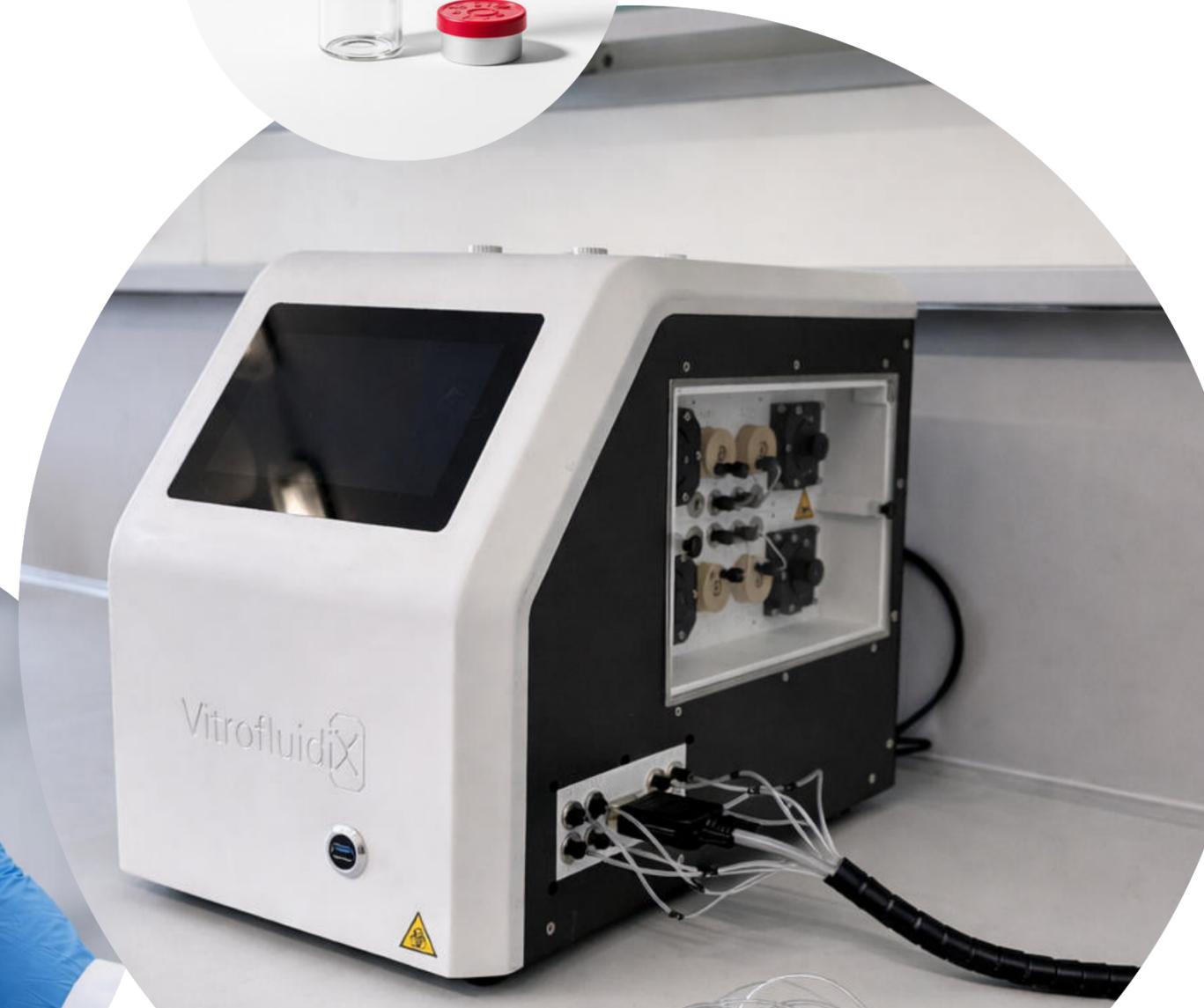


VitrofluidiX

The world's first fully integrated, adaptable
organ-on-a-chip platform for simulating human organs



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VITROFLUIDIX IN A NUTSHELL

VitrofluidiX is an innovative biotechnology startup based in Cologne, founded in 2024. With VitroFlow, the company offers the **first fully integrated and adaptable organ-on-a-chip (OoC) platform** that enables the realistic simulation of human organ functions - without additional devices.



Located at Cologne Technology and Start-up Centre (RTZ), Cologne (founded in 2024)



Q1 2026 - market-ready MVP



First revenues generated



6 products in pipeline

2 Non-consumables: Device & reusable inlay for chips, 4 consumables



Financing status - Seed

450k€ pre-seed oversubscribed

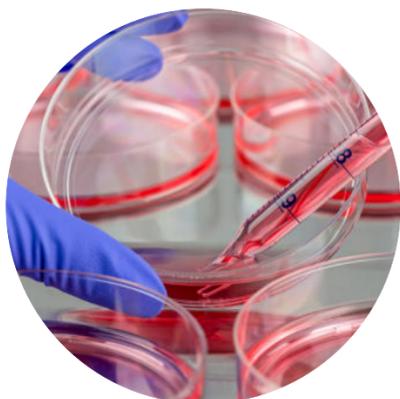


Patent submitted, VDE-CE Ongoing



Traditional drug development relies on cell cultures and animal models that are inefficient, expensive, and poorly predictive of human outcomes. Organ-on-a-chip technology enables early elimination of failing candidates, reducing the number of needed animal tests and significantly cutting costs. **It closes a critical gap by bringing human relevance into preclinical testing.**

2D/3D Cell culture models



Animal models



Organ-on-a-Chip models



Human



Predictive human relevance ^[1]

Consistent with USA, EU & UK roadmaps prioritizing human-relevant NAMs ^[2]

What goes wrong today

Current preclinical models fail to reliably predict human outcomes

- Animal models: High costs & low relevance
- High risk of late stage failing **>92%** of drugs fail after animal testing ^[3]

What OoC demonstrably improves

Organ-on-Chip introduces earlier, human-relevant decision points

- Fewer animal studies
- Fewer late-stage failures

Lower R&D costs, safer testing ^[4]

Regulatory Momentum

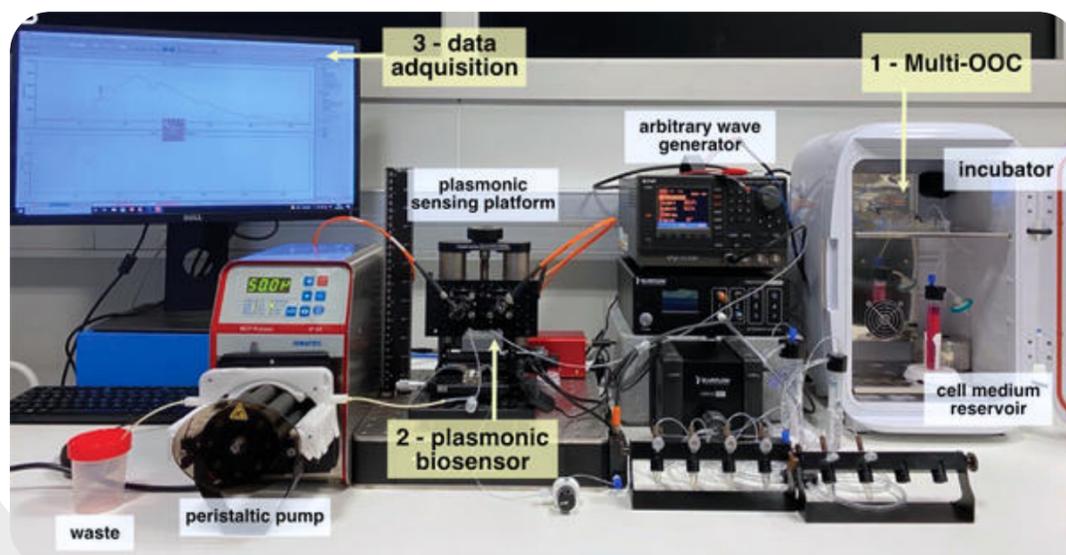
Regulatory momentum is accelerating:

FDA, MHRA and EMA now prioritize human-relevant NAMs, including organ-on-chip. ^[2]

● THE PROBLEM WITH OOC

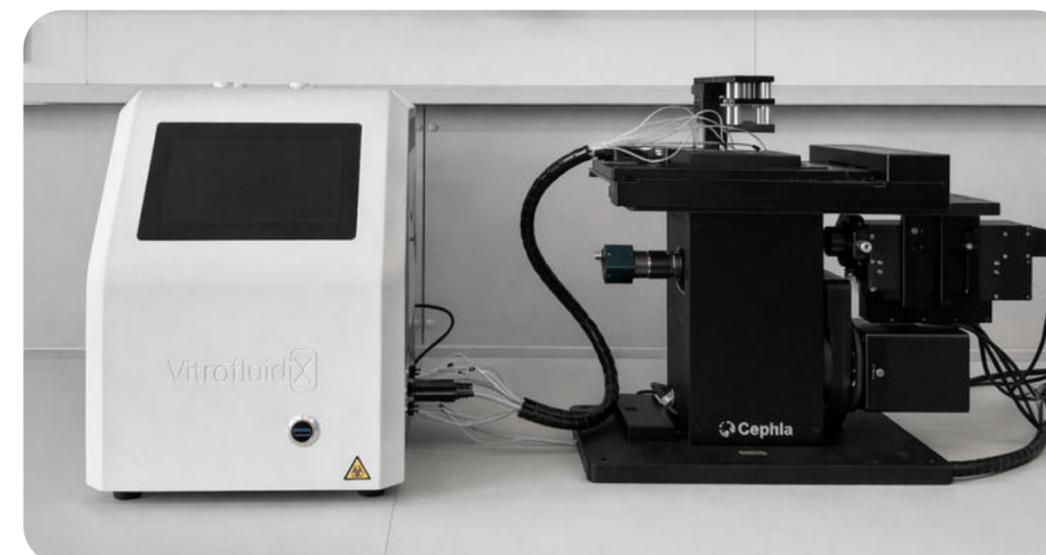
Despite strong interest in Organ-on-a-Chip technologies, adoption remains limited. Conventional systems are often technically complex, fragmented, and difficult to operate, requiring multiple external components and expertise. Closed, proprietary platforms reduce this complexity, but at the cost of flexibility, limiting chip choice, experimental freedom, and interoperability. As a result, scientists must choose between usability and adaptability. **VitroFlow closes this gap by offering a fully integrated, easy-to-use platform that remains open and adaptable.**

CONVENTIONAL OOC ^[5]



Technically complex
Limited to certain chip & cell types

VitrofluidiX



All in one and easy to use
Simulation of any organ & disease model

➤ **The world's first** fully integrated, adaptable organ-on-a-chip platform for simulating various organ and disease models.

VitroFlow is the only organ-on-a-chip platform that fully integrates automation, chip-agnostic interoperability, and live real-time imaging into a single device. By enabling reproducible, human-relevant experiments across labs while remaining compatible with existing chips and models, VitroFlow lays the foundation for an open, scalable organ-on-a-chip ecosystem. **This is how we are building the standard platform for next-generation organ-on-a-chip research and drug development.**

USP

1

Full Integration & Automation

RESULT FOR THE CUSTOMER

- Reproducible results across people and labs
- Less hands-on time
- Fewer errors and reliable routine operation in multi-user environments

2

Chip-Agnostic Interoperability

- Maximum scientific freedom and collaboration compatibility
- Easier tech transfer between companies & universities
- Keep your current chips and models (no redesign to fit one vendor's consumables)

3

Live Observation (Real-Time Readouts)

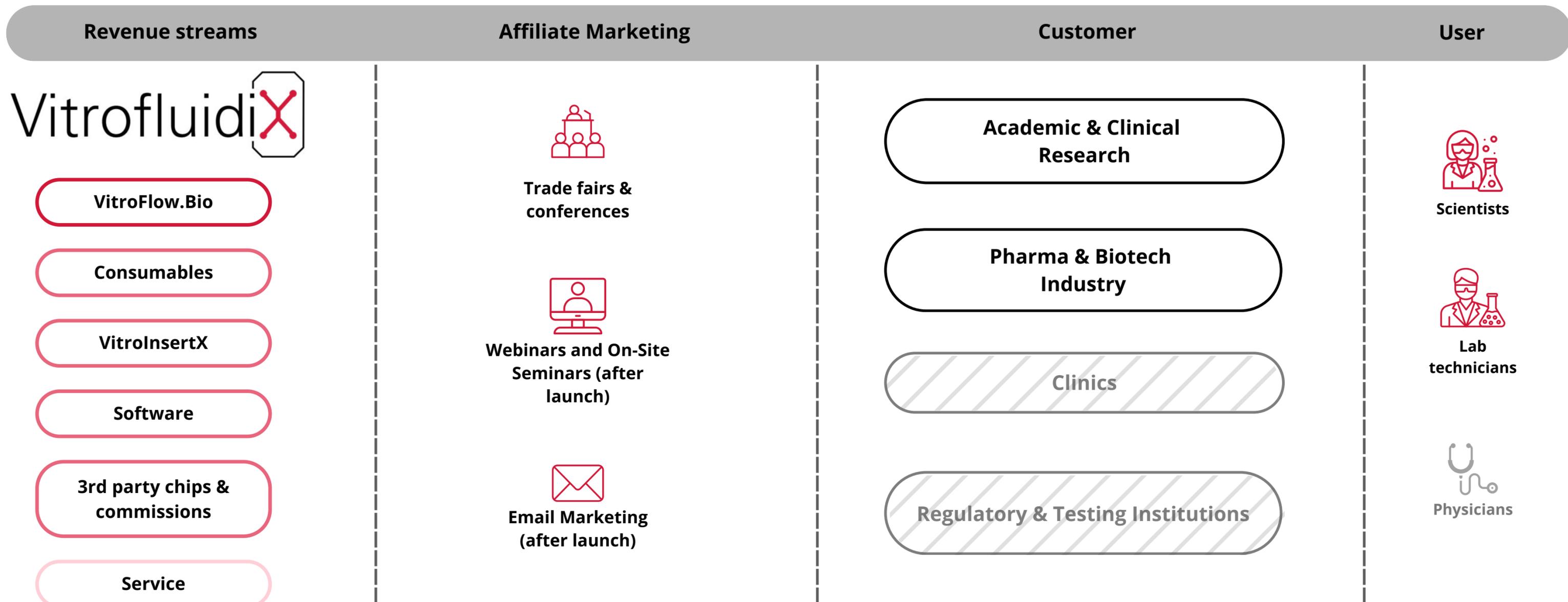
- Access the full spectrum of microscopy (widefield, confocal, high-content, etc.)
- Enable advanced imaging-driven assays (e.g., time-lapse, 3D, multiple endpoints)
- Get more data per experiment by adding imaging modalities/readouts



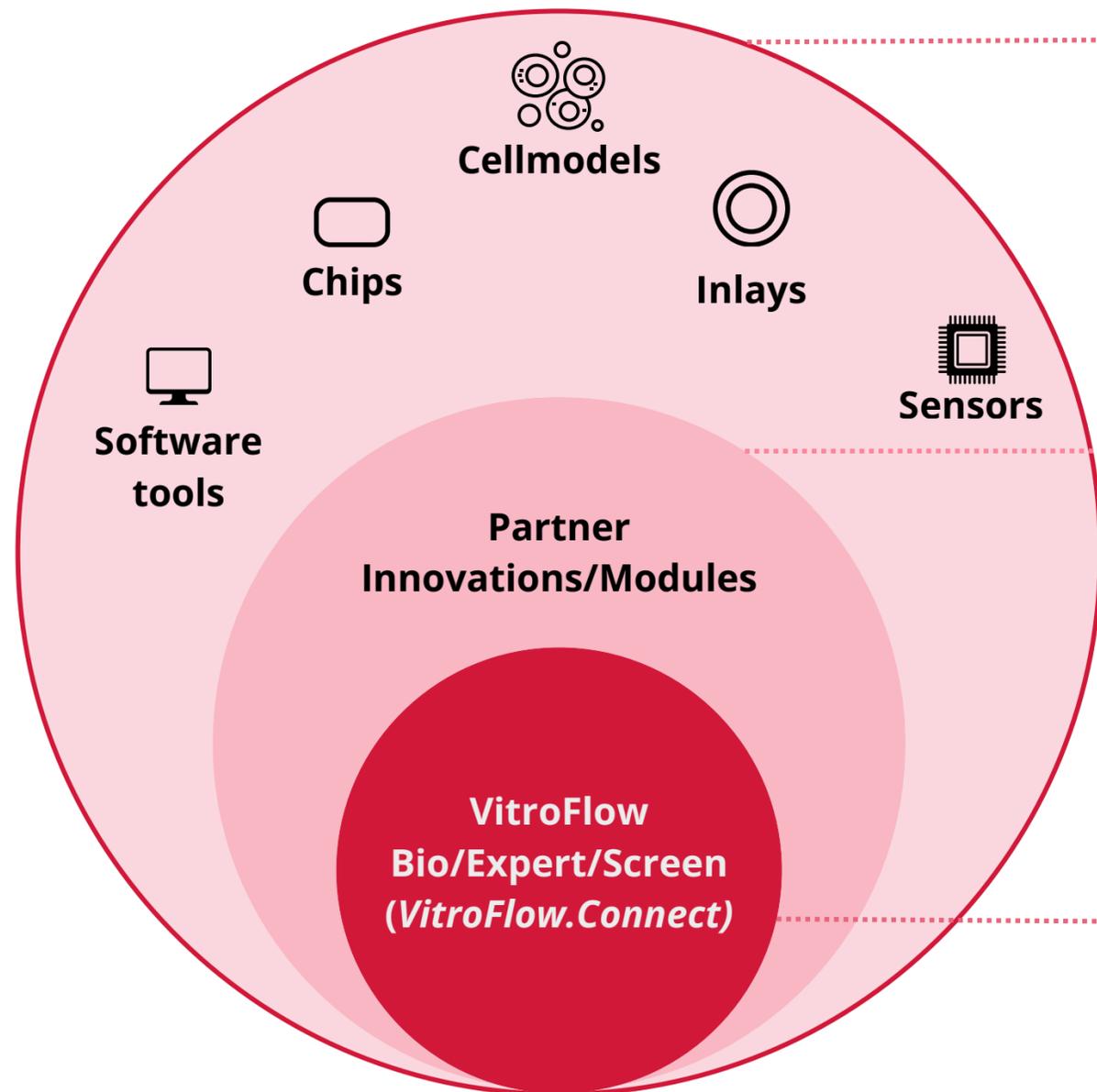
USPs validated through multiple customer & KoL interviews (Excel matrix; n = 19)

VitrofluidiX offers a **modular product portfolio** targeting scientists across academia, industry, and regulatory institutions. Sales are driven through trade fairs, webinars, and email marketing, with products tailored for both one-time device purchases and ongoing consumables and services. The focus lies on delivering **scalable solutions** for research, diagnostics, and drug development.

Bottom-up analysis with assumptions and sources available in Excel.



VitrofluidiX is building the universal infrastructure that makes all Organ-on-a-Chip models interoperable, comparable, and scalable — **becoming the de-facto standard for the field**. By defining a standardized core interface, VitrofluidiX enables chips, models, sensors, and software from different providers to seamlessly connect within one platform. This positions VitrofluidiX as the reference layer of the Organ-on-a-Chip ecosystem, allowing innovation to scale while ensuring reproducibility, cross-lab comparability, and long-term regulatory relevance.



ECOSYSTEM PRODUCTS

- Already compatible with **~90%** of existing Organ-on-a-Chip designs
- Designed to become the reference platform for chip, model and software providers
- Creating the foundation for cross-lab comparability and regulatory adoption

PARTNER INNOVATIONS / MODULES

All Organ-on-a-Chip innovations connect through VitrofluidiX - enabling true interoperability across chips, models and software.

The world's only Organ-on-a-Chip platform combining true freedom with reproducibility and system integrity.

CORE - Industry Standard Interface

The central device forms the technological foundation of the platform. It enables real-time control, environmental simulation, and live imaging for all chip types.

This slide highlights our most advanced commercial leads – including **confirmed pre-launch pilot customers and post-launch opportunities**. VitrofluidiX is listed in funded consortia – with device purchases planned upon project approval or product availability.

Pre Launch REVENUE - Pilotcustomers



University Duisburg Essen (AG Prof. Dr. Rückert) - €7,7k
Device rental & consumables (Start September, 2025)



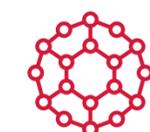
University of Cologne (Prof. Dr. Pfannekuche) - €4,5k
Device rental & consumables (Start August, 2025)
Go for sale of device after launch (€55k)

Post-Launch Potential 2026



2 x KMUI - Application

4 sales VitroFlow.Bio + consumables (90k€ pot. revenue)



ZIM-Application

1 sale VitroFlow.Bio + consumables (55k€ pot. revenue)

Calls pre-submitting:

RWTH Aachen

EU-Grant with John Hopkins University

KMUinnovativ grant with University of Cologne, Bayer, InnoVitro

... further candidates in on-going conversations

Pharma traction:

in talks with Bayer, Roche

The founding team at VitrofluidiX combines expertise in biology, engineering, and business, **ensuring user-oriented technology development**. Mentors from academia and industry, including Prof. Dr. Jan Riemer and Silke Beaucamp, provide valuable guidance. VitrofluidiX was largely bootstrapped from inception until its first financing round in early 2025, reflecting the team's strong execution focus and resilience.



Our mentors

Prof. Dr. Jan Riemer
BIOCHEMISTRY



Silke Beaucamp
FOUNDER & CEO DNTOX

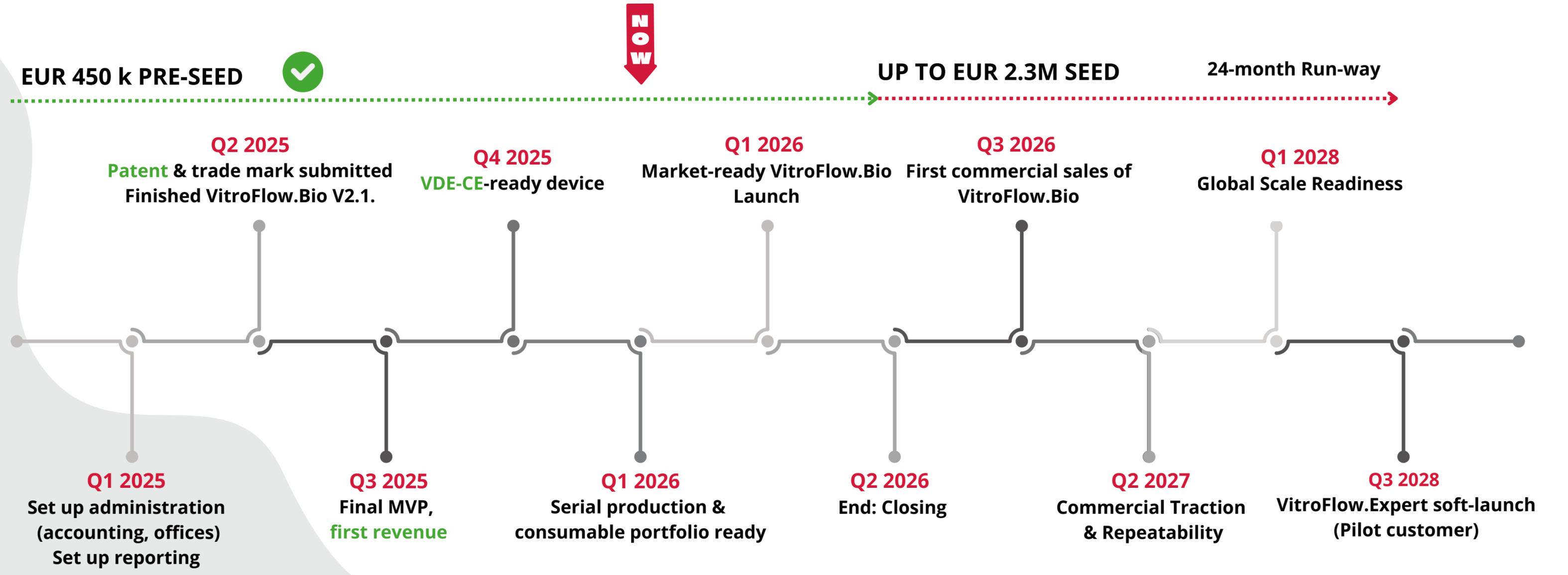


Dr. Marius Lissautzki
FOUNDER & CEO TINK



NEXT STEPS

This is the roadmap for the next funding phase. It focuses on scaling commercial traction, expanding the platform, and strengthening VitrofluidiX' position at the center of the Organ-on-a-Chip ecosystem.
The goal is to establish the foundation for becoming the industry standard.





First fully integrated, adaptable **organ-on-a-chip platform** for drug development and research

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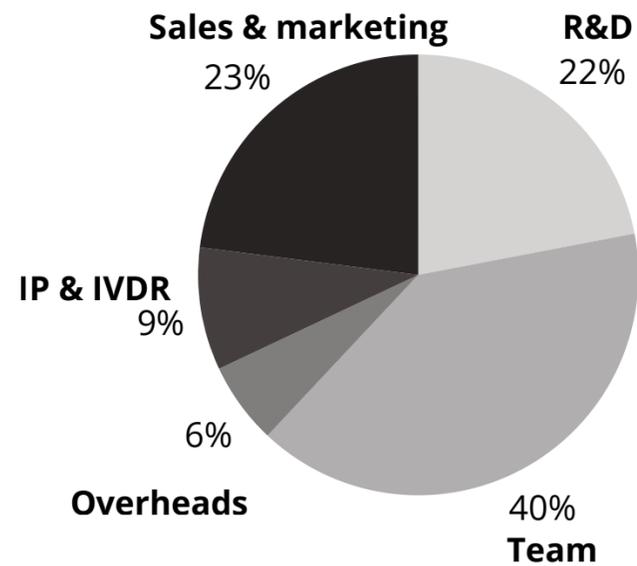
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 vitrofluidix.com

 RTZ, Cologne

 Now is the moment to reshape how tomorrow's medicines are developed.
Be part of the change – invest in VitrofluidiX!

 **Funding data - overview** | **CONFIDENTIAL**

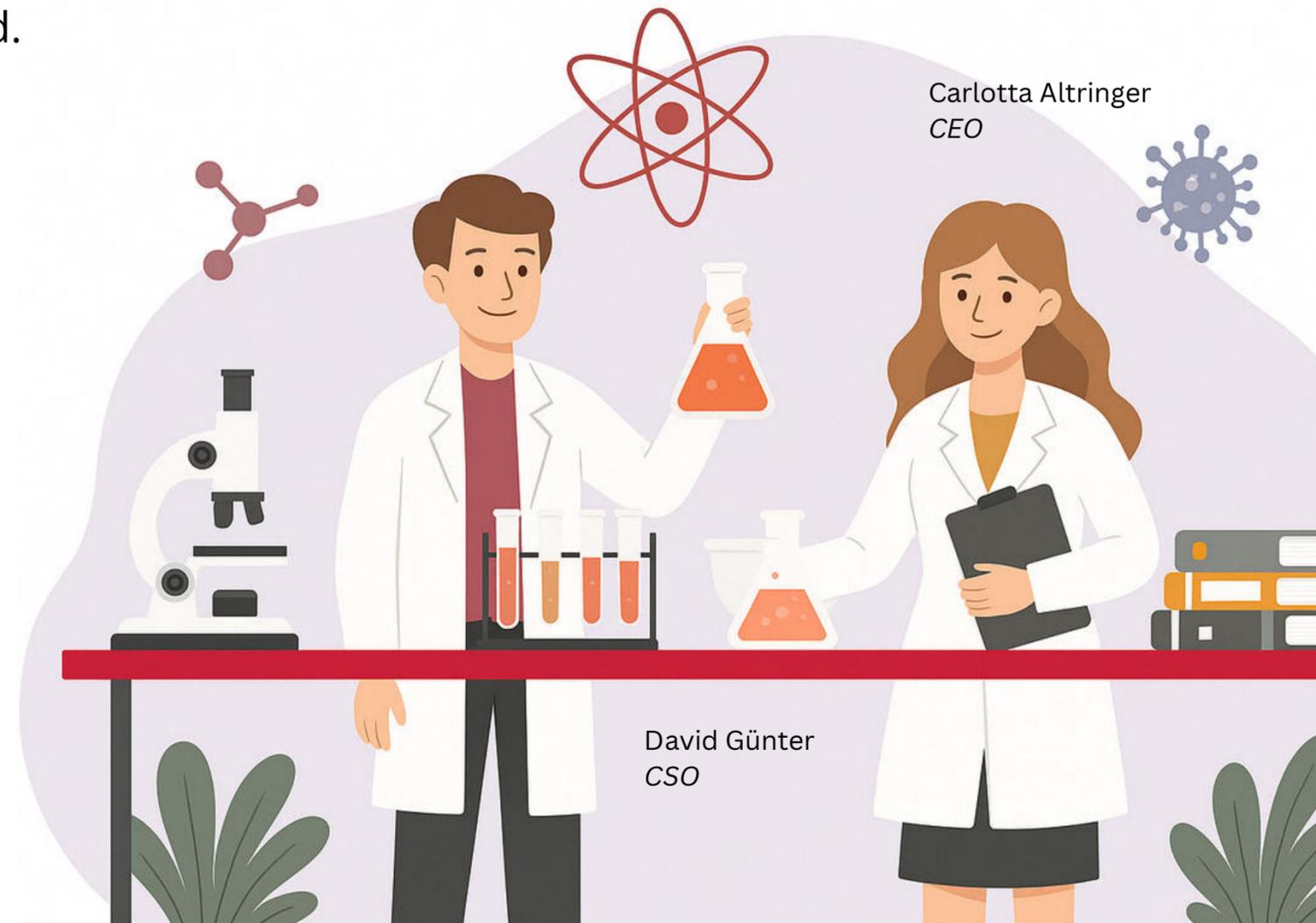


€2.3M
Funding size

24 months
Run-way with seed

€1.0M
soft commitments

Note: no open CLAs



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- [4]** N. Franzen et al., Impact of organ-on-a-chip technology on pharmaceutical R&D costs, *Drug Discovery Today*, Volume 24, Issue 9, Pages 1720-1724, ISSN 1359-6446 (2019)
- [5]** J. M. Fernández-Costa, M. A. Ortega, J. Rodríguez-Comas, G. Lopez-Muñoz, J. Yeste, L. Mangas-Florencio, M. Fernández-González, E. Martín-Lasierra, A. Tejedera-Villafranca, J. Ramon-Azcon, Training-on-a-Chip: A Multi-Organ Device to Study the Effect of Muscle Exercise on Insulin Secretion in Vitro. *Adv. Mater. Technol*. 2023, 8, 2200873