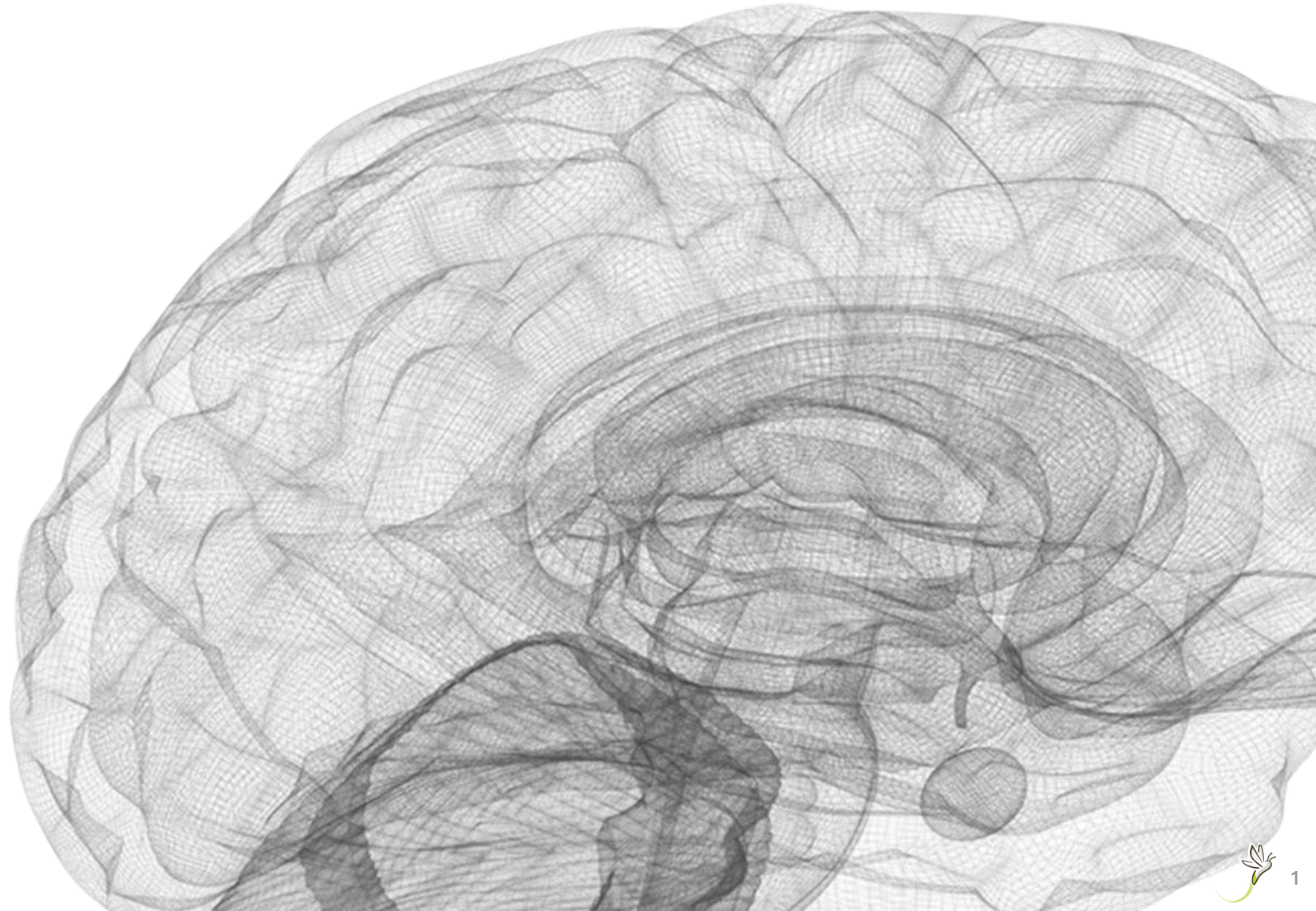


LUCIOLE MEDICAL

Transforming
Brain Monitoring

COMPANY PRESENTATION



The Need: Comprehensive Monitoring to Protect the Brain

For an organ that consumes over 15% of the body's oxygen, there is **no effective & reliable mode of measurement**

Monitoring oxygenation in real-time is an **important predictor of brain function**, backed by scientific evidence*



Brain oxygen desaturation during anesthesia/surgery can have **serious & long-term medical impact**

Global brain monitoring market is estimated to grow **to USD 8 billion by 2025**; rapid increase in wearables leading to changes in clinical practice

Luciole in a nutshell

1

Luciole is a Swiss-based private company created in 2007.

- Spin-off from the Swiss Federal Institute of Technology Zurich (ETH) and the University Hospital of Zurich.

2

Accredited in Europe since 2015

- ISO 13485
- CE market devices (MDR)



3

Extensive clinical experience

- 24 different clinical centers in Europe
- 32 studies covering large potential clinical applications



4

Unique patented features

- Absolute oxygenated and deoxygenated hemoglobin concentrations
- Cerebral blood flow and blood volume



Spiegelberg acquisition in 2023

Spiegelberg Acquisition: Synergies to Build a Leader



Brain Monitoring Leader

Fully integrated commercial organization with innovative product portfolio and multiple opportunities to drive value

Salesforce delivering **c.85%** recurring revenue profile

Spiegelberg's intracranial ICP monitors installed **>2000** worldwide

Only market player to offer probes & 2nd-generation patches

Only company with CE mark for probe & patch

Spiegelberg

Established manufacturing, sales, and commercialization

Luciole

Integrated products and analytics platform for knowledge-based clinical decisions



Luciole Brain Monitoring Product Suite

Measures

Application



ICP Monitors & Probes

CE Mark & ISO13485 Certification

Intracranial pressure (ICP)

Neurosurgery
ICU



RheoSens

CE Mark & ISO13485 Certification

Intracranial pressure
Brain temperature
Oxygen metabolism
Cerebral blood flow

Neurosurgery
ICU



RheoPatch

CE Mark & ISO13485 Certification

Cerebral water concentration
Cerebral blood flow of the subjacent tissue

Anesthesiology
Cardio surgery
Neuro ICU



RheoLity Software

CE Mark & ISO13485 Certification

Visualized, combined data from all devices & captured data that can be analyzed into trends and patterns

Broad applicability for monitoring & diagnosis



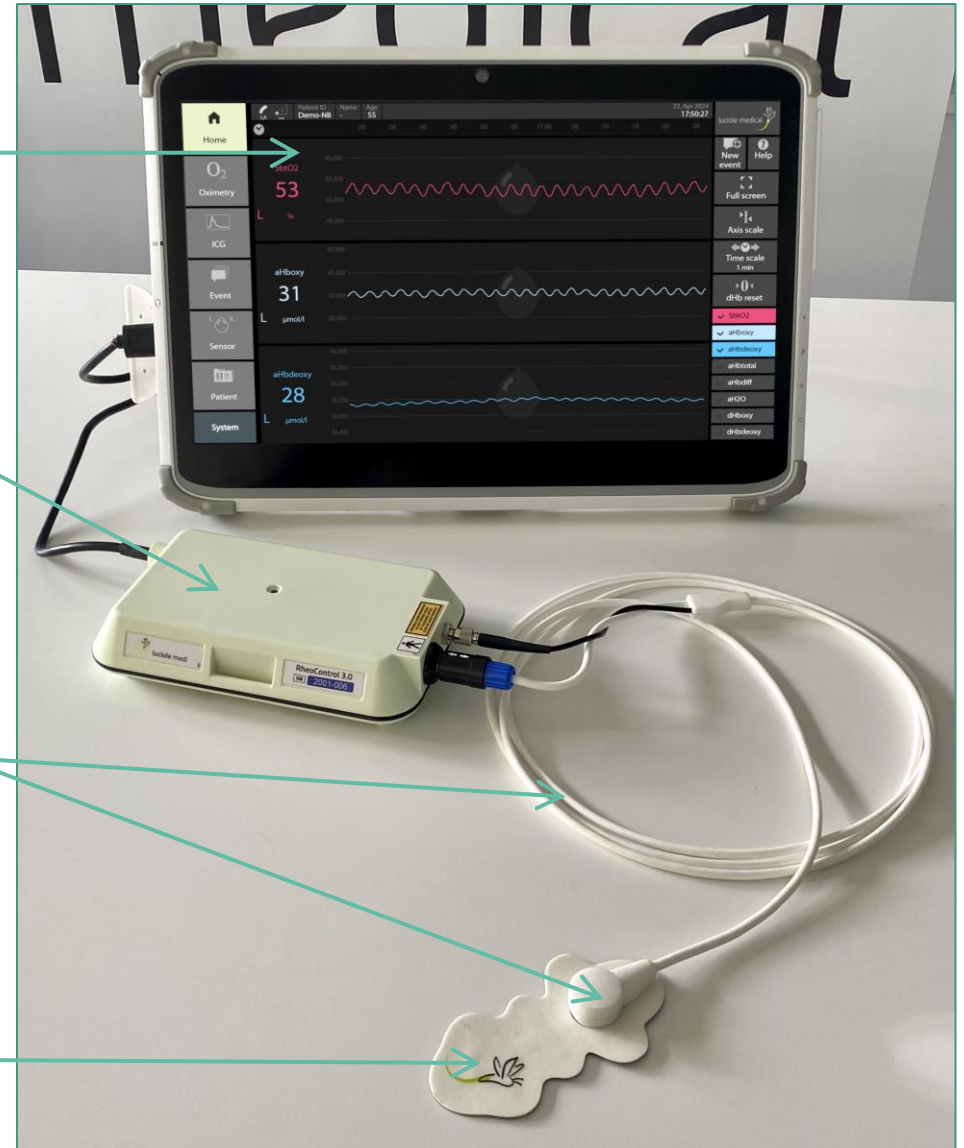
Luciole platform with Patch sensor

Monitoring platform (RheoLity)

Controller (RheoControl)

Connection Cable (RheoPatch cable)

Adhesive sensor (RheoPatch cable)



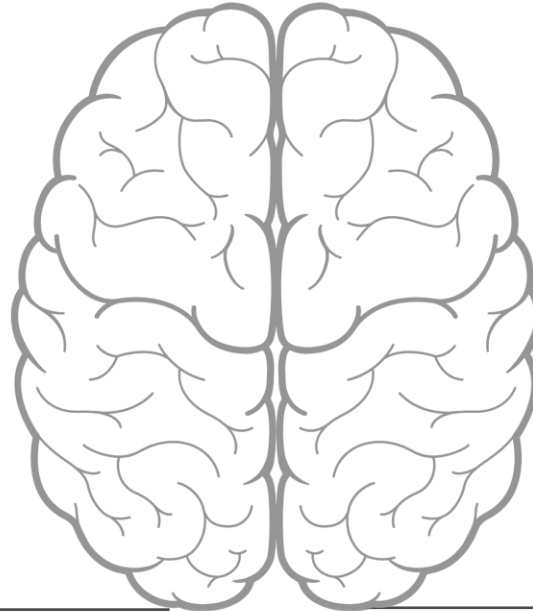
Brain Monitoring Applications

Neurocritical care

- Subarachnoid hemorrhage
- Traumatic brain injury
- Cerebrovascular reactivity
- Stroke
- Cardiac arrest

Anesthesia

- Cardiac surgery
- Orthopedic & spine surgery
- Extra Corporeal Membrane Oxygenation



Pediatric

- Surgery
- Metabolic disease
- Extra Corporeal Membrane Oxygenation

Sleep apnea

- Diagnostic
- Treatment monitoring
- Post surgery apnea

Medical Wearable & Out of Hospital Use

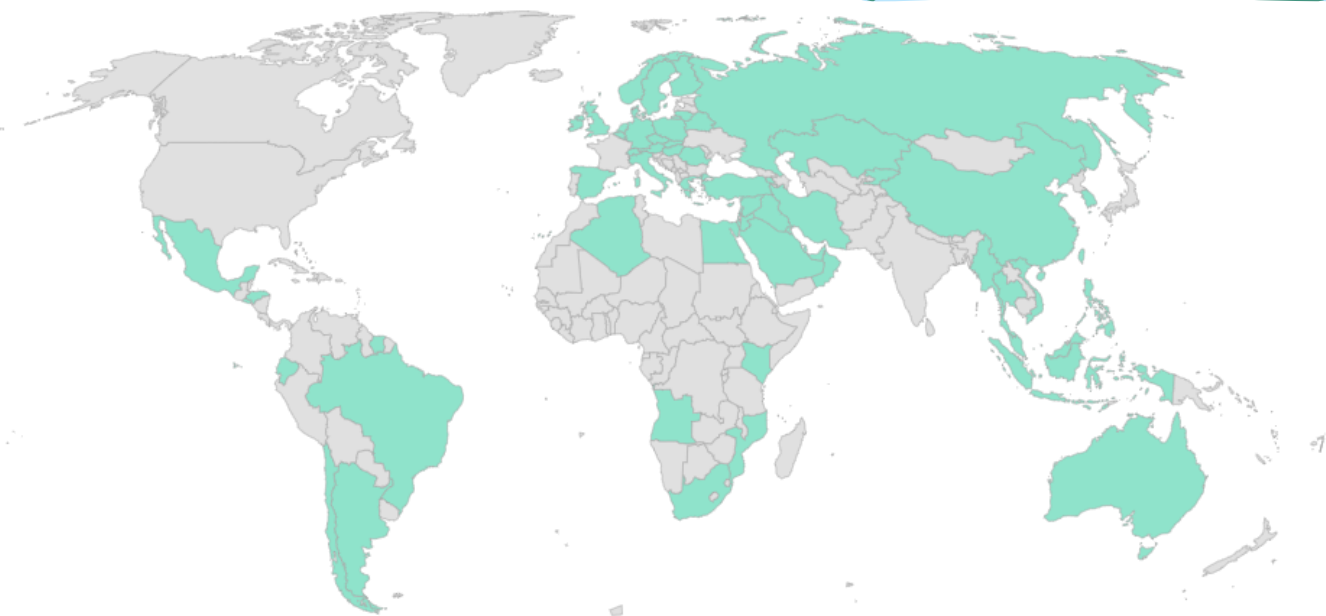
- GP brain health monitoring
- Rehabilitation

Established ←

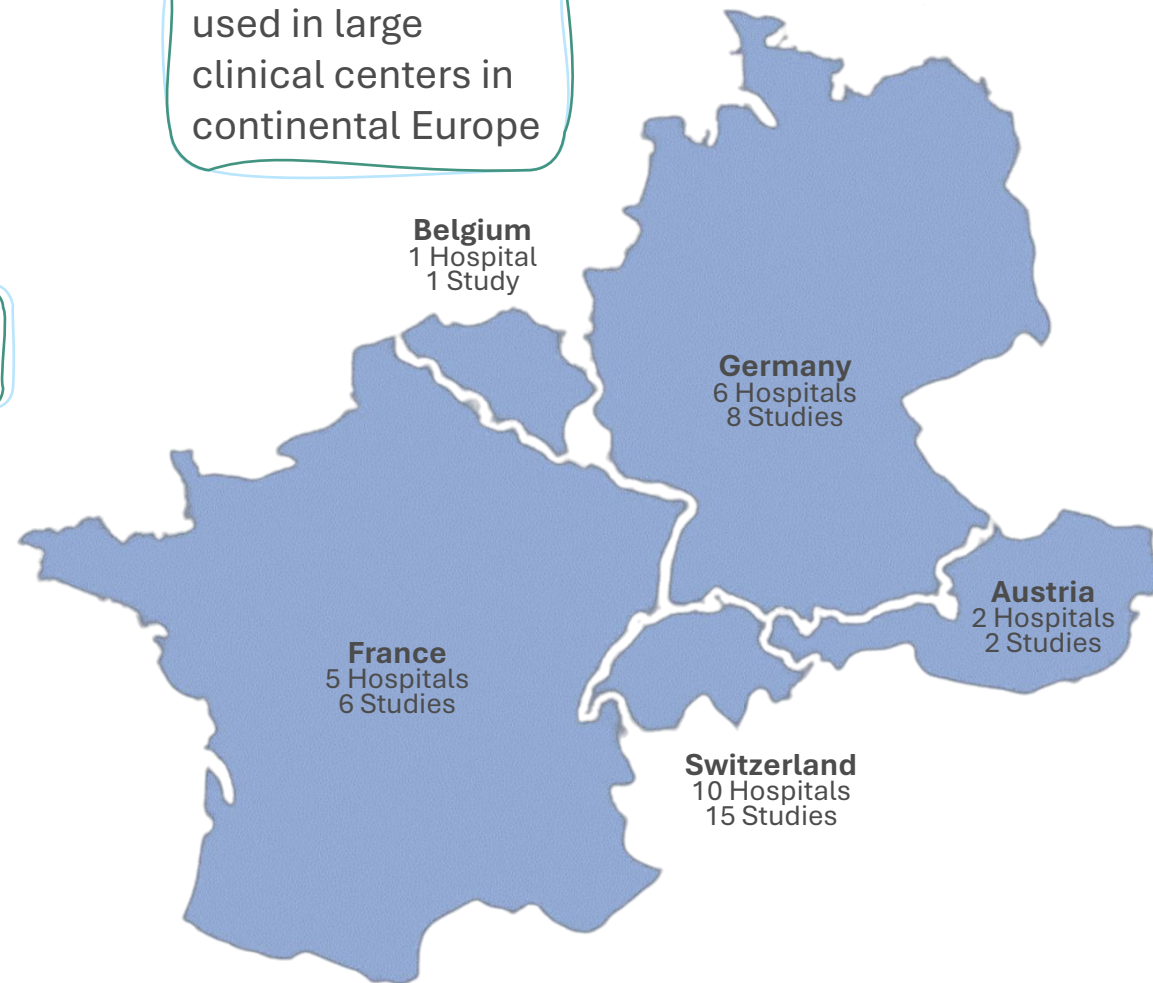
Coming Next →

Combined Portfolio Commercial Presence

ICP devices are sold in more than 60 countries



Rheo product suite used in large clinical centers in continental Europe



Luciole Works with Leading EU Hospitals



Charité (Berlin, DE)



CHU (Grenoble, FR)



CHUV (Lausanne, CH)



Erasme (Brussels, BE)



Hirslanden (Zurich, CH)



HKB (Kremlin-Bicêtre, FR)



HUG (Geneva, CH)



Inselspital (Bern, CH)



Klinikum (Stuttgart, DE)



KSB (Baden, CH)



La Pitié (Paris, FR)



La Timone (Marseille, FR)



Medical University (Innsbruck, A)



MUG (Vienna, A)



Rothschild (Paris, FR)



SNRI (Zurich, CH)



Technical University (München, DE)



Tierspital (Zurich, CH)



Triemli Hospital (Zurich, CH)



UKB (Bonn, DE)



UKH (Heidelberg, DE)



UKT (Tübingen, DE)



USZ Emmanuella (Zurich, CH)

Experienced Board & Leadership Team



Bruno Reihl, PhD
Director of the Board
Former CTO & deputy CEO
Disetronic; Former CEO
Raumedic



Bin Sheng, PhD
Director of the Board
Deputy CEO of UBS SDIC fund



Markus H. Muser, PhD
Director of the Board
25+ years in engineering &
medicine



Philippe Dro, PhD, MBA
Chairman of the Board & CEO
Former CEO GlycoVaxyn, EndoArt;
Co-founder of Axovan



Nicolas Bouche, BSc
COO
Former Head of Engineering Nestlé
Institute of Health Sciences



Ulaş Yakupoğlu, MSc
Sale & Marketing Director
Former Venous Senior Marketing
Lead, Medtronic Western Europe



Claudia Trainito, PhD
CTO
Former Associate Manager Novartis
Pharma

With strong collaboration with
Spiegelberg:
Technology for brains



Stefan Paschko, MSc
Managing Director



Bodo Hardt
Director Head & Sales Marketing

Thank you!

