

The Belgian **BIOPHARMACEUTICAL** sector

**Remaining competitive
is crucial** for the Belgian
biopharmaceutical industry



The Belgian innovative biopharmaceutical sector has a central role to play in Europe

Our latest EU Pharma figures once again confirm the key impact of this industry. Our country belongs to those leading us in innovation and the life sciences, a field whose role has become so important thanks to a combination of investments, a superb ecosystem, and a strong international network. However, Europe is under pressure to remain competitive and retain its rapid access to a broad range of new therapies.

Scientific progress

Belgium is one of the key drivers of innovation in European biopharmaceuticals. Our country is second in the European rankings for number of clinical trials per capita and for number of patent applications per capita. When it comes to investment in research and development (R&D), Belgium tops the European list, with an average investment of 15.5 million euros per day. Numerous enterprises have established their research centres in Belgium, and collaborate with universities and research facilities to develop novel medicines. This means that Belgium is home to highly qualified researchers and specialists, and as a result has become a centre for scientific expertise, which is a driving force for innovation in this sector.

Competitiveness

However, over recent years research expenditure in Asia and the United States has been rising significantly. Europe is rapidly losing ground, particularly when it comes to research into highly promising novel treatments such as cell therapy and gene therapy. This was emphasised in a report presented to the European Commission last September, entitled "The future of European competitiveness". Mario Draghi, presenting the report, put forward the opinion that Europe needs to deliberately set its course towards the future and build competitiveness into its strategy. This is important for the whole of Europe, and thus Belgium cannot be an exception.

Economic impact

Biopharmaceuticals are one of the biggest contributors to the Belgian economy, with the sector representing around 20% of the total added value of the manufacturing industry. This makes Belgium a crucial player in the European biopharmaceutical production and export markets. As well as directly creating jobs, this sector is supporting a number of other industries, including logistics, education, and IT services.

Contribution to European innovation policy

Its unique combination of public and private partnerships has helped Belgium become a European leader in health innovation. With its strong infrastructure and expertise, Belgium can serve as a model for other European countries when it comes to attracting investment in scientific research and development. The Draghi report emphasises that Belgium's leading position makes it a key player in maintaining European competitiveness and ensuring new therapies remain accessible to European citizens.

Securing competitiveness

The Belgian biopharmaceutical sector is essential to innovation, economic stability and public health in Europe. Its central position in the production of new medicines and its role as a European innovator make the country a key strategic partner for the European Union. For Belgium to maintain this leading position, it will need ongoing investments, collaborations and strategic policy support, on both the national and the European levels.

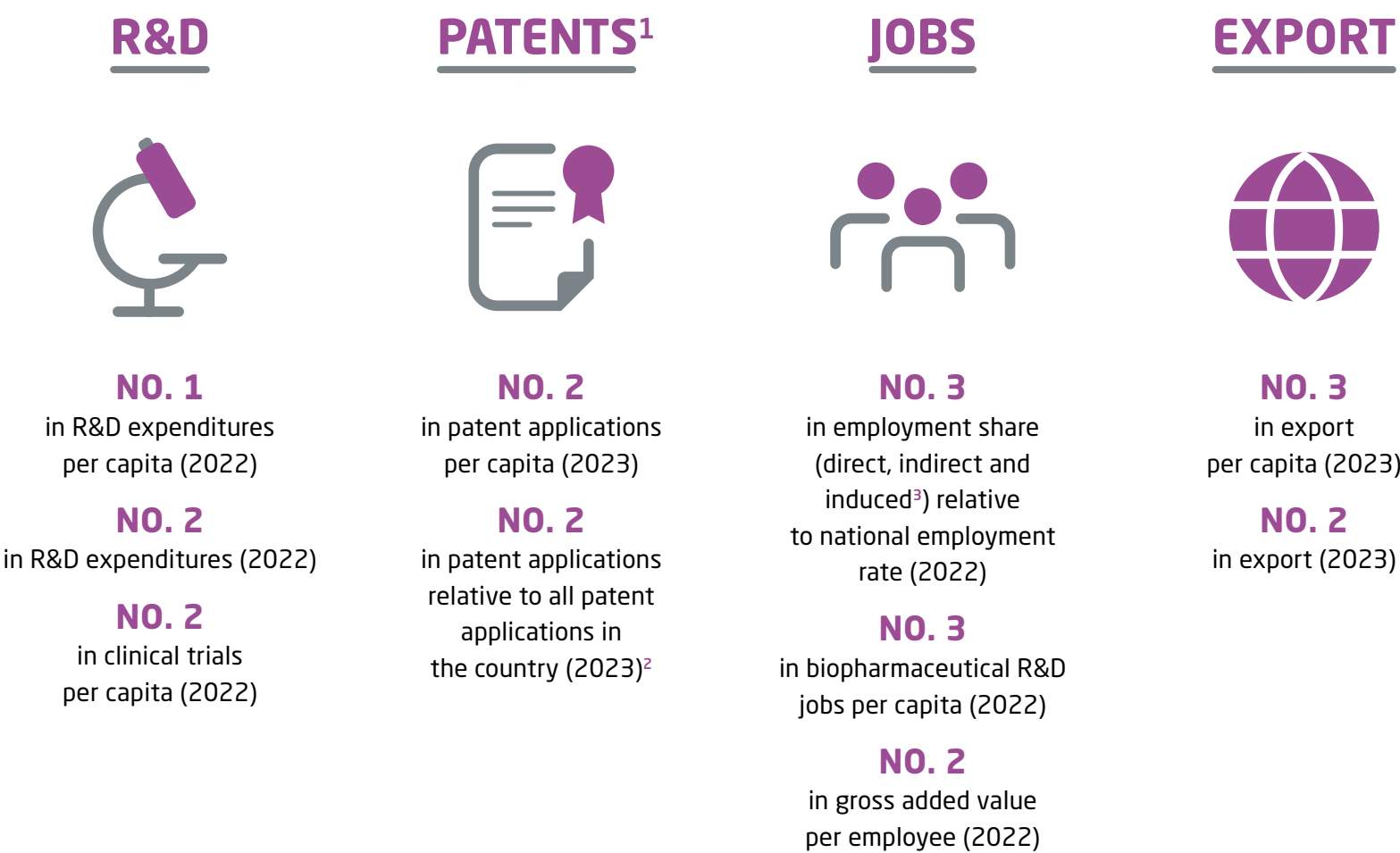
The European innovative biopharmaceuticals sector has issued five recommendations that can help Europe take a new approach to its life sciences ecosystem.

1. The creation of an EU Office for Life Sciences and a dedicated Competitiveness strategy for European Life Sciences
2. European ecosystem that can transform ideas into innovation
3. Develop a globally competitive location for developing and manufacturing new technologies
4. Invest in health
5. Secure Europe's place as a resilient global biopharma player

This approach prioritises connecting the sector and securing EU competitiveness. Ultimately, these are in the interests of our own economy - and also of our health.

Caroline Ven
CEO, pharma.be

The Belgian biopharmaceutical sector consistently in Europe's top 3

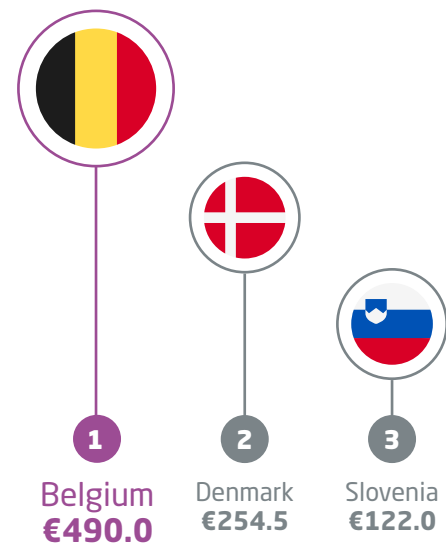


Belgium's share within the European Union



Innovation as a driving force

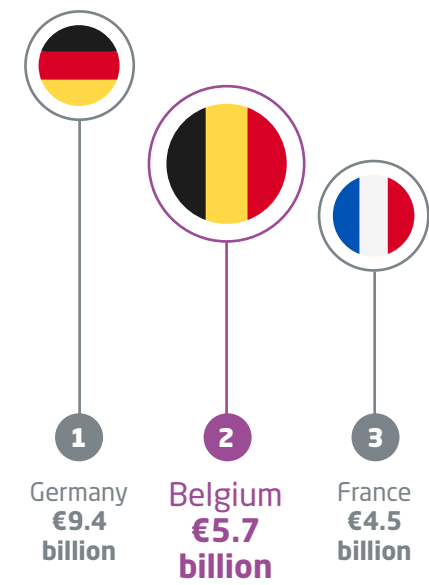
NO. 1
in R&D expenditures per capita in
the biopharmaceutical sector



Biopharmaceutical R&D expenditure
- per capita
2022

The Belgian biopharmaceutical sector holds its leading position in R&D expenditure per capita. Belgium's investments are almost double those of the runner-up, Denmark, and over four times the investments made by no. 3, Slovenia. By comparison with the EU27 average, the difference is even starker: Belgium's expenditure is around seven times the average. These steady investments are building a crucial foundation for the development of new products and treatments for our patients.

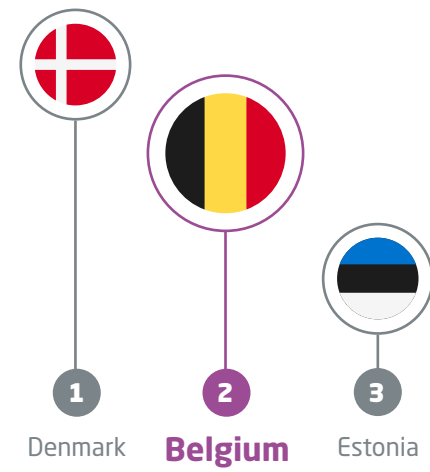
NO. 2
in R&D expenditures
in the biopharmaceutical sector



Biopharmaceutical R&D expenditures
- total
2022

Belgium also scores well above other European countries when we look at the absolute numbers, with only Germany spending more. In 2022, Belgium's biopharmaceutical sector invested 5.7 billion euros in R&D. This corresponds to some 15.5 million euros per day, equivalent to the combined investment of countries 4-7 on the European rankings (Italy, Denmark, Spain and Sweden). An impressive tally, considering Belgium is eighth on the list of European countries by population.

NO. 2
in clinical trials per capita



Number of approved clinical trials
- per capita
2022

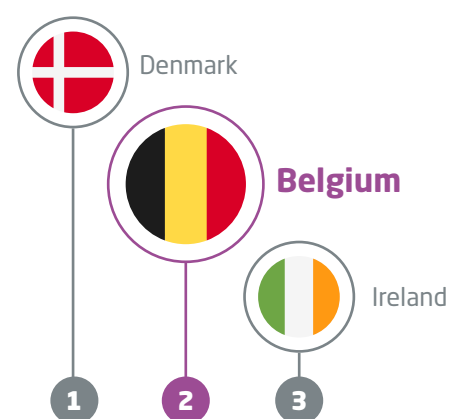
In 2022, Belgian authorities approved 474 clinical trials. This made Belgium the country with the highest number of clinical trials per capita, after Denmark.



Patents as an essential criterion for innovation

NO. 2

in biopharmaceutical patent applications per capita

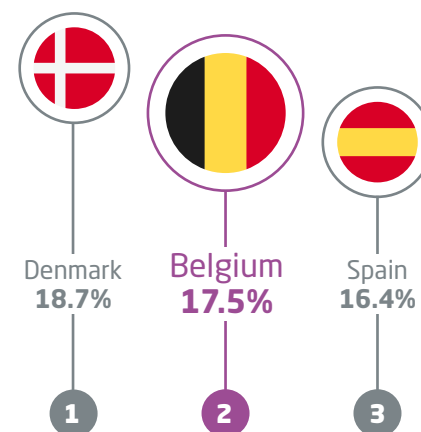


Number of patent applications in the field of pharmaceuticals and biotechnology - per capita
2023

Another important indicator of innovation is the number of patent applications being submitted. Once again, Belgium is highly competitive in this area. In 2023, it held the second place for number of patent applications per capita in the field of pharmaceuticals and biotechnology. Some 446 patent applications were submitted, corresponding to well over one per day.

NO. 2

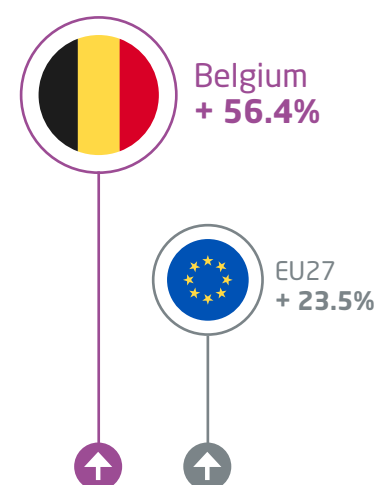
for biopharmaceutical patents as a percentage of all patent applications, per country



Biopharmaceutical patent applications as a percentage of all patent applications in the country² - total
2022

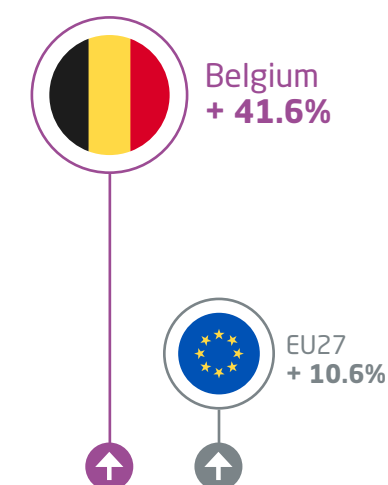
If we look at the number of biopharmaceutical patent applications as a share of all patent applications in the country, Belgium once again places in Europe's top three, with 17.5% of its patents coming from the biopharmaceutical sector. In France, no. 4 on the ranking, this share drops to below 9%. Belgium's high score is a clear indicator of how crucial the biopharmaceutical sector is to its national research and innovation.

STEADY FOCUS ON INNOVATION



Evolution of biopharmaceutical R&D expenditures - per capita
2018-2022

Belgium's leading position did not "just happen": it is the result of years of consistent work. Over the period 2018-2022, the per-capita Belgian R&D expenditure in the biopharmaceutical sector increased by more than 56%. This is almost 2.5 times the growth percentage for R&D expenditure per capita in the EU overall. No other country with significant R&D expenditure per capita established such a major growth.

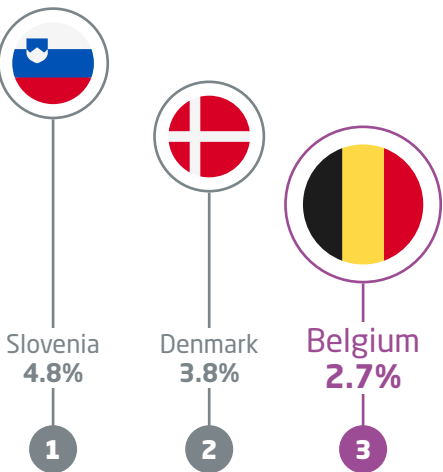


Evolution of the number of patent applications in biopharmaceuticals and biotechnology - total
2018-2023

Looking at biopharmaceutical patent applications, Belgium performed even better: between 2018 and 2023, the number of patent applications submitted increased four times more than in the EU27 overall.

Human capital as a basis for success

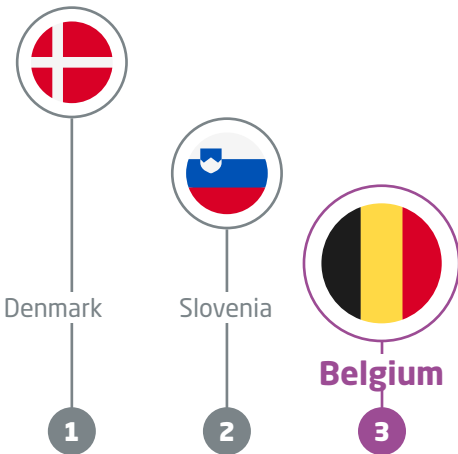
NO. 3
in employment share in the
biopharmaceutical sector in relation
to national employment



Employment share in the biopharmaceutical sector (direct, indirect and induced) in relation to national employment - total 2022

The Belgian biopharmaceutical sector holds its leading position all through the value chain, from R&D and clinical trials through to production and distribution of medicines. This cannot happen by chance - it requires investment in human capital. The biopharmaceutical sector in Belgium was a source of almost 45,000 direct jobs in 2023. When we add in the indirect and induced jobs, the sector created 141,528 jobs altogether. In other words, over 1 in 40 jobs in Belgium are associated with the biopharmaceutical value chain.

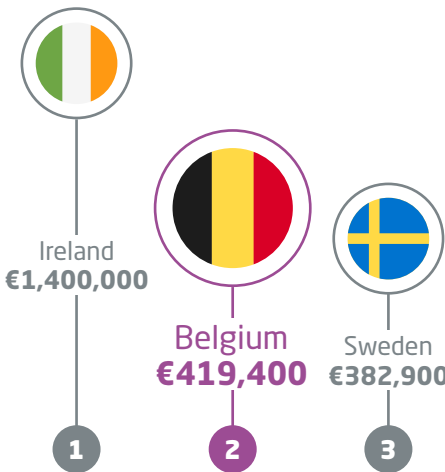
NO. 3
in biopharmaceutical R&D jobs
per capita



Biopharmaceutical R&D jobs - per capita 2022

The Belgian biopharmaceutical sector owes its strong position in innovation to all its employees, and in particular to its researchers. In 2023, there were some 6,700 researchers working in this sector, putting Belgium in an impressive third place within Europe.

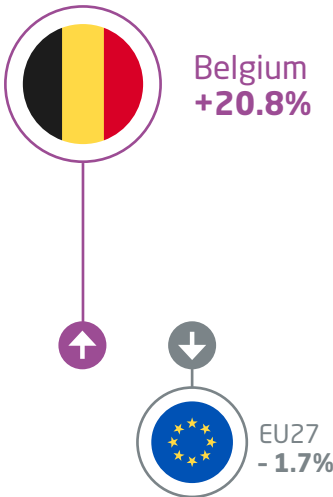
NO. 2
in gross added value
per employee



Direct gross added value - per employee 2022

Employees in the biopharmaceutical sector are also more productive than the average, putting Belgium in second place in Europe for added value generated per employee. The added value in Belgium is more than double the average value across the EU27.

**SUSTAINABLE INVESTMENT
IN TALENT AS A DRIVER OF
INNOVATION**

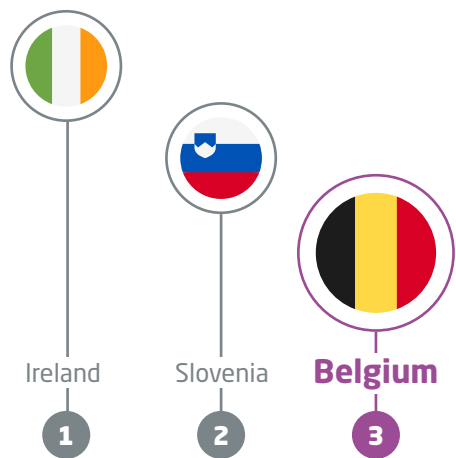


Increase in biopharmaceutical R&D employment - total 2018-2022

The fact that Belgium continues to be among Europe's top innovators, year after year, is due not least to the biopharmaceutical sector's systematic investments in human capital, and in particular in researchers. Indeed, between 2018 and 2022, in Belgium the number of researchers increased by a fifth, while in the EU27 overall, the number of researchers reduced.

Innovation with global impact

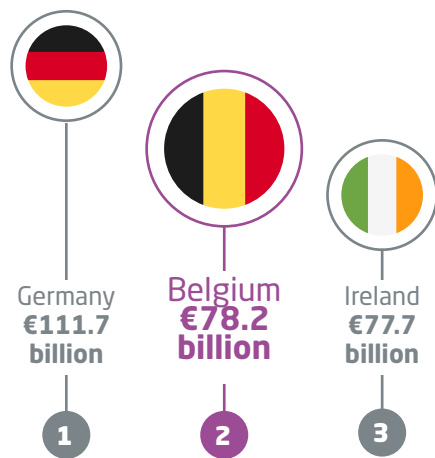
NO. 3 in biopharmaceutical exports per capita



Biopharmaceutical exports
- per capita
2023

In 2023, Belgium retained its place in the European top 3 for international trade in biopharmaceuticals and vaccines (per capita). This means that it was not just Belgian patients benefiting from the innovative products coming out the Belgian biopharmaceutical sector, but in fact patients worldwide.

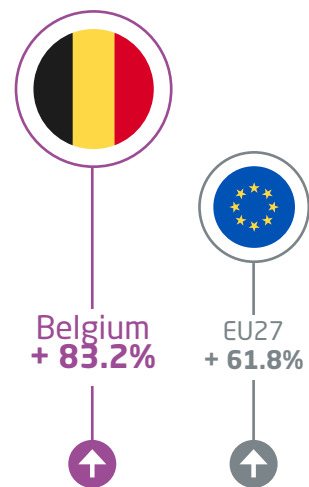
NO. 2 in biopharmaceutical exports



Biopharmaceutical exports
- total
2023

Belgium's export figures are not just impressive when considered per capita, but also as absolute numbers, despite the country's small size. In fact, thanks to its two airports and a shipping port with bespoke services for biopharmaceutical exports, Belgium places second on the ranking, behind only the much larger Germany.

FOCUS ON EXPORT



Evolution of biopharmaceutical exports
- total
2018-2023

In the exports arena, Belgium pursued a systematic strategy throughout 2018-2023, strengthening its position as an international hub. With impressive results: Belgium's export activities over this period expanded significantly more rapidly than in the EU27 as a whole.



Footnotes

1. 'Biopharmaceutical' patents refer to patents in the technological fields of 'pharmaceutical products' and 'biotechnology'.
2. Scope limited to countries with at least 2,000 patent applications to avoid problems of comparability.
3. In addition to direct employments in the sector itself, we also take into account indirect jobs (for example jobs in Belgium at subcontractors who supply raw materials or services to the biopharmaceutical sector) and induced jobs (jobs created in Belgium by the expenditures of employees active in the biopharmaceutical sector).

Sources

The indicators in this brochure are based on the following sources:

- Statbel
- Eurostat
- National Bank of Belgium (NBB)
- Belgian National Social Security Office (NSSO)
- EFPIA, The Pharmaceutical Industry in Figures, Key Data 2023
- European Patent Office (EPO)
- PwC, EFPIA Economic Impact Assessment of the Pharmaceutical industry in Europe (2024)
- Deloitte, Belgium as clinical trial location in Europe

Methodological notes

The comparisons made in this brochure cover the EU27 countries (UK not included).

Data for 2023 is not yet available for certain indicators. In these cases, the comparison was based on data for 2022.



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