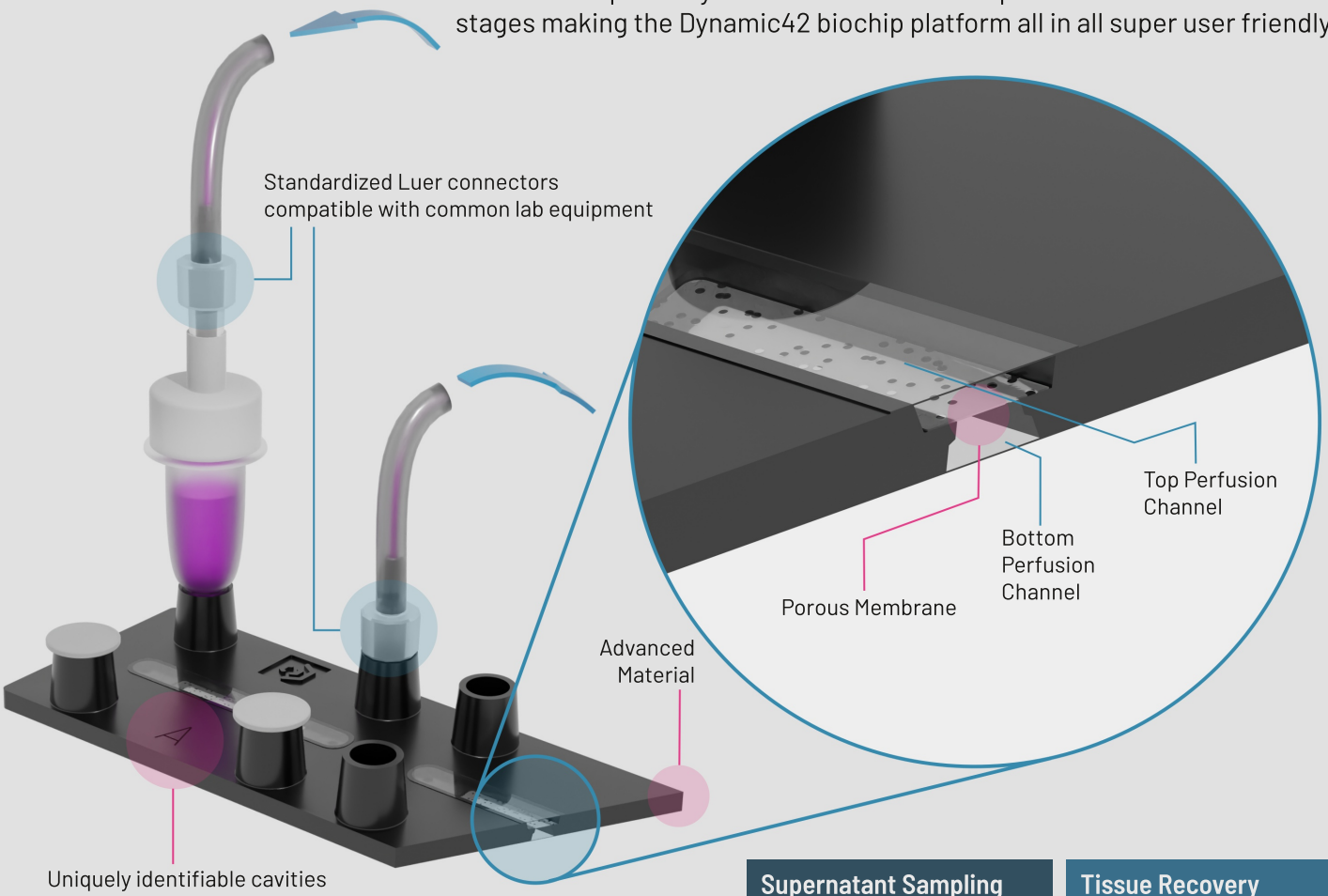
ORGAN ON CHIP

DYNAMIC42

A biochip designed by wet-lab scientists for wet-lab scientists!
Discover the world of organ-on-chip with the Dynamic42 biochip platform.

Each biochip is designed in microscope slide format and comprises two test cavities. Inside, you find a tightly integrated porous membrane dividing each cavity into a top and bottom channel. This allows the establishment of complex organ-specific epithelial tissue in one channel, nourished via a vasculature in the second adjacent channel.

Luer ports at the inlets and outlets ensure compatibility to all common pump systems. Easy geometry and the microscope slide format support standard wet-lab compatibility with devices such as plate readers and microscope stages making the Dynamic42 biochip platform all in all super user friendly.



Platform Features

- / Two test cavities per biochip
- / Various membranes integrable
- / Microscope slide format
- / Standardized luer ports
- / Low adsorbing material
- / Uniquely identifiable via lot and module number

Supernatant Sampling

- / Clinical parameters (LDH, ALT, AST)
- / Cytokine profiling
- / Compound turnover
- / Synthesis parameters (Albumin, Urea)
- / Barrier function

Tissue Recovery

- / Immunofluorescence analysis
- / Flow cytometry analysis
- / CellTiter - GLO® (ATP content)
- / RNA Sampling / PCR
- / Western blot

Live Cell Imaging

- / Glutathione depletion
- / ROS formation
- / Mitochondrial activity
- / Immune cell perfusion
- / Immune cell migration

Protein Functionality

- / Transporter function
- / Enzyme activity
- / Receptor Binding
- / Receptor Activation

Biochip Models

BC001

Biochip design with narrow cavities

/ Top channel volume: 120 µl
/ Bottom channel volume: 70 µl
/ Cell growth area at membrane interface: 1.02 cm^2

BC002

D42 Standard Model

Top Seller

Biochip design with wide cavities

/ Top channel volume: 140 µl
/ Bottom channel volume: 70 µl
/ Cell growth area at membrane interface: 1.32 cm^2

BC003

Spheroid-on-Chip culture

Three-channel biochip design with microcavities

/ Top channel volume: 140 µl
/ Mid channel volume: 200 µl
/ Bottom channel volume: 150 µl
/ Cell growth area at membrane interface: 1.32 cm^2

BC005

iPSC-on-Chip culture

Biochip design with thin channels

/ Top channel Volume: 65 µl
/ Bottom channel volume: 55 µl
/ Cell growth area at membrane interface: 0.44 cm^2

All biochips are manufactured under ISO9001:2015 standard and have to pass quality control

DEKRA Certified
Qualitätsmanagement
ISO 9001
www.dekra-siegel.de

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