SwisSense: MITOMI-based biosensor for NT-proBNP detection

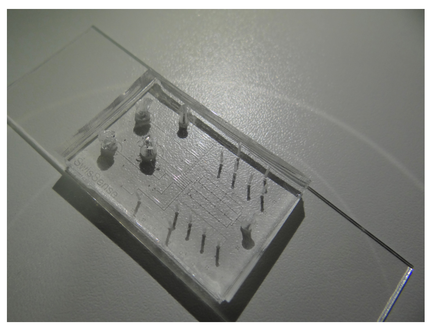
V. Bacheva, R. Blum, H. Dupont, M. Gadiri, V. Glukhenkaya, J. Pratiwi, E. Glushkov, D. Dubravcic, P. Renaud

Nanotechnology committed to health

Nanotechnology is a rising industry with many industrial applications such as optics, electronics, food science, the space industry and the medical industry.

Why microfludics?

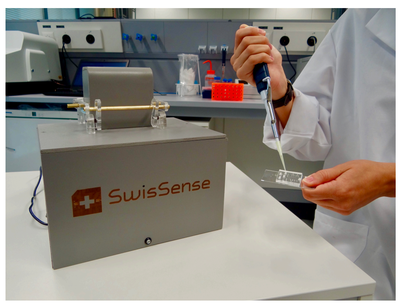
- Small sample volumes (10 µL)
- Short reaction time (max 10 min)
- Multiplexing & Integration

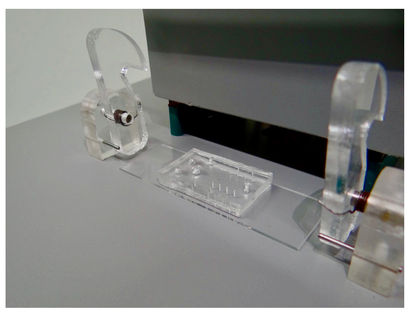


Cleanroom fabrication

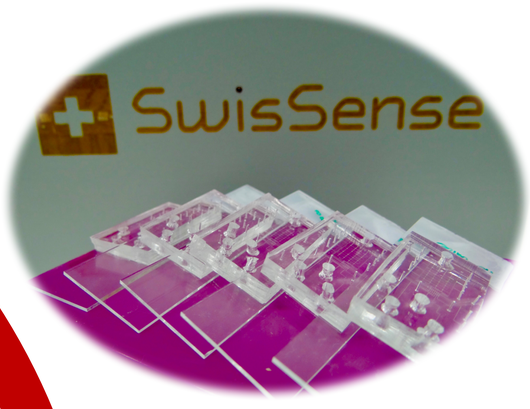
- Industrial-scale process
- Cost effective

Plug&Play mechanism





STEP 1	STEP 2	STEP 3
Load sample and reagents	Insert cartridge	Wait for results



User friendly

- Compact device
- Automatic operation
- **1** cartridge
- **3** reagents

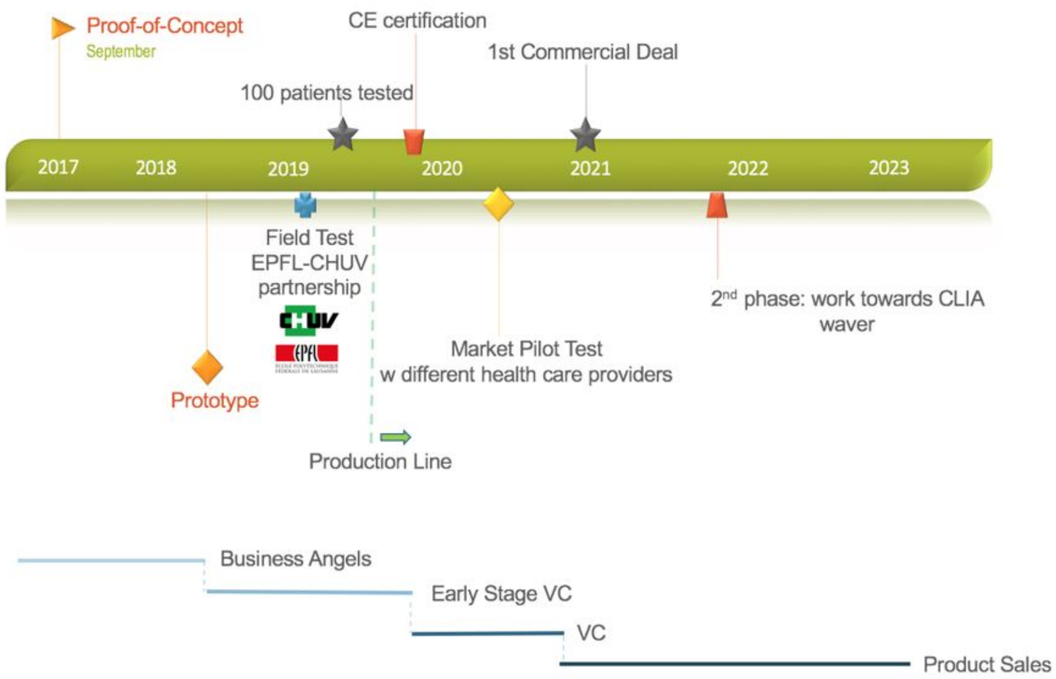
The future of cardiac diagnostics...

Our compact & easy to use measuring device at the home of every heart failure patient.

Revenue

- SwisSensor: EUR 1000
- 25 Test cartridges: EUR 800
- Target Accounts: Hospitals, Pharmacies, Individual patients

Business plan



... but also other medical domains

- **Versatile technology**: Detection of many **other biomarkers** possible
- **Whole blood samples** can be used

References

https://cmi.epfl.ch/
http://res.cloudinary.com/demo/imagefetch/w_400,c_thumb,g_face,e_saturation:50/
http://images.wisegeek.com/finger-getting-pricked.jpg