

# The innovative MedTech ecosystem of Flanders



Flanders Investment & Trade  
Government of Flanders – Belgium

Els Verhulst, 2023

# MEDTECH IN FLANDERS





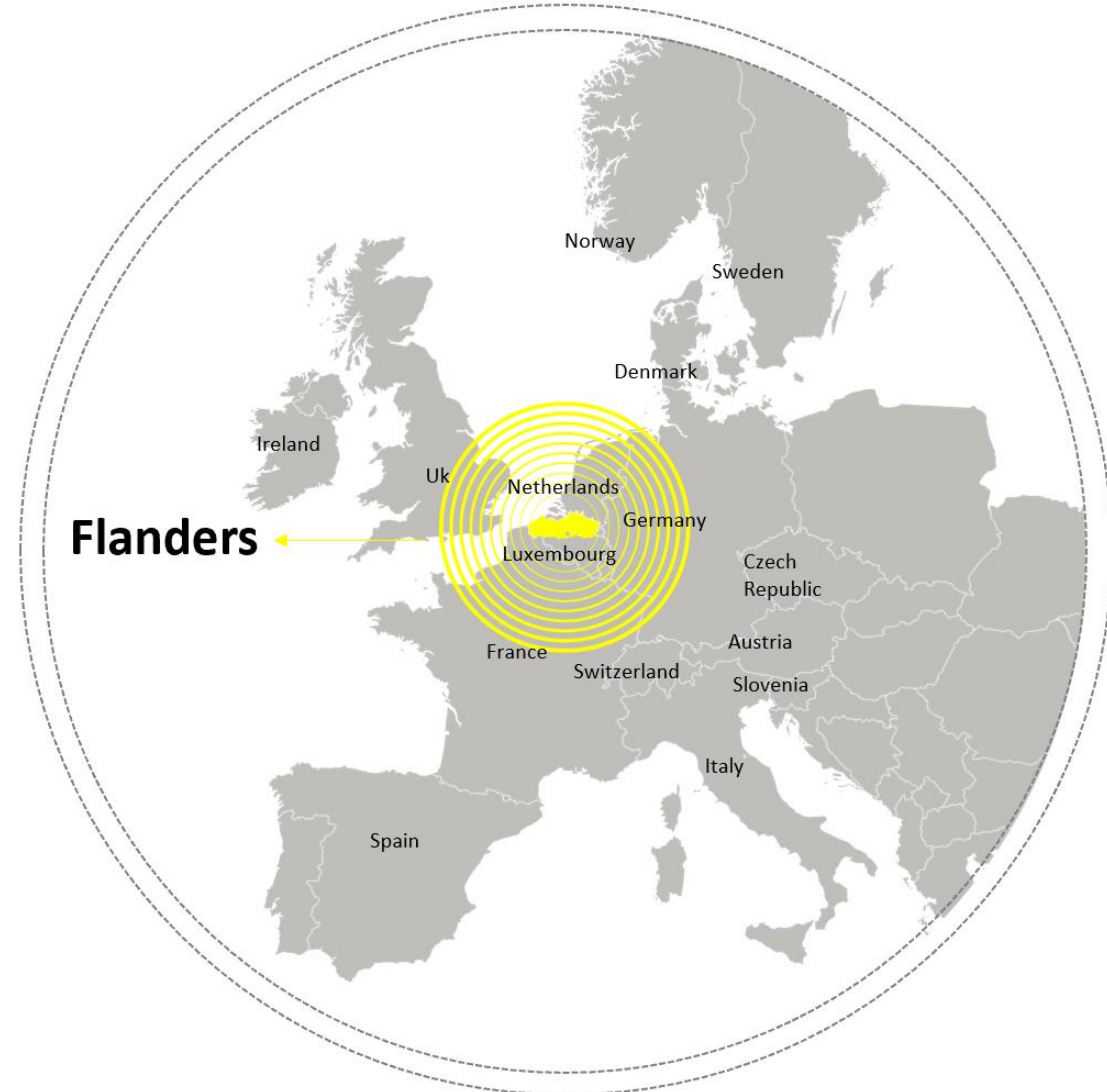
# Market access

## An ideal destination market for a medtech company

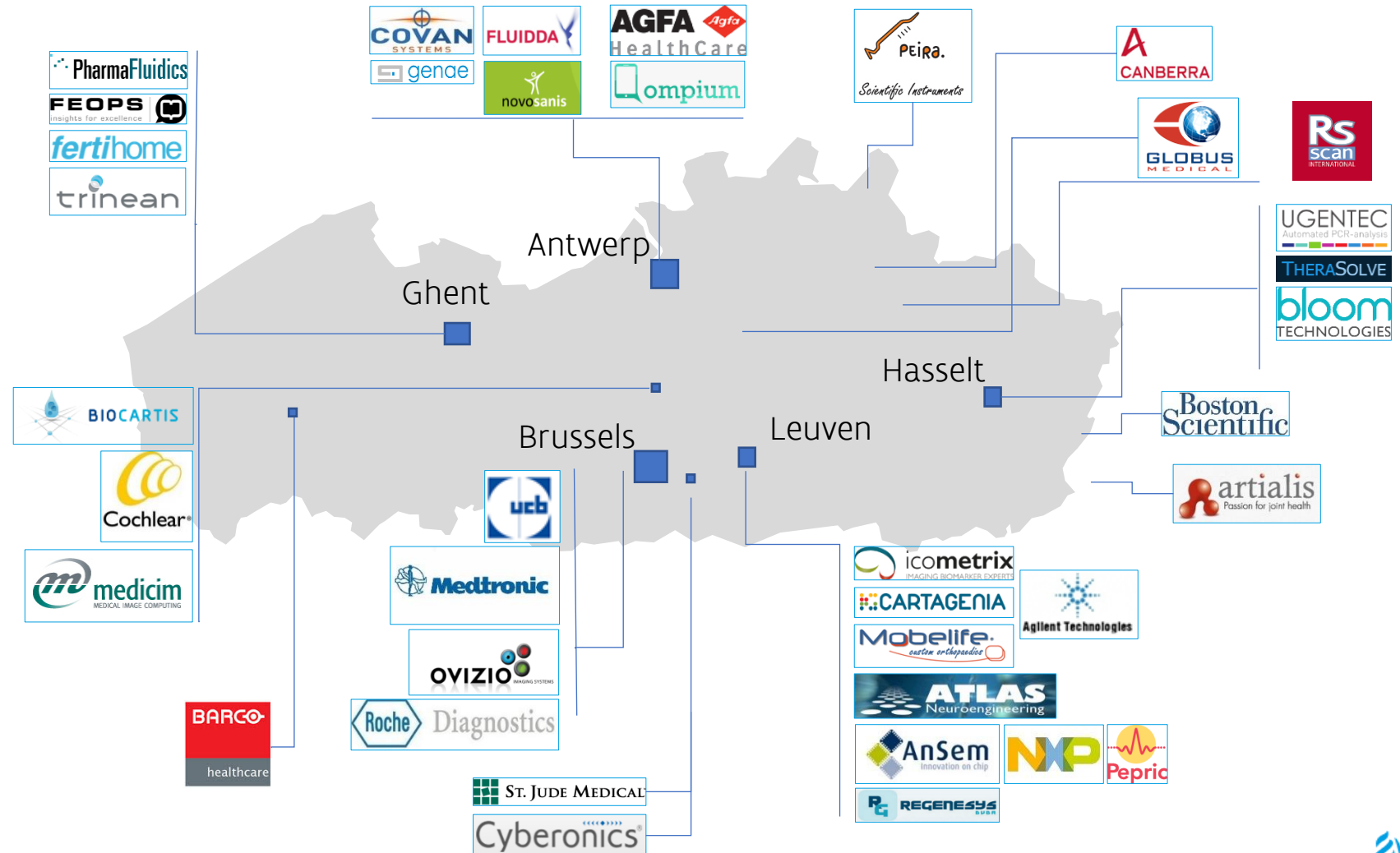
Flanders is ideally situated between the UK, France, Germany and the Netherlands.

A dense, high-quality transportation infrastructure, Flanders offers fast connections to locations all over Europe by air, sea or land

→ access to 164 hospitals with 150.000 hospital beds within a 2 hours drive



# Medtech hub

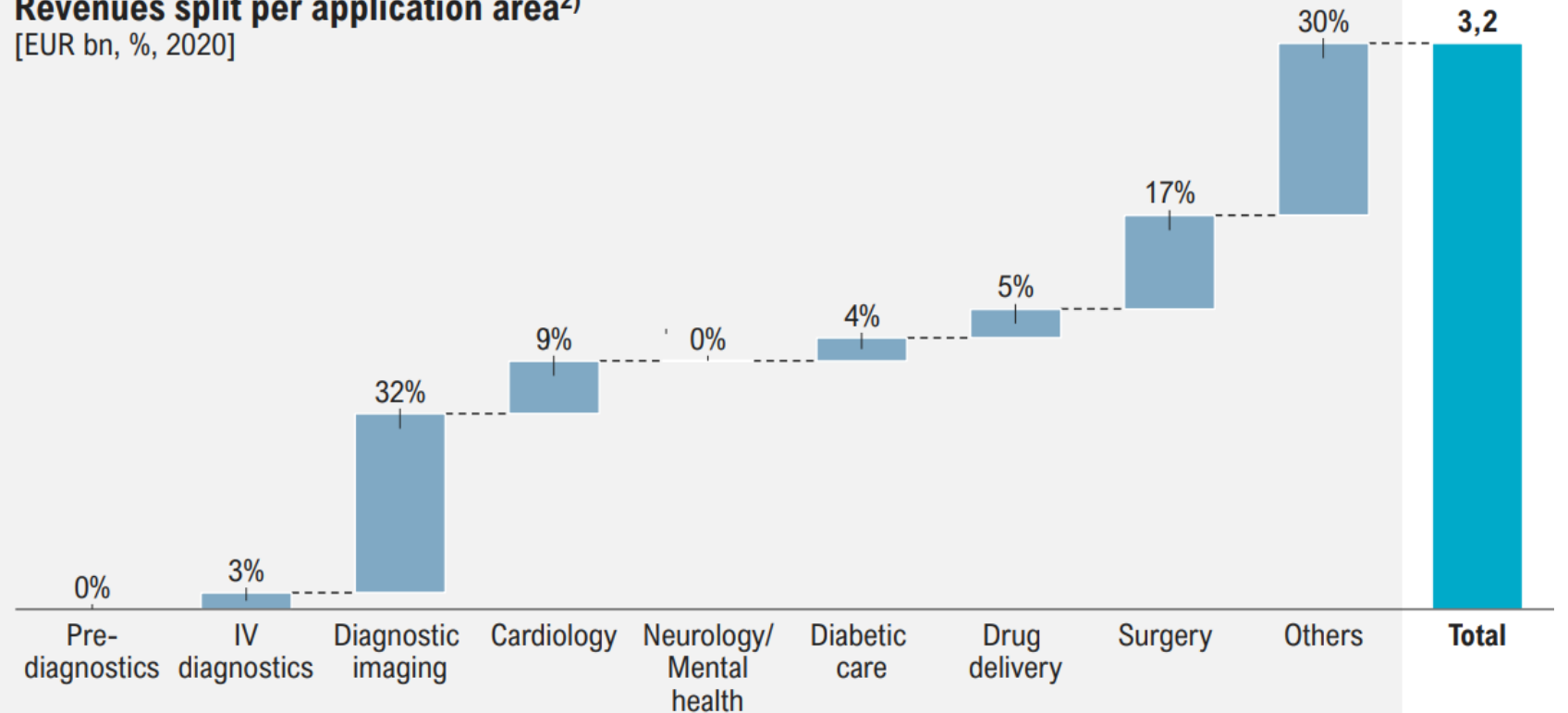


# Belgian MedTech companies have total revenue of 3.2 billion EUR

Total revenues of Belgian leading MedTech players<sup>1)</sup>

**EUR c. 3.2 bn**  
Total revenues

Revenues split per application area<sup>2)</sup>  
[EUR bn, %, 2020]






















1) Approximation based on revenues of c. 50 leading Belgian MedTech companies – Identified as such in beMedTech "Facts and figures 2018" report 2) Based on primary focus area of leading companies

# Why Flanders #1

## Developers of medical wearables can build on strong expertise in sensors technology, AI and wearables

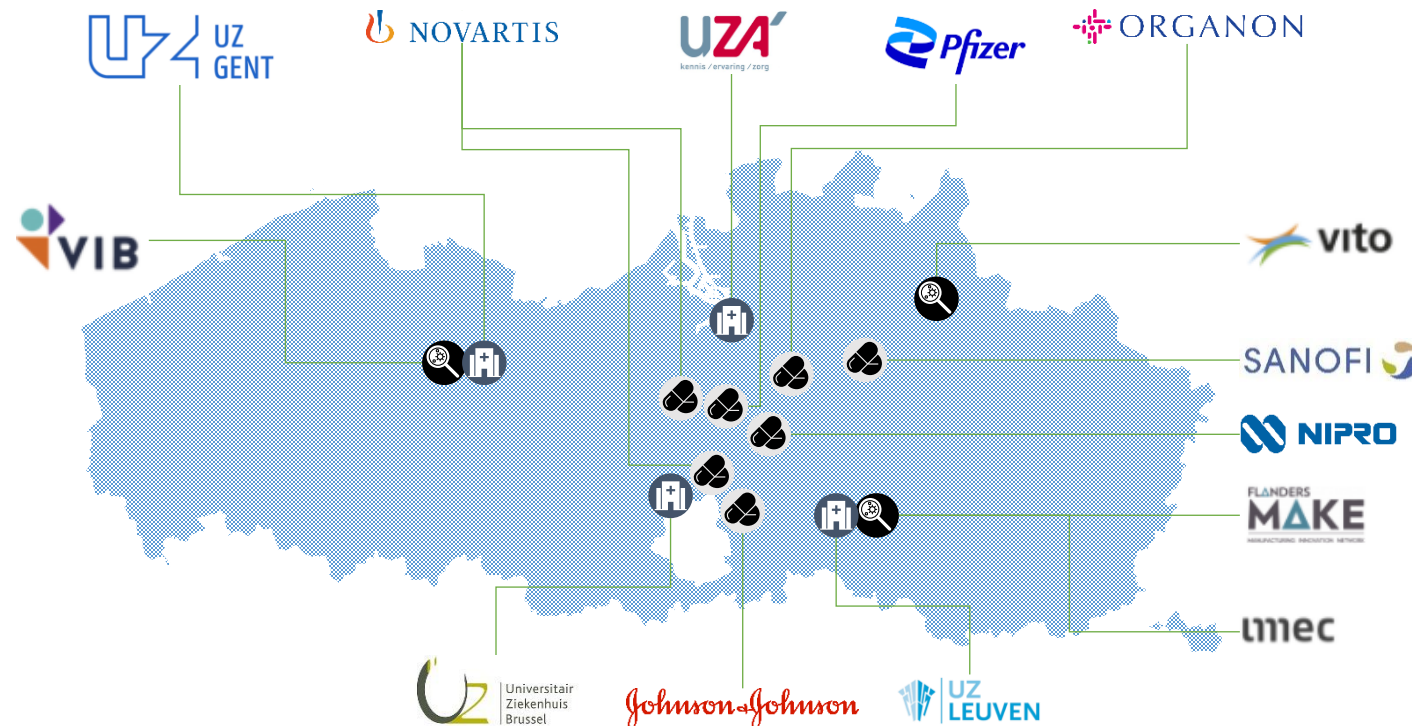
### Strong expertise for medical wearables - Key technologies

Technology	 Sensors	 Artificial Intelligence	 Smart textiles	 Wearable devices
Description	Sensor technology to collect the health data on the body	AI / big data technology to interpret the collected data	Alternative to devices, through sensor technology integrated in clothing	Devices (e.g., patch, smartwatch, ...) to hold the sensor against the body
Expertise present in Flanders	 R&D of nano-electronic technologies in healthcare, smart cities, mobility, smart cities...	 Focus on developing AI solutions for manufacturing, smart city and healthcare industries	 Development of flexible and stretchable electronics for integration into textiles and clothing	 Development of smart patches to measure and monitor cardiac performance
Non-exhaustive	 Development of intelligent sensors for visualization solutions in a.o. medical imaging	 Development of tailored AI solutions, smart machines and data analytics	 Design of wearable solutions with electronic textiles for healthcare and sports (CareWare project)	 Development of intelligent bracelet and app for the elderly that sends an alert to family or friends
	 Development of software, networking, and hardware elements to securely deliver sensor data to IoT platforms	 Machine learning and AI expert with several use cases in machine building (e.g. CNH)	 The Centre for Textile Science and Engineering at Ghent University pioneers in smart textile R&D	 Victoris aims at supporting athletes in the best possible way by smart sportswear
	 Melexis is a global supplier of micro-electronic semiconductor solutions	 Dedicated Data and Artificial Intelligence Competence Lab (EluciDATA Lab) to stimulate data-innovation	<p>Room for developers of wearables, supported by present technology expertise</p> 	




# Why Flanders #2

## Flanders houses a significant number of potential clients

### University Hospitals, Strategic Research Centers and Pharma Sites in Flanders



- **Total of 164 hospitals in Belgium, with in Flanders:**
  - 49 general hospitals and 4 university hospitals, representing 29.206 hospital beds
  - 8 hospitals for revalidation
  - 31 psychiatric hospitals
- **4 Strategic Research Centers in the field of micro- and nano-electronics, biotech and manufacturing**
- **Pharmaceutical companies** from around the world (production bases, distribution centers and R&D activities) :
  - #1 in Europe for clinical trial procedure speed and #2 for clinical trial applications per capita
  - #1 in Europe for pharma investments per capita
  - #2 in Europe for pharmaceutical production
- **Health aware population:**
  - 20.2% of population is above 65 (above EU average)
  - 60.3% of population has average to high health literacy

 University Hospitals  
  Strategic Research Centers  
  Main Pharmaceutical Sites <sup>1</sup>

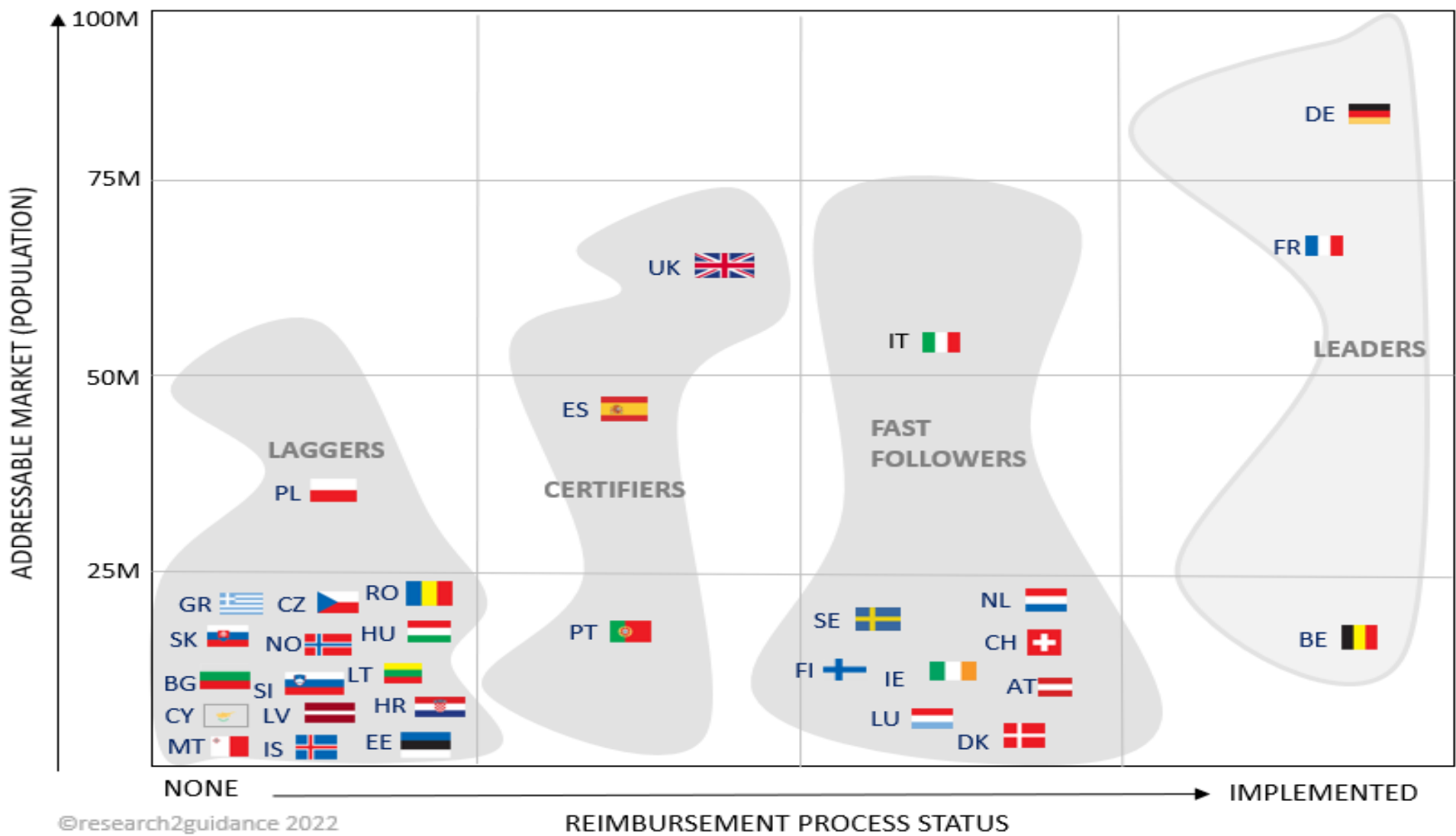
1) Selection of companies

Source: FIT report by Roland Berget, Company websites, Agentschap Zorg en Gezondheid, FIT, Eurostat, Sciensano, pharma.be

# Why Flanders #3

## Belgium: leader in reimbursement for digital health apps in the EU

EU Country DIGA Implementation Status and Addressable Market



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THE  
INNOVATIVE  
ECOSYSTEM



# Innovative Ecosystem: key ingredients

VISION  
&  
LONG  
TERM  
STRATEGY



Access to capital, from  
seed to mezzanine

Excellence in R&D



Entrepreneurial climate

Central location



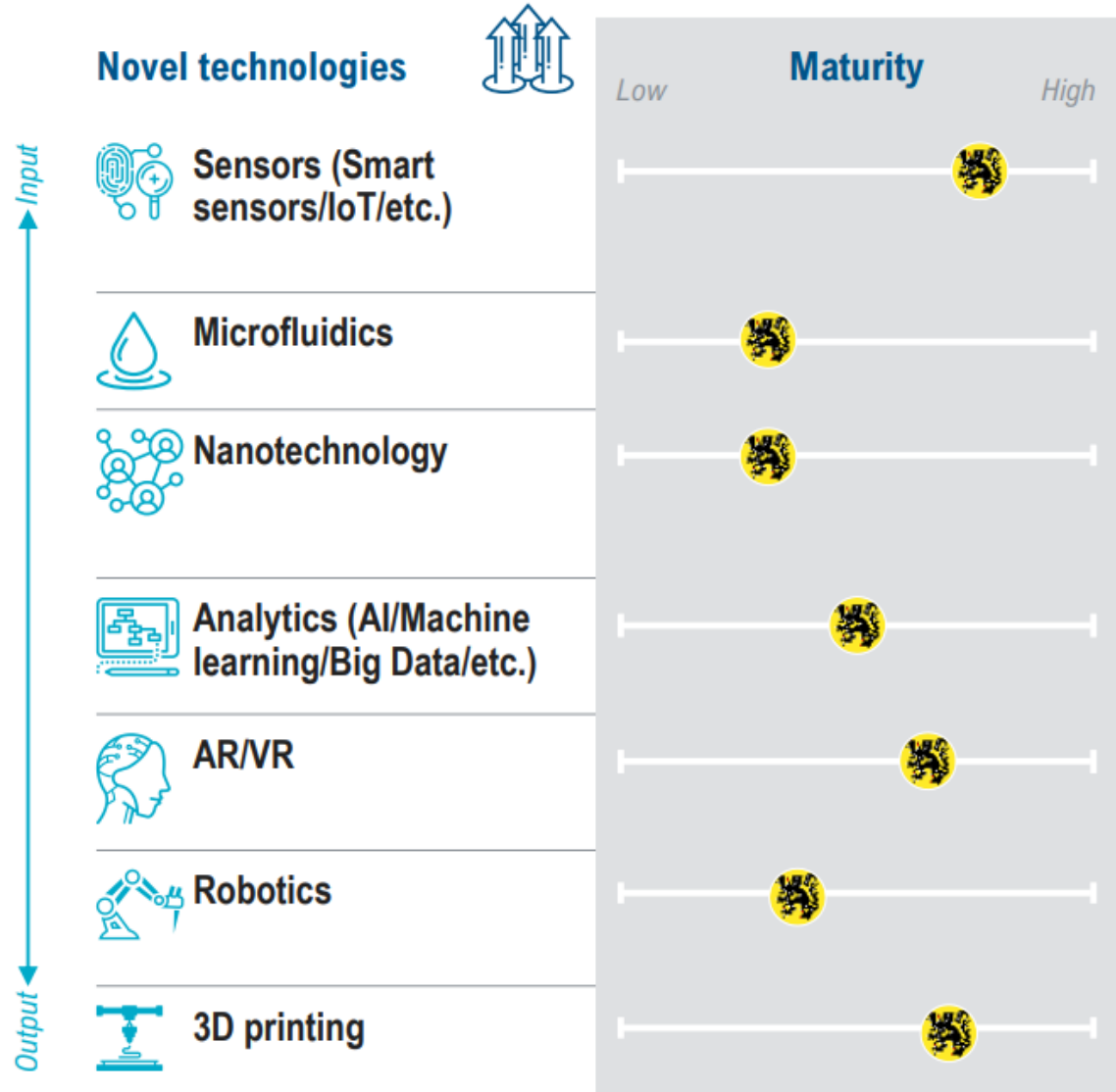
Best in class support



A proven industry



# Flanders' Research Institutes, Universities and Spin-off companies apply novel technologies to Medical Devices and IVD



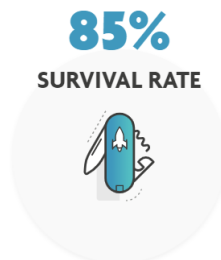
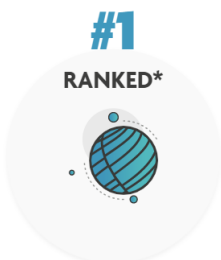
Example companies and institutes



# World leading research centre and incubator in nano- and digital technology

- 4000 FTE (100 nationalities) in research, 600m € research revenue, 600 companies collaboration
- Research domains: CMOS sensors (radar, lidar, imaging), neuromorphic computing, micro-fluidics, wearables,...
- HQ in Leuven and operations in NL, USA, China, Japan, India
- Imec.istart: the #1 university-linked start-up accelerator in EU, headquartered in Ghent

**imec** istart

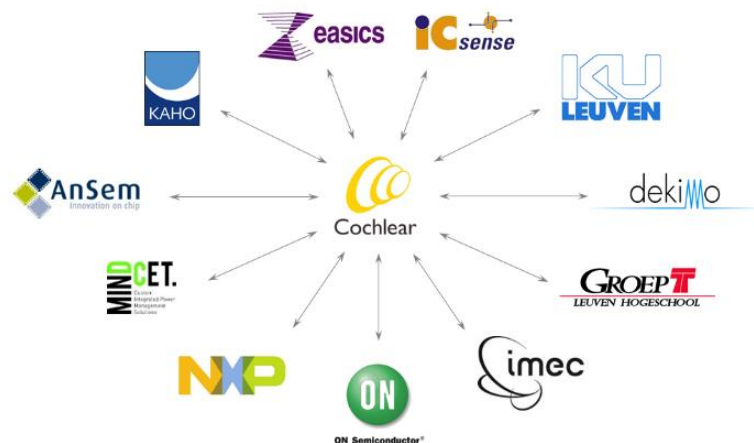
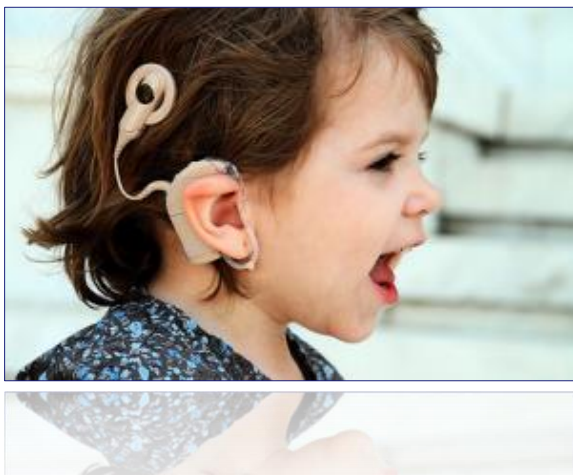


\* Ranked the #1 university-linked business accelerator in Europe

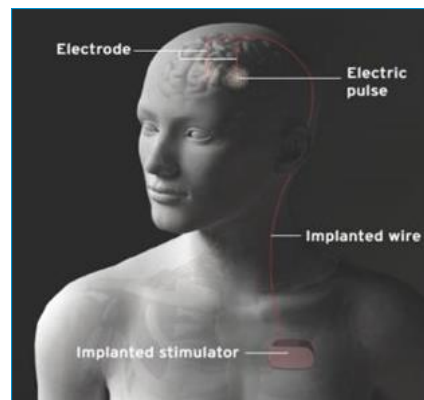
# Nanotechnologies for health

*"A unique combination of [nano]electronics systems expertise with health technologies"*

## Cochlear implant



## Deep-brain stimulator



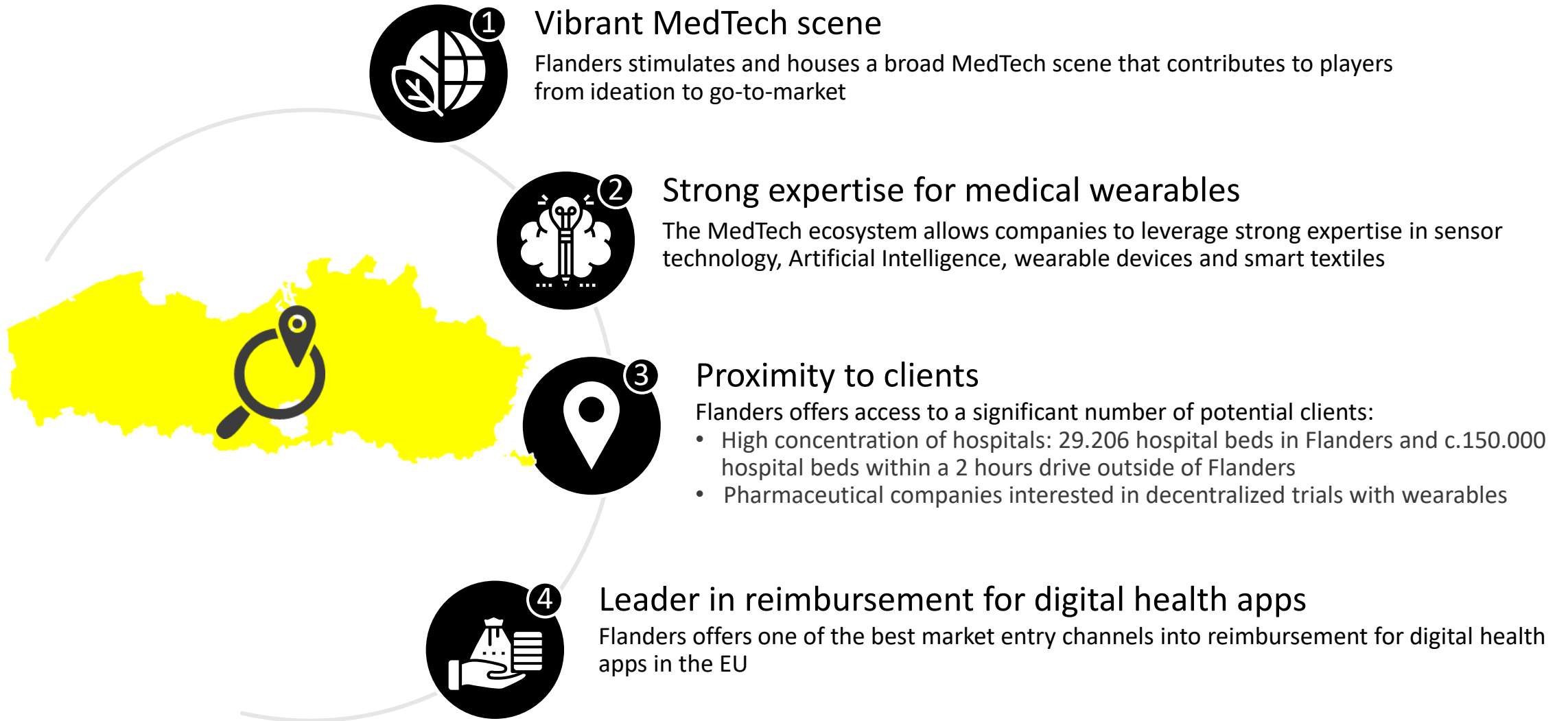
## Eye pressure sensor



WHY  
FLANDERS  
-INCENTIVES-



# Unique Assets of Flanders



# A supportive environment

- ✓ Presence of VC players and business angels
- ✓ Incentives and tax breaks
  - ✓ Local financial incentives and support for life sciences ventures
  - ✓ Lowest European tax rate on patent income
  - ✓ Reduction of 80% of withholding tax on R&D staff
  - ✓ R&D investment deduction
- ✓ R&D grants
- ✓ Close to the European Commission





# Thank you

