



Strengths of the Life Sciences Ecosystem in Belgium-Wallonia

BIO **WiN**


Wallonia.be



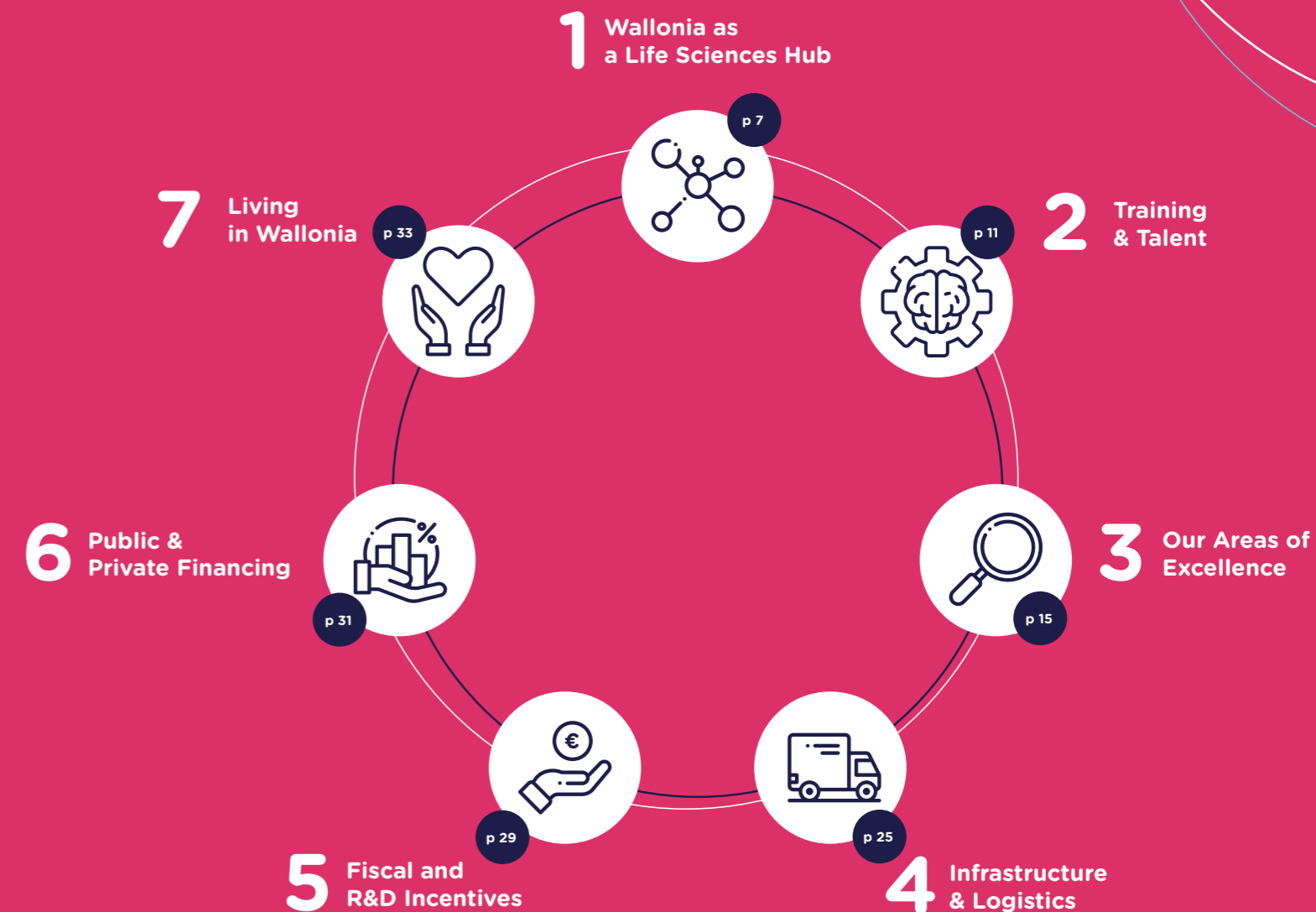
“ Pascale Delcomminette
CEO of Wallonia Export-Investment Agency (AWEX)

Wallonia is home to a vibrant life sciences and health industry, with pharmaceutical and biotech companies leading our exports. Recognised as a key biomanufacturing player in Europe, Wallonia actively attracts foreign direct investment (FDI) through innovation clusters, top-notch infrastructure, favourable policies, and a comprehensive interconnected value chain. To maintain our outstanding position, the Wallonia Export-Investment Agency strongly supports the international growth of our pivotal sectors, biotech, medtech and nuclear medicine.



“ Sylvie Ponchaut
Managing Director of BioWin

Nestled in the heart of Europe, the Walloon region in Belgium is not only a thriving biopharmaceutical hub but also a region with a rich historical legacy of excellence in the life sciences. Located in southern Belgium, Wallonia boasts a long-standing tradition of scientific achievement and pioneering breakthroughs in the field of healthcare. This legacy, combined with its current prowess, makes Wallonia an influential player in the life sciences on a global scale.





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Belgium at a glance

Belgium's geographical location, multicultural population, and history combine to give the country a **highly international character**. A crossroads and **centre of trade for centuries**, Belgium has preserved the best aspects of Latin and German cultures. As a result, it is a modern country with a **highly developed infrastructure** and an **excellent standard of living**. Its high quality of life can be attributed to **good education, and well-developed healthcare and social welfare systems**. The Belgian population is known for its productivity, loyalty, openness and language skills, and **the quality of the Belgian workforce enjoys worldwide recognition**.



Capital:
Brussels



Over
30 000 km²



Over 11 million
inhabitants



Dutch, French,
and German



Monarchy led by HM
King Philippe



Motto: Strength lies
in unity



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Wallonia as a Life Sciences Hub

Wallonia as a life science hub in Belgium

Wallonia, located in the south of Belgium, is a leading region in the field of life sciences. The presence of industry leaders like UCB, Janssen Pharmaceuticals, and GSK has further solidified the country's position in the life sciences sector. Belgium is one of the most advanced hubs of excellence for biotech, biopharma and medtech today.



Belgium's historical prominence in life sciences is rooted in a combination of scientific achievements, academic excellence, a robust biotechnology and pharmaceutical industry, and a commitment to medical innovation and patient care. With these factors still firmly in place and actively contributing to this ecosystem, we, as Deloitte, believe that Belgium's reputation as a thriving life sciences hub can only continue to grow.

Tom Van Wesemael, Life Sciences & Health Care Lead, Deloitte

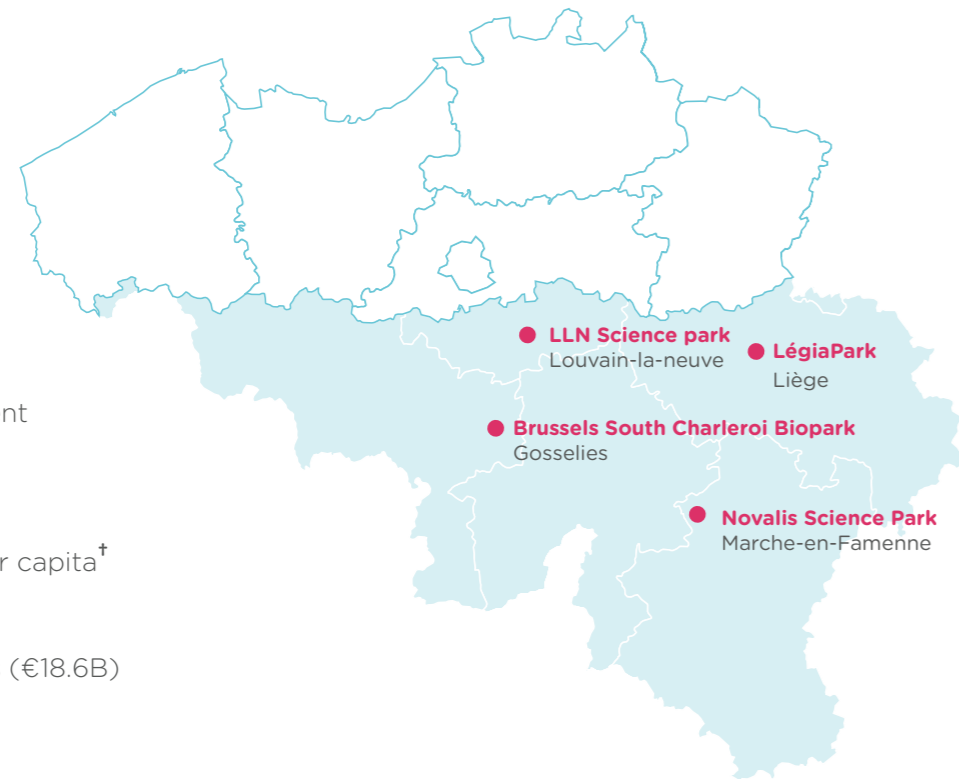


Key strengths of the life sciences ecosystem in:

Belgium

- **N° 1*** in biopharma R&D expenditure per capita[†]
- **N° 2*** in amount of biopharma patent applications per capita[†]
- **N° 2*** in number of clinical trials per capita[†]
- **N° 2*** in biopharmaceutical exports (€18.6B)

* in Europe



Wallonia

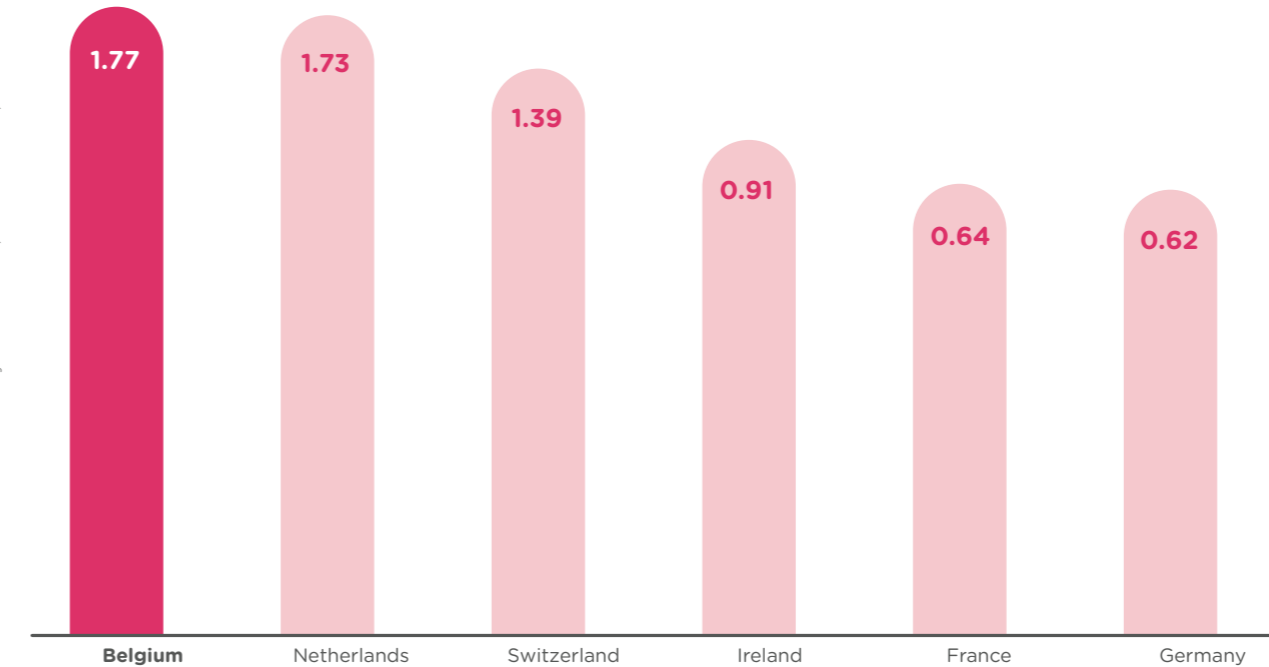
- **11 000** researchers
- **20 000** direct jobs
- **>260** life sciences companies
- **5** universities
- **4.5%** annual employment growth rate (2005-2022)[‡]

[†]Source: Pharma.be
[‡]Source: BioWin

A leading position in clinical trials

Belgium ranks **in the top 3 for clinical trials** in Europe (source: Pharma.be). Our biopharmaceutical companies contribute approximately **80% of the clinical trial requests** in Belgium. Between January 2022 and January 2023, an impressive **629 applications were submitted**. Additionally, in 2021, Belgium accounted for **20% of cancer-related clinical trials in Europe**.

¹ Source: WHO Global Observatory on Health R&D, ICTRP database; Pharma.be

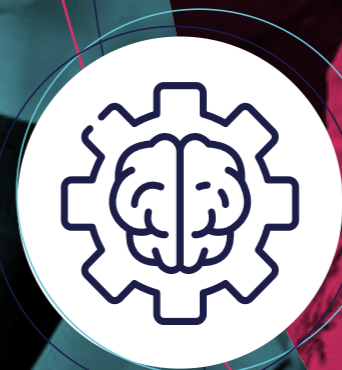


■ **Total number of clinical trials in CTRP database per capita¹**

per thousand inhabitants
Status as of January 18th, 2023



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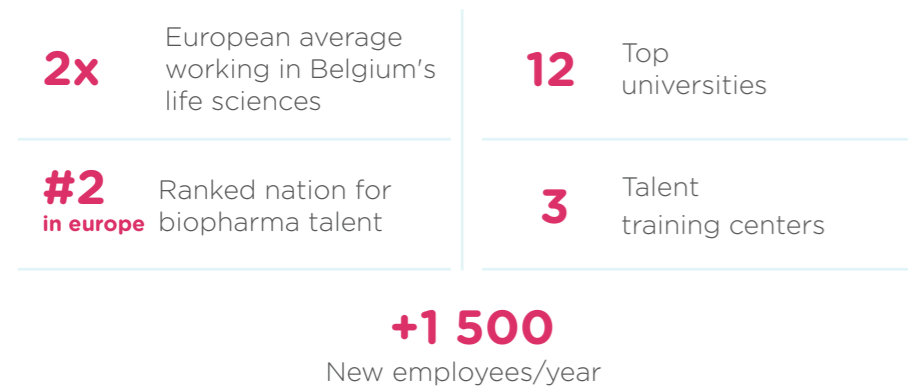


Training &
Talent

Wallonia offers a wide range of talent

A dynamic community of scientists, students, professionals, and highly skilled individuals collaboratively cultivates an exceptional environment, essential for advancing a globally renowned health ecosystem

Talent development is a priority for the life sciences sector in Belgium; the government has taken proactive steps to support this goal. Major initiatives have been launched by the Prime Minister Alexander De Croo together with the academic world, healthtech and biotech industry, endorsed by the President of the European Commission, Ursula von der Leyen.



Numerous dedicated science parks & universities of applied sciences

Source: healthbiotechvalley.be

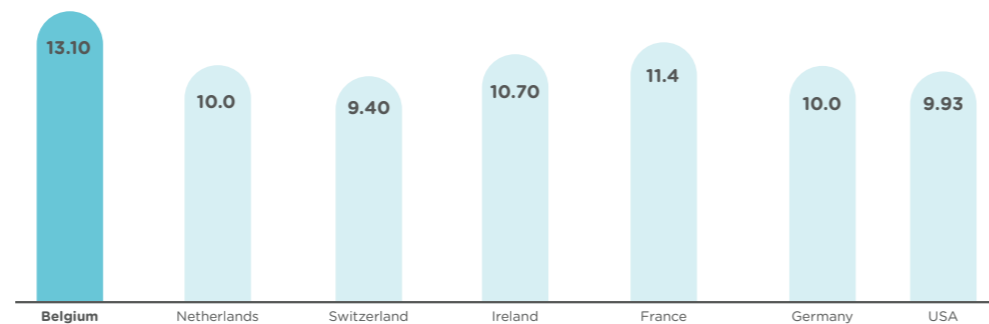


Investing in upskilling and reskilling is crucial in the rapidly changing world of life sciences. That's why at Takeda, we prioritise talent development as the future of healthcare depends on nurturing the brightest minds. We want to make sure that our workforce evolves in harmony with the latest technologies, using AI and VR to drive progress and innovation in the long run. Our ambition is not only to shape the future of medicine but also the future of talent.

Patricia Denegri, HR Site Leader, Takeda in Lessines - Belgium



Number of researchers
per 1 000 employees, 2020



Source: OECD Data Researchers, Eurostat Scitech database

Belgium has the highest density of researchers amongst neighbours and 32% higher than in the US.

Unlocking the potential of our talents

Belgium has no less than 3 dedicated training centres for lifelong learning of life science employees



A unique training centre located in the Walloon region for production-related roles (manufacturing, quality control laboratories, maintenance, etc.) in the chemical, pharmaceutical, and biotechnology industries. Thanks to private, regional and European investments, the centre has now a capacity to serve more than 6 000 people per year.



Focus areas

- Basic life science skills in manufacturing, QA, QC
- Technical writing
- Equipment/system validation and qualification
- GMP requirements, packaging



Focus areas

- STEM immersion
- Next-gen biomanufacturing and supply chain
- Data and Digital
- Soft skills, including mini-MBA for life sciences researchers

The European Biotech Campus will be operational in 2025



Belgium has more graduates in life sciences & health per capita than neighbouring countries.

Source: EU Biotech Campus; ViTalent





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Our Areas of Excellence

The ATMP value chain in Wallonia

Discover the wealth of opportunity in Wallonia's thriving Advanced Therapy Medicinal Products (ATMP) sector

With over two decades of pioneering expertise in ATMPs (which include tissue engineering, cell and gene therapies, and exosomes) Belgium and Wallonia have set the stage for remarkable growth and innovation. **The ATMP ecosystem's maturity signals advanced development, robust infrastructure, and a well-established network, highlighting its capacity to contribute significantly to innovative medical therapies.**



"We remain committed to investing in Belgium's burgeoning ATMP sector because we see immense potential for innovation and growth in this dynamic ecosystem. With its strategic location, skilled workforce, and supportive regulatory framework, Belgium offers a fertile ground for us to continue driving advancements in advanced therapies. Our ongoing investment underscores our dedication to improving patients' lives and shaping the future of medicine."

Cedric Volanti, Vice President, Viral Vector Services, Thermo Fisher Scientific



A glimpse at the numbers:



38

innovative companies

15

visionary companies dedicated to pioneering therapies

8

companies in industrial production

15

service providers



> 2 100

skilled professionals engaged in developing cutting-edge therapies (direct jobs)



> 6 000

positions have been created thanks to the ATMP sector in Wallonia (both direct and indirect jobs)

Unlocking Wallonia's ATMP potential

✓ Full value chain:

Wallonia boasts a complete ecosystem from research to hospital care, giving us a unique European advantage.

✓ Diverse expertise and global recognition for innovation:

We excel in all ATMP categories, from cell and gene therapies to exosomes, earning global acclaim for our innovations. Leading companies like UCB, Orgenesis, Catalent, Thermo Fisher, Kaneka Eurogentec, Ncardia, and more are at the forefront, supported by international backing.

✓ Investor support:

Public and private investors are vital to our success, along with our strategic location and top-tier logistics.

✓ Regulatory excellence:

Ensures a smooth regulatory path for ATMPs, enabling progress.

✓ Government backing:

Wallonia's government champions innovation and digital transformation, bolstering our competitive edge.



We are proud to continue our investments in Belgium's gene therapy landscape, a region that has consistently demonstrated excellence in life sciences. Belgium's rich history of innovation, coupled with its thriving ecosystem, positions it as a prime hub for gene therapy research and development. Our ongoing commitment reflects our confidence in the talent, infrastructure, and collaborative spirit here, as we work to advance the frontiers of gene therapy and make a meaningful impact on patients' lives worldwide.

Xavier Hormaechea, Managing Director UCB Belgium, President of BioWin



Wallonia, a vaccine hub

Wallonia excels in vaccine production, especially during the COVID-19 pandemic, bolstering its global importance in this field. This has led to increased investment and international partnerships. Research focuses on adjuvants, immunology, and messenger RNA, with active production targeting various diseases. Wallonia also plays a key role in global vaccine distribution.

“
At GSK, we unite science, technology, and talents to get ahead of disease. GSK in Belgium represents the largest biopharmaceutical company with 9 000 employees, a fully integrated industrial network, from fundamental research and development, to vaccine manufacturing and distribution. We deliver 1.5 million doses of vaccines every day; and around 40% of the world's children receive a GSK vaccine each year. Thanks to our unique combination of a well-developed ecosystem, a highly skilled workforce, and a well-established collaboration with public authorities and research centers, GSK benefits from an exceptional biopharmaceutical ecosystem. This position must not be taken for granted, which is why we must continue to work together to strengthen our competitiveness.
 ”

Emmanuel Amory, Managing Director GSK Belgium



Vaccine and medicine exports:



€100 B



17%
of Belgium's total exports



Every day, the sector exports goods worth
€275 M

Belgium and Wallonia have all you need for the successful development of vaccines and is home to:

- ✓ **Pharmaceutical companies and organisations**
Some of the key players in the development of vaccines in Wallonia include GSK, Zoetis, Pfizer and J&J.
- ✓ **World-class CDMOs**
Thermo Fisher Scientific, Univercells Group
- ✓ **Top notch universities and research centers**
- ✓ **CEIV Pharma-certified airports and the world's first CEIV Pharma-certified seaport**
- ✓ **Unique groundbreaking institutes:**

Vaccinopolis: innovative vaccine research centre

Constructed in record time due to the urgency of global health challenges, Vaccinopolis is a symbol of innovation and collaboration, supported by the federal government and private partners. The federal government invested 20 million euros in Vaccinopolis and in the ULB's Institute for Medical Immunology. Vaccinopolis closely collaborates with the University of Brussels: a leader in human vaccine immunology. Henceforth they will be able to operate from a state-of-the-art immunology laboratory.



During the COVID-19 crisis, 600 million vaccine doses were produced and sent from Belgium in 2021.



European Plotkin Institute for Vaccinology

By connecting scientists, research institutions, companies and funds, the European Plotkin Institute for Vaccinology serve science and society. Powered by Universiteit Antwerpen and Université Libre de Bruxelles, combining vaccine trials and in-depth analyses of the immune system, the Institute provides a unique and much needed infra-structure to efficiently evaluate novel therapeutics and vaccines, and to accelerate vaccine development.

Belgium, Wallonia: global excellence in nuclear medicine

Belgium stands at the forefront of nuclear medicine, driven by an early and dedicated focus on healthcare applications. Nuclear medicine was introduced in most Belgian university hospitals in the late 40s and early 50s. In the late 1990s, Belgium became the world leader in nuclear medicine equipment per capita, boasting a high density of experts and specialised staff.

Today, nuclear medicine in Belgium and Wallonia is flourishing, demonstrating expertise across the entire value chain, possessing robust infrastructures, and being globally recognised by specialists in the field.



Telex is pleased to benefit from the radiopharmaceutical assets and skills that exist in Wallonia to develop its activities. It is an ideal environment to help us deliver the promise of nuclear medicine in targeted therapy and help even more patients to cure and treat their cancer.

Richard Valeix, EMEA President - Telex Pharmaceuticals



Added value of
€225 M

18
companies in Wallonia

5 000
jobs in Belgium half of which are in Wallonia

Discover the power of Belgium-Wallonia in advancing nuclear science and technology for global healthcare

✓ Comprehensive expertise

From isotope production, labelling techniques, radiopharmacy, dosimetry to specialised transport and supply chain, education, and patient care, Belgium-Wallonia's proficiency results in a fully integrated value chain.

✓ World-class professionals

High concentrations of medical physicists, chemists, pharmacists, and nuclear physicians, support the application of nuclear science and technology in healthcare.

✓ A tangible impact

Belgium plays a pivotal role in the global supply of radionuclides, with over 10 million patients worldwide benefitting annually from production made in Belgium.



In 1 out of 3 nuclear medicine department in the world, treatments are made possible thanks to Belgian technology.



Belgium's pioneering journey in nuclear science and the exceptional capabilities it has developed over the years are a testament to our commitment to advancing healthcare through nuclear medicine and technology. At IRE-ELiT, we take immense pride in our role as one of the major producers of vital radioisotopes and radiopharmaceuticals and remain dedicated to shaping the future of molecular imaging and therapy globally.

Jean Bonnet, Head of strategy, sales and marketing IRE-IRE ELiT



IBA is the world leader in proton therapy, a high-tech cancer treatment transforming lives.



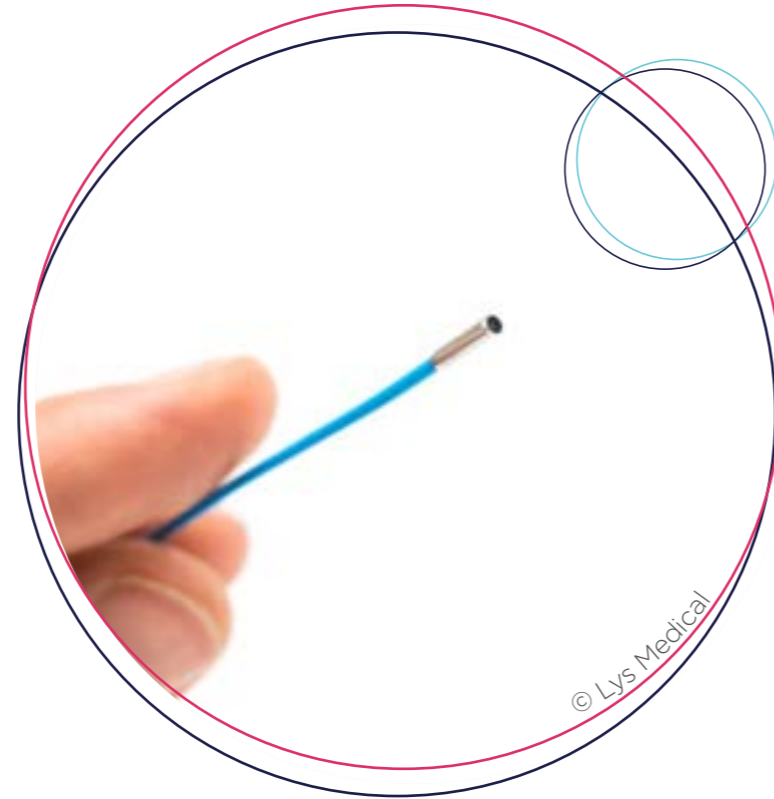
Medtech, a rapidly growing ecosystem

Belgium has a well-established and thriving medical technology industry, known for its strong innovation and high-quality products. In Wallonia specifically, the strengths are built from the dense and well-developed engineering capabilities, clinical expertise, and talented people.



iSTAR Medical is proud to be headquartered in Wallonia to develop MINject®, a minimally invasive glaucoma surgery device for open angle glaucoma. Wallonia is a key hub for our industry and being part of the region's rich ecosystem of exciting companies and research helps our company to flourish.

Michel Vanbrabant, CEO - iStar Medical



In Belgium



16 750
direct jobs



250
companies



10.3%
annual growth



€3.4 B
Total yearly turnover
(excl. export)

Source: bemedtech.be + Report by Deloitte

Medtech is a strategic sector for Wallonia

Medtech is a cornerstone of Wallonia's strategic landscape, expanding through a dynamic blend of regional initiatives, global leaders, and a diverse ecosystem spanning research, engineering, entrepreneurship, logistics, and more. Wallonia's collaborative spirit, supported by a favourable fiscal framework, top-tier talent, and a central European location, makes it a prime hub for medtech innovation.

Key strengths include:

- ✓ Regional initiatives fuelling medtech and digital innovation
- ✓ Clinical trial excellence on an international scale
- ✓ A rich and diverse ecosystem home to global leaders (IBA, Baxter, Johnson & Johnson, Mölnlycke and CooperVision)
- ✓ Collaborations between hospitals, entrepreneurs, and universities
- ✓ Supportive fiscal framework for R&D
- ✓ Abundance of highly qualified talent and world-class universities
- ✓ Strategic logistics centres in the heart of Europe



With MedReSyst, a regional program focused on developing critical data management and AI tools in Wallonia, we aim to reshape network medicine, optimizing patient journeys from screening including omics to personalised treatments.

Benoît Macq, Convenor MedReSyst & Prof. at UCLouvain



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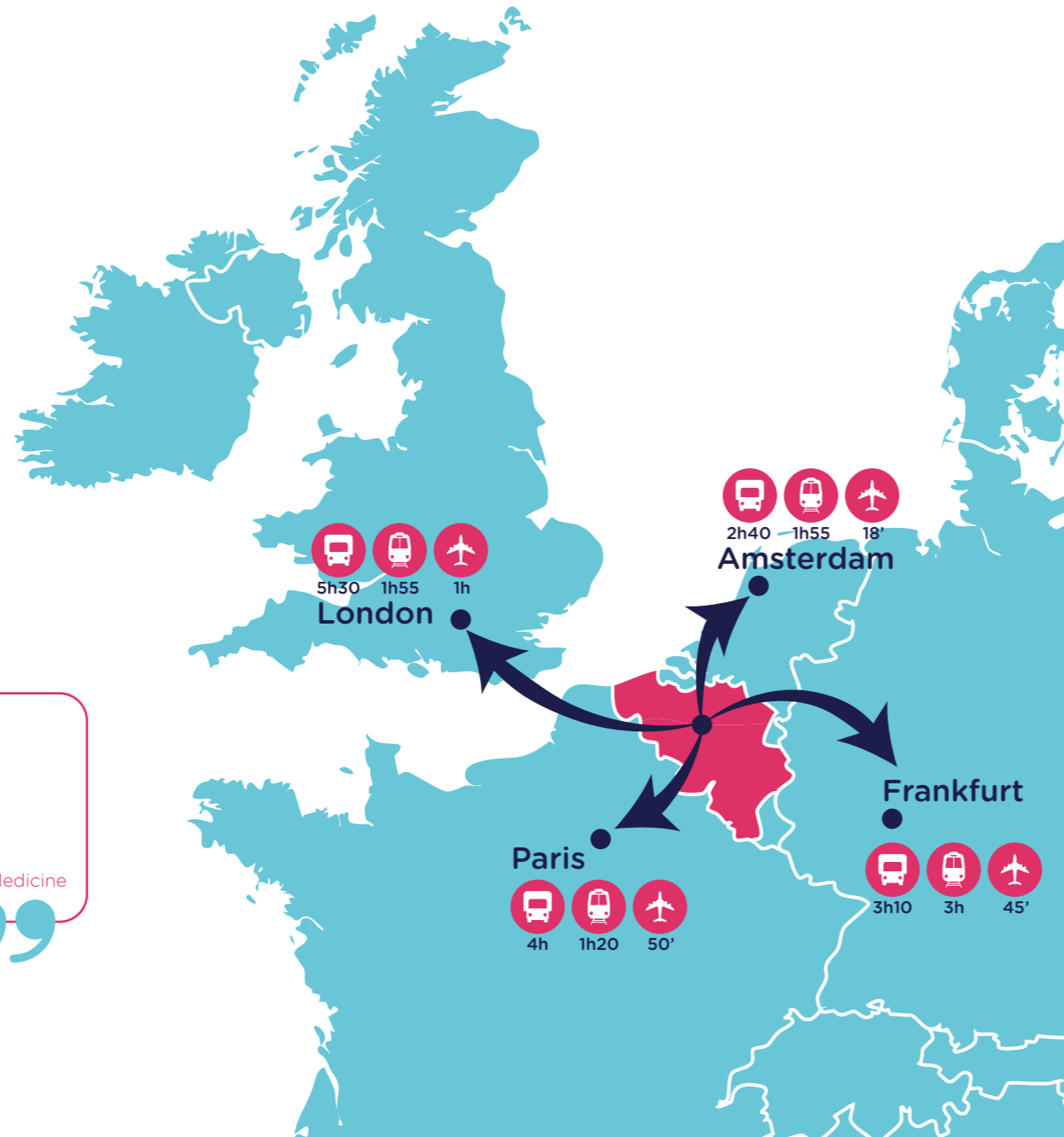
Infrastructure & Logistics

Infrastructure and logistics

With more than 100 000 sqm of available labs and offices, Wallonia offers the best quality/price ratio in Europe.

An attractive offer in **the heart of the European network**. More than 280 business parks, including seven science parks, are perfectly connected to the major European communication and transport networks. Bridging buildings and incubators can house one or more SMEs on a temporary basis during their launch phase. The available zones are fully equipped and offer direct access to Wallonia's research and development centres.

“
 We first chose Belgium because of its central position in Europe. We always strive to be close to the two big European markets that are Germany and France and be able to get to them at a lower cost, with great access to main highways and airport hubs.
 ”
Jean-Michel Colnot, Senior Director Distribution EMEA - J&J Innovative Medicine



Wallonia benefits from an excellent accessibility to high-quality transportation networks

Road, rail, water and airport networks

A neighbour of Brussels, capital of the European Union, Wallonia is a place to do business, a place that will welcome your organisation, right at the geographical heart of the European market.



Belgium is #1 for motorway density in Europe



Belgium is #1 in the world for rail network density



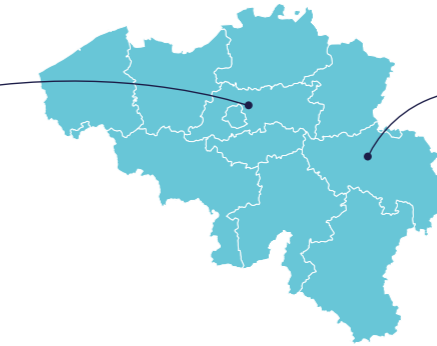
Belgium provides access to inland and coastal freight water transport

Belgium has many international air transport options

Brussels Airport

- Daily flights to Asia, the US, the Middle East and Africa
- Historical link in between Belgium and Africa: 1st EU country in terms of direct flight to North & Central Africa; daily flight to the main distribution hubs
- More than 100 000 sqm of pharma warehouses
- 1st and largest airport community in the world where stakeholders are CEIV Pharma certified

www.brusselsairport.be



Liege Airport

- 1st Belgian cargo airport and 6th European cargo airport (2022)
- WHO Europe's logistics platform during the COVID-19 crisis
- 1 140 000 tons in 2022
- 1 500 destinations
- Awarded Best Cargo airport in 2021 at the Payload Asia Awards
- Hub of World Food Program / European hub of AliBaba
- Clinical express centre, open 24/7, CEIV Pharma certified

www.liegeairport.com



5

Fiscal and R&D Incentives

Wallonia offers a business-friendly environment in terms of taxation and incentives

- ✓ **Tax incentives on innovation**
3.75 % effective tax rate on net income of Patents, Software ...
- ✓ **Impatriate fiscal status**
Attractive personal and corporate taxation

Costs Proper to the Employer (CPE)
Up to **30%** of the gross salary, capped at EUR 90 000
- ✓ **Tax ruling**
Legal certainty regarding your project in Belgium
- ✓ **Holding tax regime**
 - Participation exemption: **100%** deduction on dividends received (min threshold, min holding period, taxation requirement)
 - **0%** capital duty on capital contribution
 - **100%** exemption on capital gains on shares (min threshold, min holding period, taxation requirement)
- ✓ **Nominal corporate tax rate**
25% and **20%** for SME's
- ✓ **Investment incentives**
Up to 20%
European guidelines for regional grants (2022-2027)
- ✓ **R&D incentives**
50-80%
Subsidy for basic industrial research
 - Acquisition of new knowledge
 - Creation of new products
 - Creation of complex components
 - Validation of generic technologies / new concepts (incl. pilot trials)
- ✓ **Employment incentives**
11%
Average % reduction over 4-year period

Team workers, researchers
Up to **22%** reduction cost of employment

First recruitment
Exemption of social security contributions up to € 3 100/qtr. for an unlimited period



6

Public & Private Financing

Public and Private Financing

With a market capitalisation of 40.1 billion euro in 2023, Belgian biotechnology companies hold the second highest value in Europe, just behind Denmark.

Public and private investment companies provide long-term funding for businesses and foreign investment projects in Wallonia. The goal is to promote the region's economic development. The investment is granted for longer periods than those generally granted by the interbank market.



The funding support can take the following forms:

- acquisition of shareholdings
- granting of loans - convertible or non-convertible, subordinated or non-subordinated



Source: KBC Securities 2023

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A Great Place to Live



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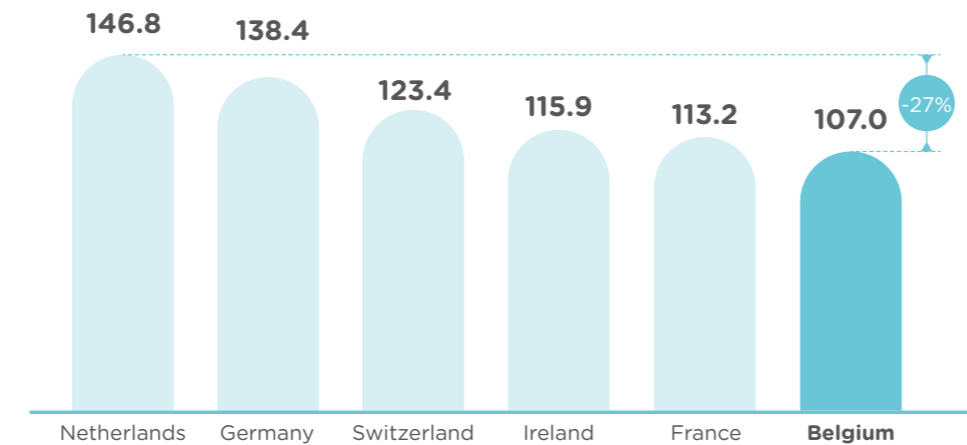
Living in Wallonia: where the life sciences thrive and life flourishes

Welcome to Wallonia, a region that seamlessly blends the vibrancy of the life sciences with the joys of everyday living. Nestled in the heart of Europe, Wallonia is not just a destination; it's an experience.

In the southern part of Belgium, we've cultivated a harmonious ecosystem that fosters scientific breakthroughs and celebrates the beauty of nature. With a rich heritage of academic excellence, a vibrant life sciences community, and a commitment to sustainable living, this region is more than just a home - it's a place where careers flourish, families thrive, and dreams come to life.

House price to income ratio, Q1 2022

Index, 2015 = 100



Source: OECD

Embracing Wallonia: a life of quality, culture and potential

✓ Quality of life

Wallonia offers a peaceful, balanced lifestyle with beautiful landscapes, excellent healthcare, and a rich cultural heritage.

✓ Cultural richness

Wallonia's historic cities, picturesque villages, and cultural events make it a hub for art, music, and culinary exploration.

✓ Career and education opportunities

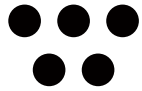
The region provides diverse job prospects and prestigious educational institutions in a central European location, facilitating career growth and academic excellence.

✓ ... and these are only some of the factors that make Wallonia a great place to live!

Elevate your quality of life in Wallonia, where nature, culture, and well-being converge. Embrace a harmonious blend of history, natural wonders, and a thriving community. Discover a region that nurtures your passions, celebrates your individuality, and offers a truly fulfilling lifestyle.



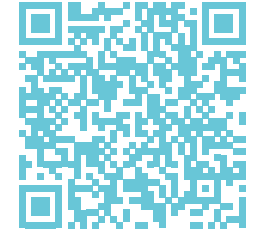
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Wallonia.be

The Wallonia Export & Investment Agency or AWEX, is the public service in Wallonia in charge both of attracting foreign investment to Wallonia - Belgium and to stimulate foreign trade by assisting the companies established in our region in their export endeavours. It constitutes a one-stop shop for all foreign companies interested in locating to Wallonia or expanding their existing activities and is the complete partner for all Walloon companies wishing to develop overseas.

wallonia.be | lifesciences@awex.be



BIOWiN

BioWin is the Health Cluster of Wallonia, Belgium. We are the regional reference holder for all stakeholders in innovative R&I projects in health biotechnology and medical technologies, whether they are companies, research centres or universities.

BioWin serves as a valuable resource and gateway for foreign companies seeking to leverage the opportunities and expertise available in Wallonia's thriving life sciences sector. Whether it's through collaboration, access to research and development resources, or market insights, BioWin can play a pivotal role in supporting foreign companies' success in the region.

biowin.org | contact@biowin.org

