

PATIENT-SPECIFIC SMART CLOSED-LOOP **NEUROMODULATION**



GENERAL INFORMATION

Lauréat i-Lab concours

Creation date	2024
Location	Rennes, FRANCE
Sector	Medical Technologies
1 st Product	Implantable VNS (class III)
Business Model	Reimbursed device (e.g. LPPR)
Investment need	Seed: €550k Equity



THE COMPANY

Oktoscience is developing an intelligent and implantable medical device to revolutionize neuromodulation therapies.

Our first product in development is a smart VNS (or vagus nerve stimulation) device with the aim of improving **EPILEPSY TREATMENT** via an adaptive and personalized therapy.



TEAM

COFOUNDERS

CEO | Charlotte DOUARD, PhD, IP certification (INPI)

+10 yrs exp. in Health innovation, mktg and licensing activities in the field of MedTech; + 200 SW & patent assets mgt; Entrepreneurship: BM, BP, Decks...

CSO | Alfredo HERNANDEZ, PhD MedTech Data processing & Al

INSERM: Research Director. Head of +20 persons; +20 patents; +250 publications. MICROPORT: Director of Biomedical engineering and data science - R&D department.

ADVISORY BOARD

Arnaud BIRABEN, Neurologist. VNS expert. President of the French League Against Epilepsy (2012-16).

PHILIPPE MABO, Cardiologist. Pioneer in implantable electrical stimulation devices.



MARKET | FIRST: SMART VNS FOR EPILEPSY

Although Oktoscience's technologies are generic to neuromodulation devices, our 1st product will be a smart VNS device for epilepsy. This strategy has been streamlined to allow the fastest possible access to patients.

FOR PATIENTS

50 million patients worldwide 1

~ 30% continue to suffer from seizures and are not treatable by medication nor surgery 2

TO GO BEYOND VNS FONTIERS

We're going after **2 key pain points** of current VNS therapy, resulting in 50% therapy failure:

- the high-complexity of **implant configuration**
- the lack of patient-specific adaptation

OUR PROMISE

Oktoscience aims to offer each patient with the same chance to benefit from the VNS therapy by finding out the right - personalized - stimulation parameters necessary to success.

Clinicians will be provided with a ready-to-work therapeutic VNS solution so that they can focus on their patients - instead of their implant - and treat more.

TAM (Neuromodulation, \$11B in 2030) | **SAM** (VNS, \$1B in 2027) | **SOM** (€112M annual turnover in 2033)



PATENTED TECHNOLOGIES

AUTOTITRATION | Automated and optimized learning of Patient-specific stimulation parameters

CLOSED-LOOP NEUROMODULATION | Personalized & adaptive stimulation to patient physio-pathology



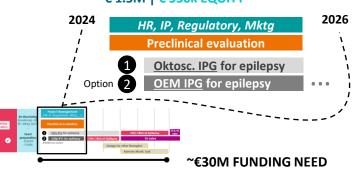
7 GRANTED PATENTS (EU, US) PIONEERING PUBLICATIONS

1: Lancet Neurol. 2019; 18: 357-75; 2: Trends Pharmacol Sci. 2019 Oct;40(10):735-746



ROADMAP

€ 1.5M | € 550k EQUITY



before breakeven

ast update: Nov, 2024