



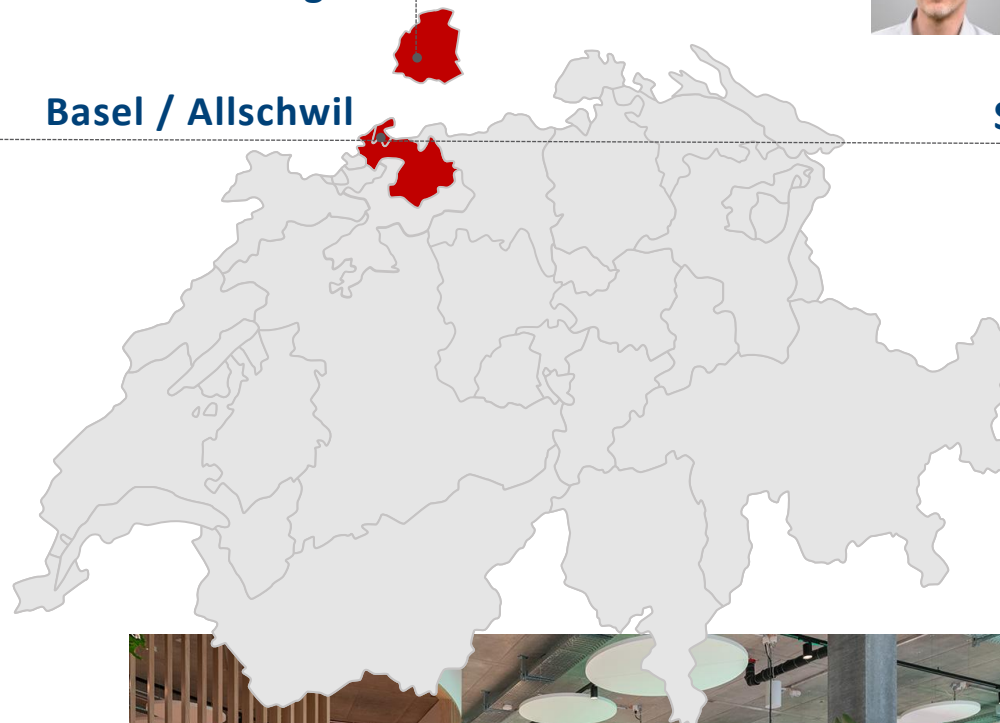
abc biopply

Europe's First Fully Integrated Organoid CRO
Humanized Multi-Organoid Disease Models
operated by Organoid Competence Centers



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3D Clinical Labs Freiburg

Andreas Thomsen, MD
Scientific Advisor



📍 **Headquarter**



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Finance & Controlling

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📍 **Swiss Organoid Competence Center**



Marco Leu, PhD
CSO, Co-owner



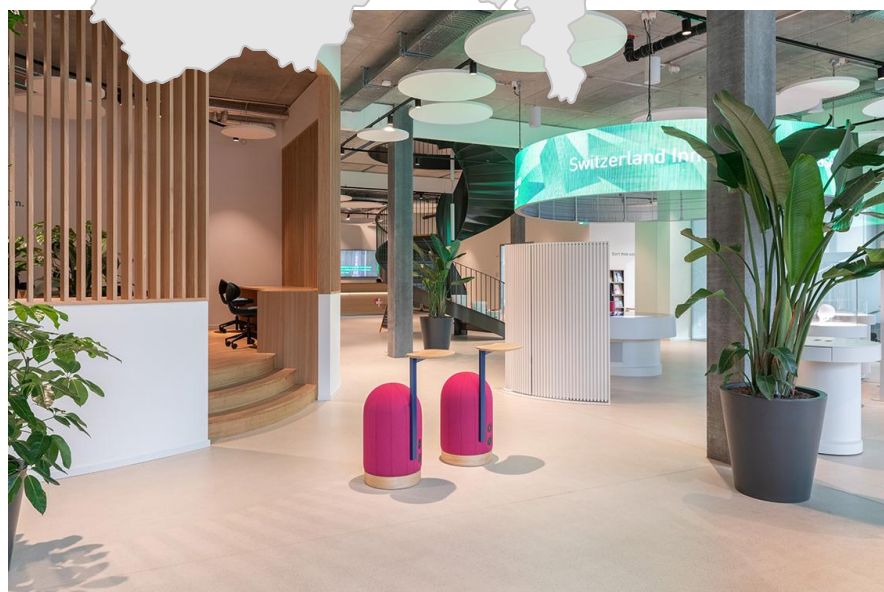
Olivera Evrova, PhD
Laboratory, Development & Production



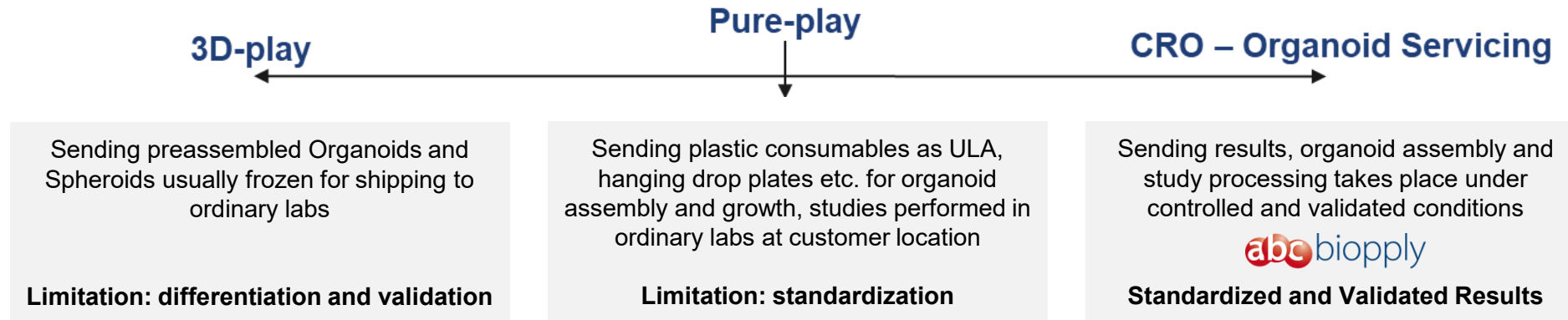
Raquel Sousa, PhD
Laboratory, Development & Production



Daniela Rohrer
Logistics



abc biopply – scalable business model with preclinical CRO franchise

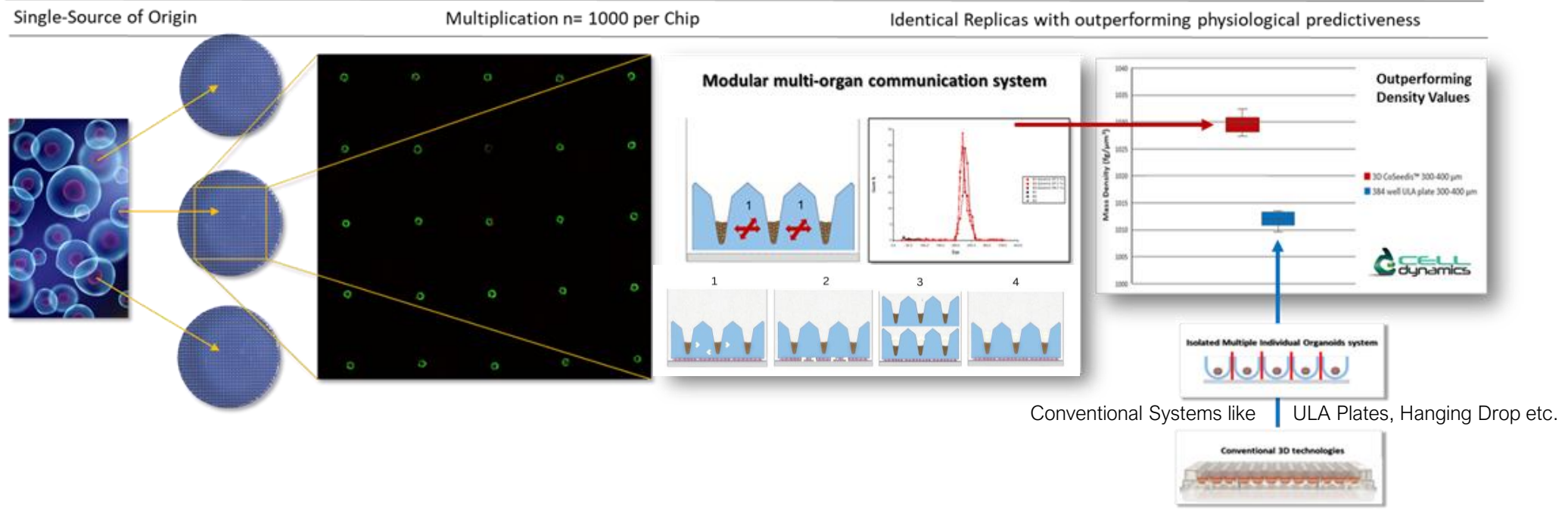


- **Overcoming Organoid Market Limitations:** The current organoid market is fragmented and often underestimates the complexity of 3D cell culture, leading to poor validation, standardization, and limited predictive power.
- **Scalable Business Model:** abc biopply offers a distinctive organoid servicing and licensing model based on its proprietary 3D CoSeedis Multi-Organoid in chip technology™, delivering validated and standardized results.
- **abc biopply's Vision:** The company aims to become an “animal-free Charles River” using a franchise system to establish and enforce an international network of Organoid Competence Centers, positioning itself as a leader in organoid-based drug development services.

Boosting drug discovery and development to the *ex vivo* level

PROPRIETARY
TECHNOLOGY

Proprietary 3D CoSeedis Multi-Organoid *in chip* Technology™

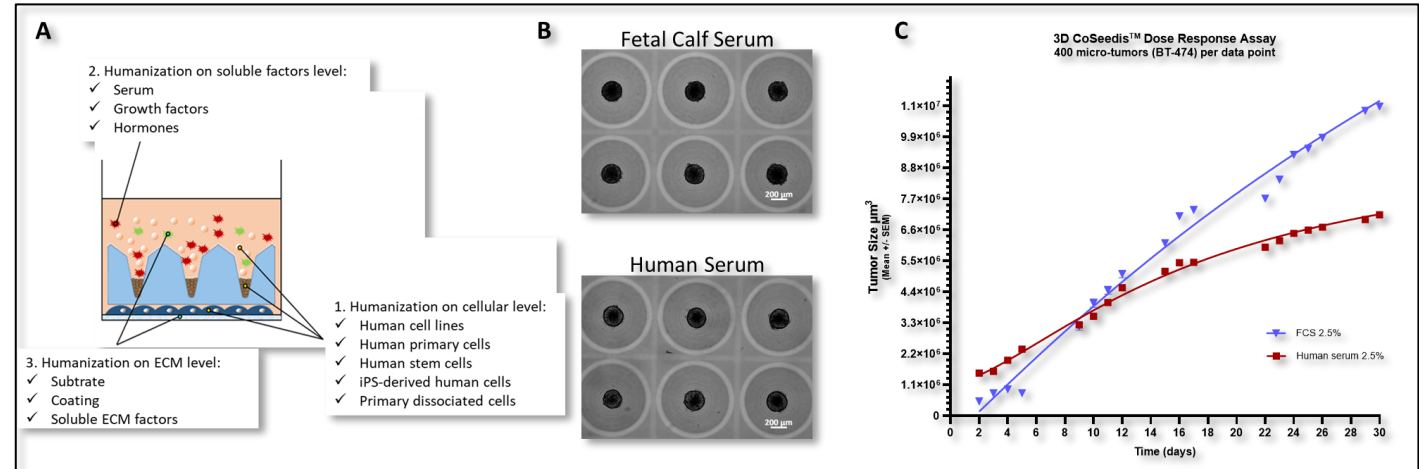
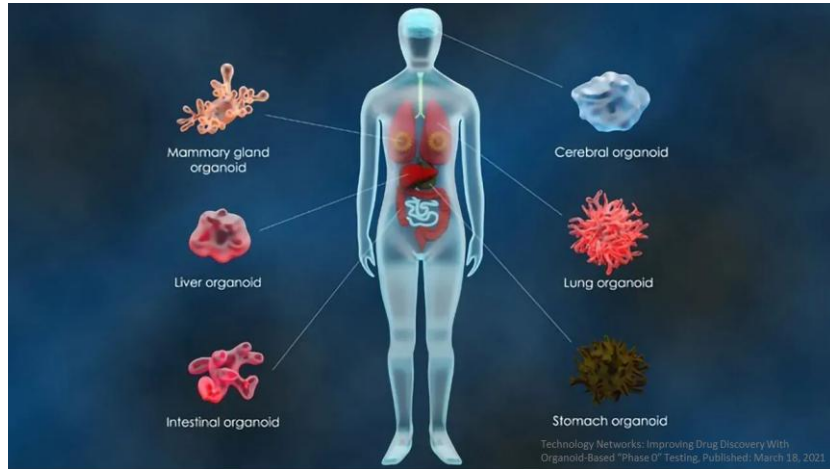


- Proprietary permeable matrix composition and design
- Intrinsic self-organization of physiological microenvironments
- Different formats with up to 1000 replicates
- 98.2% uniformity and homogeneity of organoids
- 360° nutrition supply prevents partial starvation as in conventional 3D systems
- Allow to mimic specific organs and tissues in culture over long periods of time
- Documented with over 20 recognized scientific publications
- Protected by multiple IP covering EU and US

Highest levels of Humanization in 3D CoSeedis multi-organoid models™

Published: Opening new horizons in humanizing preclinical multi-organoid disease models with the 3D CoSeedis in chip communication technology™, Arcadu et al., 2023

Published: Advancing 3D drug development models to the gender and ethnicity specific level, Sousa et al., 2024



- Humanization occurs at multiple levels within 3D CoSeedis multi-organoid models™.
- These models offer flexibility in using various cell sources, with simple humanization achieved through the integration of human cell lines.
- For Custom tailored studies we offer to free our models from all animal components and align studies with humanized mouse models.
- Current developments advance our 3D Drug development models to the **sex and ethnicity** level.

- The highest physiological significance is achieved by completely eliminating non-human components by:
 - ✓ using primary patient-derived cells to mimic entire organs
 - ✓ human sera or defined humanized media
 - ✓ and a humanized micro-environment with ECM components and soluble factors.
- Our study demonstrates that these elements can reliably create microtumors that mimic the appearance and structure of patient tumors, lasting up to 75 days in culture with layers of actively dividing, dormant, and necrotic cells.

Integrated preclinical organoid CRO Customer Journey

1. Select a validated Application & Model*

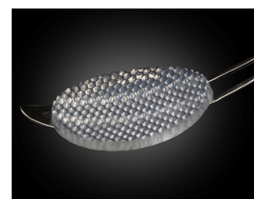
*All our Organoid Disease Models are assembled from all kind of Cell Lines, Stem cells, PDCs etc.



Oncology – Various
Neurology
Hepatic
Renal
Obesity
Cartilage
Ask for Custom-tailored Preclinical Discovery Models
Ask for our personalized Development Models

2. Choose relevant Technology - Four Levels of Complexity

Standard: 3D CoSeedis Multi-Organoid *in chip* Technology™



Advanced: 3D CoSeedis Adaptive Microenvironment Technology™

Complex Co-culture: 3D CoSeedis Organ-to-Organ Communication Technology™

Humanized: Customized Humanization of 3D CoSeedis Multi-Organoid Models™

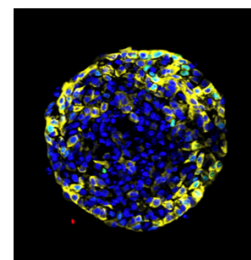


Organoid Competence Center



3. Define Endpoints for Downstream Analysis*

*for analysis of genomics, proteomics or secret omics we rely on a network of qualified partners



3D CoSeedis™ Apoptosis *in chip* Assay

3D CoSeedis™ Co-Culture Assay

3D CoSeedis™ Cytotoxicity *in chip* Assay

3D CoSeedis™ Dose Response Assay

3D CoSeedis™ Drug Efficacy Assay

3D CoSeedis™ Tumor Relapse Assay

3D CoSeedis™ Drug Resistance Assay

3D CoSeedis™ Histology Assay

3D CoSeedis™ Standard Assay

3D CoSeedis™ Live Cell Detection *in chip* Assay

3D CoSeedis™ Antibody Penetration Assay

3D CoSeedis™ Late-Stage Tumor Relapse Assay

3D CoSeedis™ Colony Forming *in chip* Assay

4. Select your preferred kind of cooperation

Integrated Services: Plan and implement your study or project together with our experienced team, follow it up by relevant milestones and receive a standardized study reporting

In-Licensing: Get your required disease model custom tailored, receive your customized standard protocol and all materials and rely on the competent back up from our organoid specialists

Customized Development: None of the validated and standardized models in our portfolio meets your requirements. Contact our Organoid Competence Center to receive a customized development of a model that is tailored precisely to your needs



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