision support:
 - Decisions largely based on clinical experience
 - Clinicians need a tool to provide objective information about tissue perfusion

EUROPEAN MARKET OVERVIEW AND COMMERCIALIZATION PRIORITIES

2025 Estimated EU
~716,000 CLI procedures/year ⁽²⁾⁽³⁾

Tier 1

Top 3 markets in size

- Germany ~110 k/ y
- France ~60k/ y
- Italy ~50k/ y

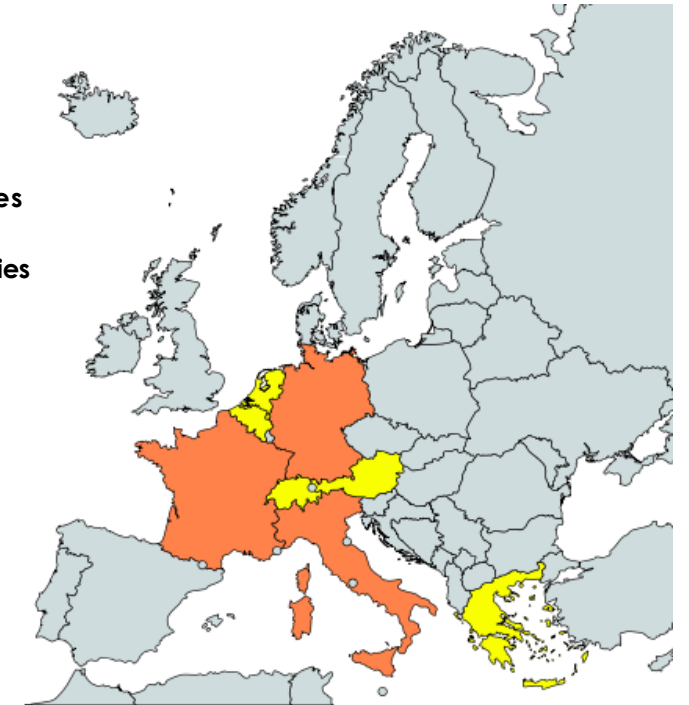
 Tier I countries

 Tier II countries

Tier 2

Important markets in size and / or KOL presence

- Austria
- Benelux
- Switzerland
- Greece



**LARGE AND DYNAMIC EUROPEAN ENDOVASCULAR MARKET:
~716,000 procedures in 2025 (~8% CAGR in the 5 next years)**

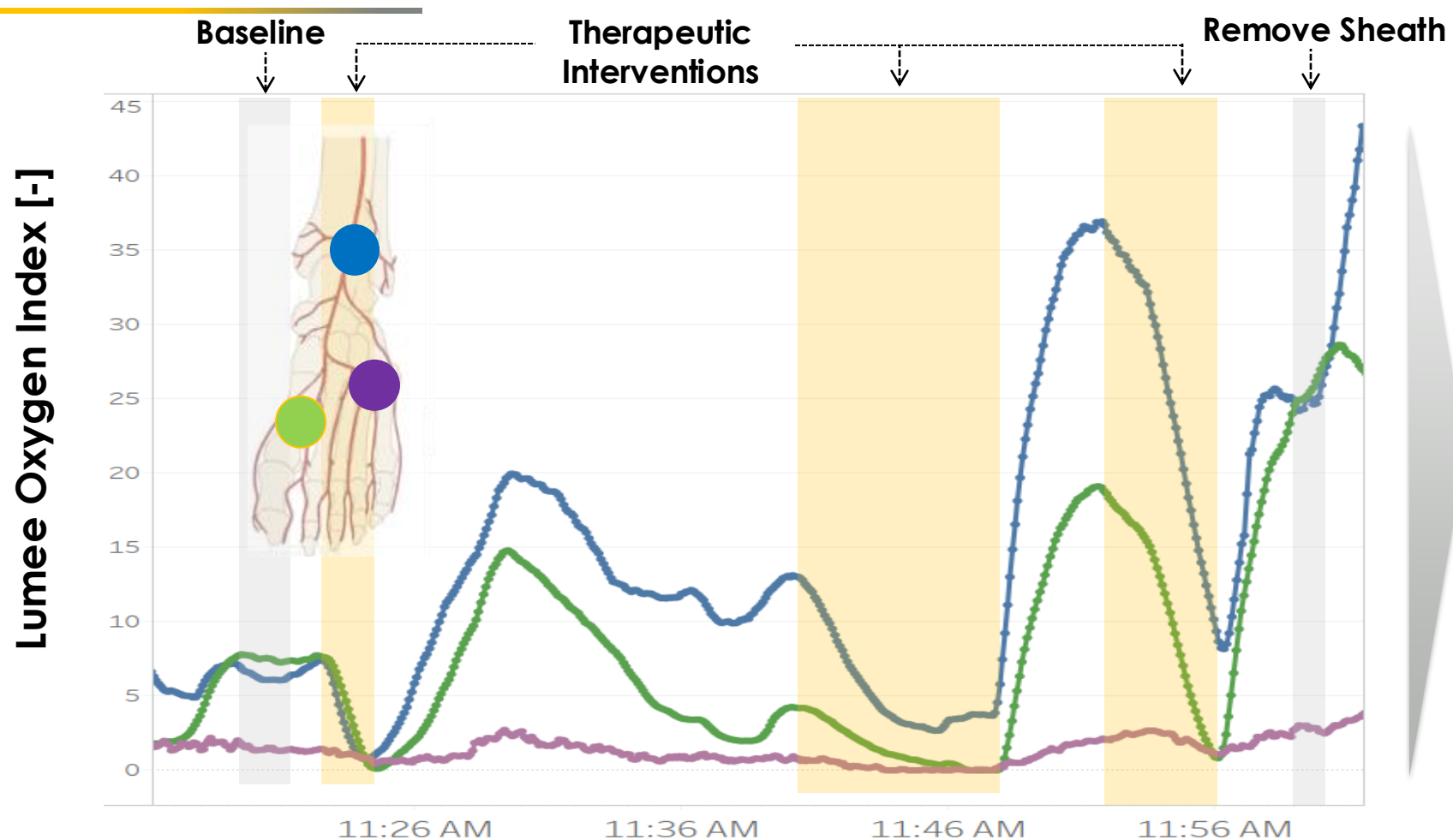
(1) <https://www.grandviewresearch.com/industry-analysis/critical-limb-ischemia-treatment-market-report>

(2) <https://pmc.ncbi.nlm.nih.gov/articles/PMC6617560/>

(3) https://journals.sagepub.com/doi/10.1177/1358863X19878271?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed

LUMEE OXYGEN IN ACTION WITH CLI PATIENT

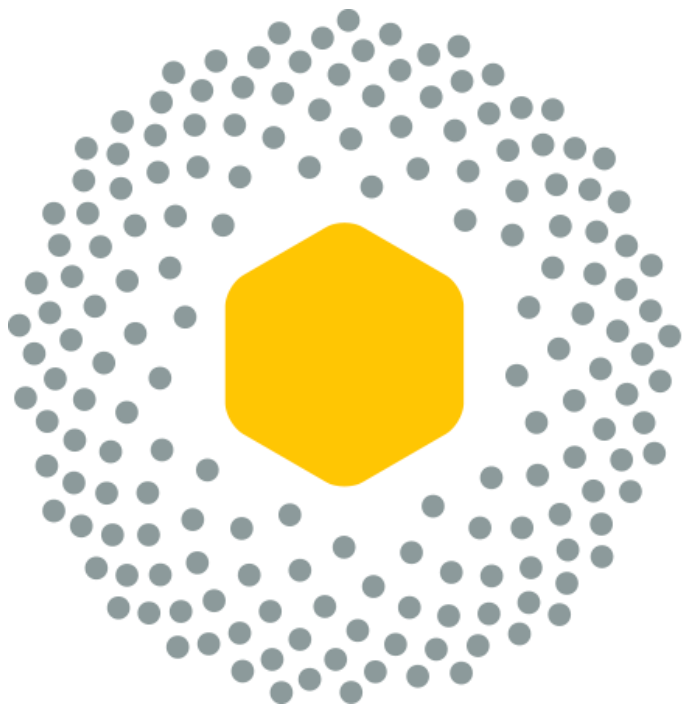
FIRST OXYGEN APPLICATION REVENUE EXPECTED 1Q2026



Lumee™ Oxygen Platform reports local tissue oxygen levels during PAD/CLI surgical intervention as well as post-operatively for 28 days, and posed a low risk to patients during the study⁽¹⁾

- Actual case data
- Intra-operative GPS
- Data for real-time decisions
- Enables in-home monitoring

Lumee™ OXYGEN PROVIDES REAL-TIME INSIGHTS DURING SURGERY
VALIDATES PROFUSA TECHNOLOGY PLATFORM



Continuous Glucose Monitoring

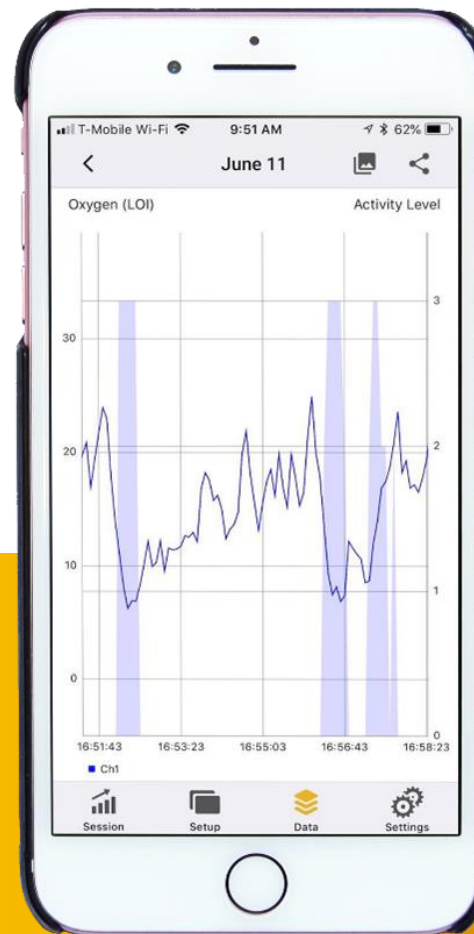
Lumee™ Patch



Lumee™ Oxygen



Lumee™ App



Lumee™ Pen

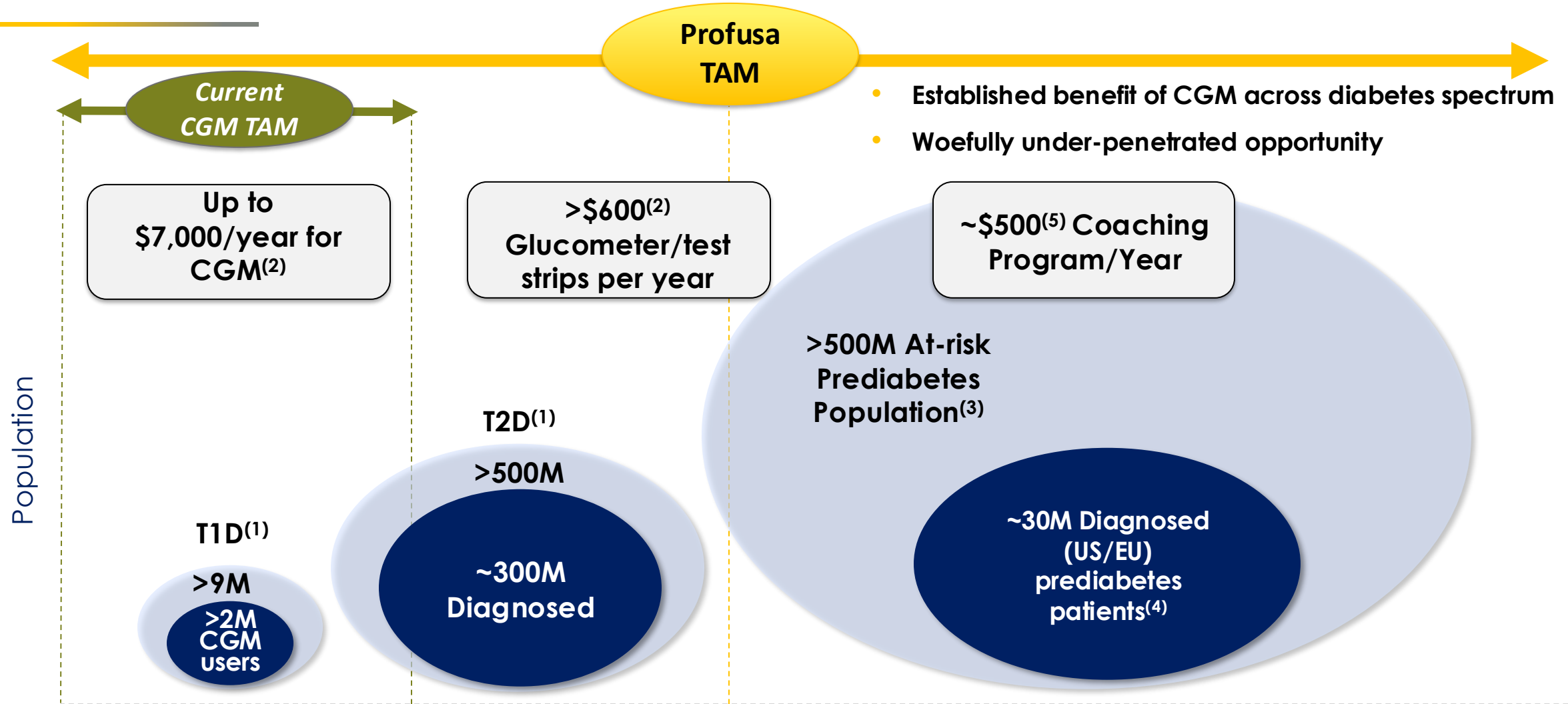


charger

>590M DIABETES PATIENTS GLOBALLY – CGM OPPORTUNITY



FROM “CAN YOU AFFORD IT” TO “DO YOU NEED IT?”



(1) <https://diabetesatlas.org/resources/idf-diabetes-atlas-2025/>

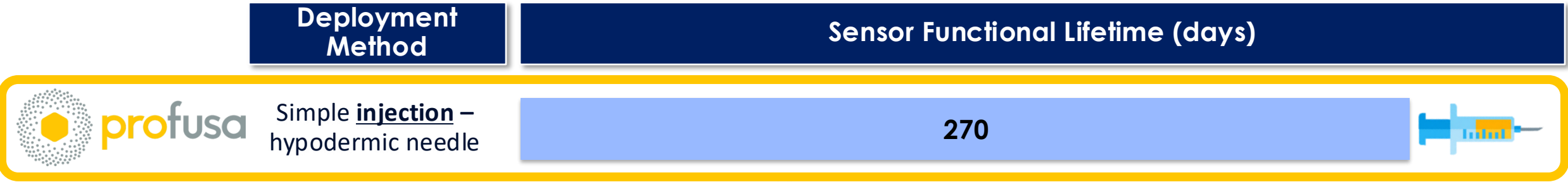
(2) <https://www.goodrx.com/classes/medical-supplies-and-devices/should-you-be-subscribing-to-have-your-test-strips-delivered>

(3) [https://www.thelancet.com/journals/landia/article/PIIS2213-8587\(25\)00034-8/fulltext](https://www.thelancet.com/journals/landia/article/PIIS2213-8587(25)00034-8/fulltext)

(4) <https://pmc.ncbi.nlm.nih.gov/articles/PMC6507173/>

(5) <https://nationaldppcsc.cdc.gov/s/article/FAQ-Cost-of-the-Program-1526419435855#:~:text=On%20average%2C%20the%20cost%20per,who%20are%20uninsured%20or%20underinsured.>

DIFFERENTIATED, ADVANCED CGM SOLUTION



VS.



**Current CGM market in intensively managed type 1 and 2 patients:
TAM expansion opportunity with at risk chronic patients**

Source:

<https://www.dexcom.com/en-us/faqs/can-i-restart-dexcom-g6-sensor-after-10-days>; <https://www.medtronic.com/ca-en/diabetes/home/support/product-support/cgm-sensors.html>

LUMEE™ Glucose



Current CGM Pain Points	Profusa's CGM Solution
✗ New sensor required every 10–14 days	✓ Overcomes foreign body response: >270 days functionality
✗ 180-day solution requires surgical implant	✓ Simple hypodermic needle injection of sensor
✗ Up to \$6,000 annual cost ⁽¹⁾	✓ High margin, low cost : (\$900/year at >80% GM potential) ⁽²⁾
✗ Cost effective for intensively managed patients only	✓ T1D through Health and Wellness patients >500 million TAM

According to Strategic Market Research, the CGM market is expected to grow from \$6B to \$16B by 2030

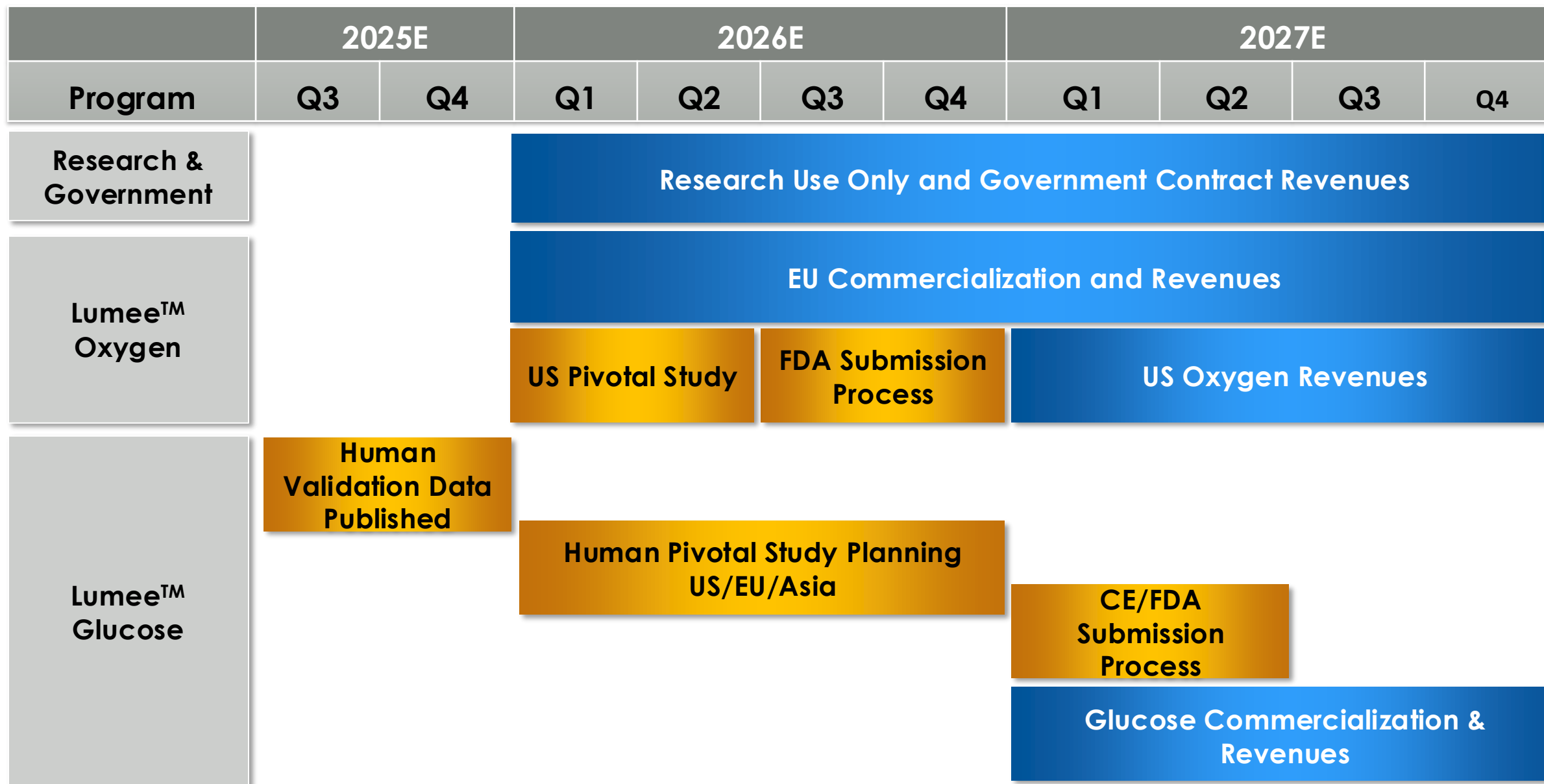
LUMEE™ GLUCOSE CLINICAL TRIAL

Demonstrated Safety and Functionality

- Clinical trial evaluated the safety and functionality of the glucose platform, sensor, reader and AI platform
 - 4 Clinical sites
 - Two European clinical sites
 - Two Asian clinical sites
- 54 Subjects enrolled
- 108 Sensors injected; 398 study visits completed
- 745 Glucose traces collected; >18,000 paired reference points
- Top line results: MARD⁽¹⁾ 10-12%; functionality >270 days: safety profile met



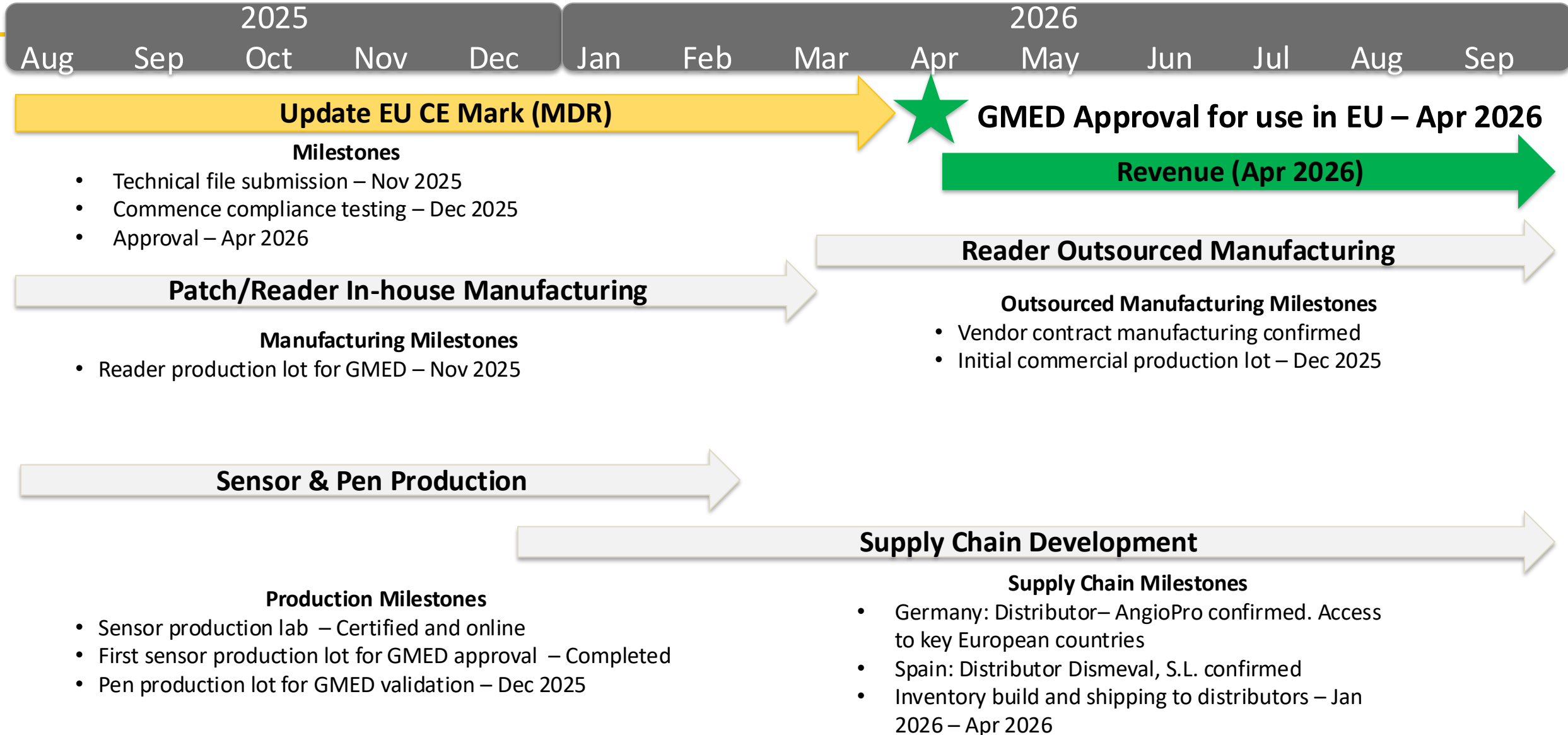
COMMERCIALIZATION ROADMAP



EU OXYGEN ROADMAP TO REVENUE



Manufacturing and Supply Chain



Update EU CE Mark (MDR)

Milestones

- Technical file submission – Nov 2025
- Commence compliance testing – Dec 2025
- Approval – Apr 2026

GMED Approval for use in EU – Apr 2026

Revenue (Apr 2026)

Patch/Reader In-house Manufacturing

Manufacturing Milestones

- Reader production lot for GMED – Nov 2025

Reader Outsourced Manufacturing

Outsourced Manufacturing Milestones

- Vendor contract manufacturing confirmed
- Initial commercial production lot – Dec 2025

Sensor & Pen Production

Production Milestones

- Sensor production lab – Certified and online
- First sensor production lot for GMED approval – Completed
- Pen production lot for GMED validation – Dec 2025

Supply Chain Development

Supply Chain Milestones

- Germany: Distributor– AngioPro confirmed. Access to key European countries
- Spain: Distributor Dismeval, S.L. confirmed
- Inventory build and shipping to distributors – Jan 2026 – Apr 2026

Distribution partners and Profusa commercial team will market directly to Centers

- High Volume Hospital Centers: perform 1,000 to 1,500 procedures/year
- Ambulatory Centers & Doctors' Offices: perform 200 – 1,000 procedures/year

Equipment required for center to perform procedure

- Each center will require 3 kits to perform the annual procedures
- Each kit contains (1) tablet (iPad) with software preloaded, (4) patches/sensors and a small supply of adhesives
- Each procedure will require (4) sensors and (4) pens

Revenue⁽¹⁾

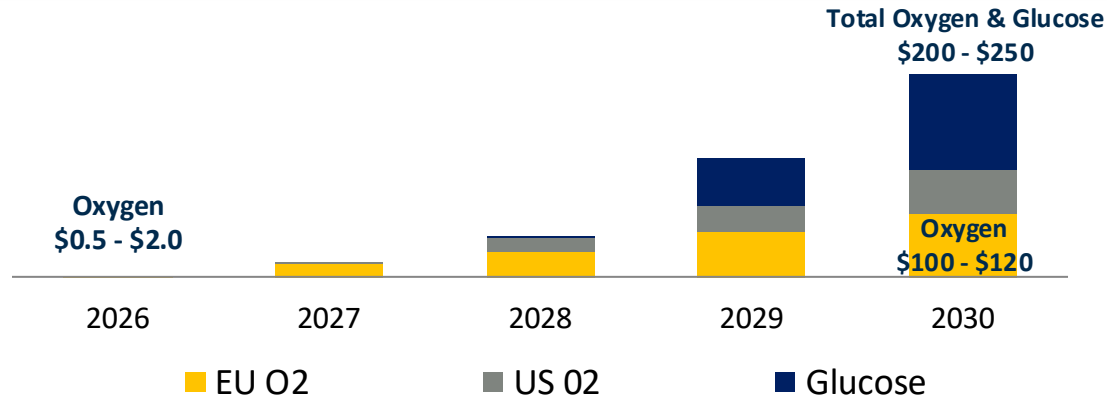
- Projected to be 600 EUR per procedure
- Startup kits projected to be 10,000 EUR per kit

⁽¹⁾ Based on Internal projections

OXYGEN COMMERCIALIZATION PAVES WAY FOR GLUCOSE



Projected Revenue (\$millions)



Assumptions

Critical Limb Ischemia (CLI) est. 2025 Market: ~1.1 million procedures in the US and EU, growing at 8% CAGR ⁽¹⁾⁽²⁾⁽³⁾

- 2025 est. procedures in EU: ~716,000 ⁽²⁾⁽³⁾
- 2025 est. procedures in US: ~425,000 ⁽²⁾⁽³⁾

Estimated Average center performs 400-500 procedures per year ⁽⁴⁾

Expect 20% of center's procedures to utilize Lumee Oxygen monitoring

Revenue sources

- Equipment starter kit (2-3 kits per center) - €10,000 per kit
- €600 - €800 (\$700 - \$900) per procedure plus ancillary supplies

Sources and Uses of Funds (16 month runway)

Liquidity

- Cash and cash equivalents \$4.0M
- Undrawn cash portion of \$22M PIPE \$10.0M
- **Total Cash Availability** **\$14.0M**
- **Availability under the ELOC** **\$95M**

Use of Funds

- **Monthly Operational burn rate** **\$0.8M**
 - Salary & benefits \$0.3M
 - Operational initiatives \$0.2M
 - Professional services (IR, Audit, Legal) \$0.3M

Milestones (Green highlighted complete)

AI development – Adoption of NVIDIA technology backbone

Update EU Oxygen CE Mark/MDR – Targeting product shipment by 4/26

US FDA – Targeting study commencement in '26 approval early '27

Engage 10-15 Treatment Centers with leading CLI surgeons in '26

- Austria Medical Center; Dr. Marianne Brodmann; ~1,500 procedures annually
- Paris vascular center; Dr. Yann Goeffic; performs ~8% of France's CLI procedures
- Belgium vascular center; Dr. Koen R Deloose

Current Distribution Partnerships covers ~35% of European procedures

- **AngioPro partnership**; territory covers ~30% of EU population
- **Dimeval, S.L. partnership**; covers procedures in Spain

Manufacturing and supply chain

- **Build manufacturing capabilities: Sensor manufacturing lab – Certified**
- Pen and patch/sensor outsource manufacturing – Targeting **Dec 2025**
- Inventory build and shipping to distributors – Targeting **Feb 2026**

(1) <https://www.grandviewresearch.com/industry-analysis/critical-limb-ischemia-treatment-market-report>

(2) <https://pmc.ncbi.nlm.nih.gov/articles/PMC6617560/>

(3) https://journals.sagepub.com/doi/10.1177/1358863X19878271?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed

(4) Customer interviews and internal analysis

DIFFERENTIATED TECHNOLOGY

- Potential to change industry standard functionality from 14 to 90 days for initial product and eventually >270 days
- ~10 years and ~\$100M invested in developing technology. More than 85 global patents issued and pending
- Clinical and third-party validation (~\$30M DARPA and NIH non-dilutive grants)

LARGE ADRESSABLE MARKET

- ~\$10.5B+ TAM in oxygen
- ~500M+ T1, T2 & at-risk chronic patients in CGM
- Other opportunities: lactate, CO₂, sodium, ethanol, AI-led data discovery platform
- Low-cost solution: addresses medical challenge of foreign object rejection and enhances potential for Global markets

CLINICAL & REGULATORY MILESTONES

- ***Lumee™ Oxygen MDR qualification for 1Q2026E European commercial launch***
- Human safety and performance data for CGM
- Defined regulatory pathways for FDA approval

FINANCIALS

- ~1.1 million procedures EU/US market potential growing at 8% GAGR for oxygen platform
- Oxygen 2026 revenue expected to be \$0.5 - \$2.0M and projected to be over \$100 million in 2030
- Glucose revenue projected to start in 2027 - over 500M US/EU user market potential
- \$22M PIPE and \$100M Equity Line of Credit



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