

# **CONTACT US**

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MICROFLUIDIC TECHNOLOGY



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THE Vessel-on-a-chip Company

Complete Microfluidic and organ-on-a-chip solutions

## Vessel-on-a-chip



### ADVANTAGES OF VESSEL-ON-A-CHIP

### 2D (1) Physiological flow

Complete **numerical simulations**, geometry and **controlled flow conditions** allow to reproduce **physiological conditions**.

### 2 3D cell culture

Improved geometry to simulate physiological conditions for cell culture.

### ③ Functional assays

Such as toxicity tests, circulating cell analysis, shear stress assays, dynamic studies, etc.

#### GET THE MOST OUT OF YOUR RESEARCH

Physiological flow

Numerical simulations in a vessel-on-achip show differences in velocity in the bifurcated channel.

#### 3D cell culture



Optical chips to allow microscopy **fluorescence imaging** of HUVEC culture on the walls of the channel.

#### **Circulating assays**



**Circulating Tumor Cells** (CTC) interactions in **vascular bifurcation**, both on a chip (A) and in vivo (B).

#### **CURRENT SITUATION**

In vitro vascular research **classically use 2D** cultures of vascular cells, which **do not mimic the human physiological conditions!** 

