

AS CHINA ACCELERATES,
EUROPE IS LOSING GROUND.
BELGIUM MUST NOW
CHOOSE PATIENTS,
INNOVATION
AND GROWTH.





FOREWORD

Belgium has everything it takes to remain a world leader in life sciences: talent, knowledge, entrepreneurship and a strong ecosystem. But leadership is not a permanent achievement. While other regions are accelerating, we cannot afford to hesitate. Our exports, our clinical trials and our patent applications are all in decline. The right choices today mean more groundbreaking medicines for patients tomorrow, more high-quality jobs, more knowledge and expertise and more economic growth for our country.

Caroline Ven
CEO

KEY FIGURES

Belgium's position in the EU remains a leading one, but it cannot be taken for granted

R&D (2024)

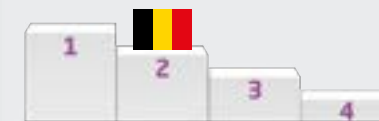
No. 1 in R&D investment per capita



No. 2 in R&D investment



No. 2 in clinical trials per capita



Patents (2025)

No. 2 in patent applications per capita¹



No. 3 in patent applications relative to the total number of patent applications in the country²



Jobs and productivity (2024)

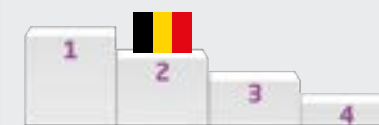
No. 3 in employment (direct, indirect and induced)³ relative to total employment in the country



No. 4 in biopharmaceutical R&D jobs per capita



No. 2 in gross value added per employee (2022)



Exports (2025)

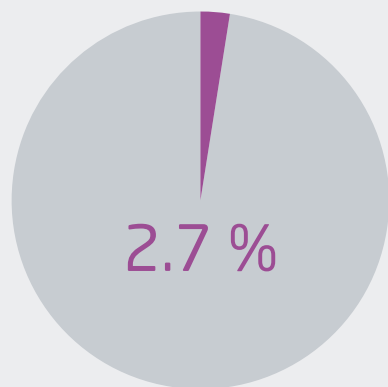
No. 3 in exports per capita



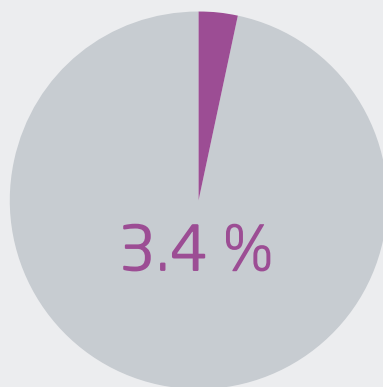
No. 3 in exports



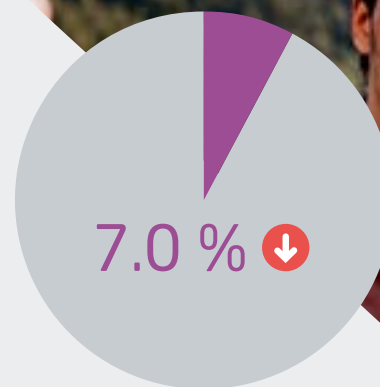
Belgium's share within the European Union



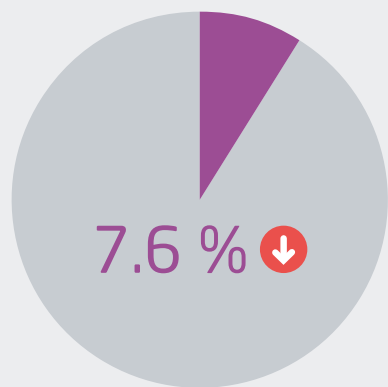
Population
2025



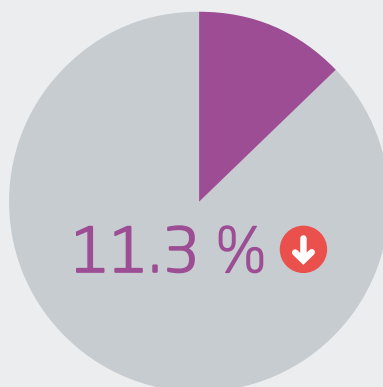
Gross Domestic Product (GDP)
2025



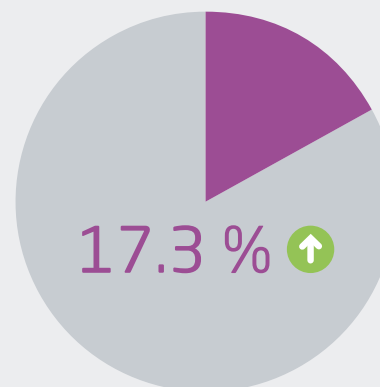
**Patent application in the
biopharmaceutical sector**
2025



**R&D jobs in the
biopharmaceutical sector**
2024



**Exports of
biopharmaceutical products**
2025

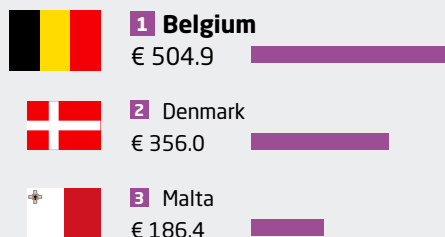


**R&D investment in
the biopharmaceutical sector**
2024

01 RESEARCH AND DEVELOPMENT

Innovation remains the driving force

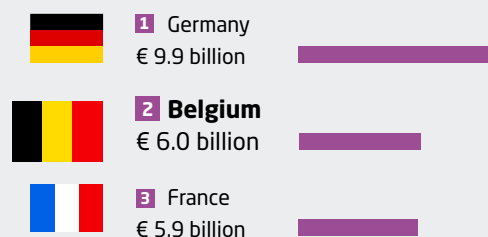
No. 1 in R&D investment per capita in the biopharmaceutical sector



R&D investment in the biopharmaceutical sector – per capita
2024

The Belgian biopharmaceutical sector retains its clear leading position in Europe in terms of R&D investment per capita. In 2024, investment was more than 40 % higher than in Denmark, which takes second place, although this lead is narrowing year on year. Compared with Malta, in third place, Belgium invests almost three times as much per capita. Compared with the average of the other EU27 countries, too, the gap remains particularly wide: investment in Belgium is more than seven times higher. Although investment fell for the first time in 2023, an upward trend was seen once again in both 2024 and 2025. This leading position is not a given, however, and requires continued, structural investment if it is to be maintained in the future.

No. 2 in R&D investment in the biopharmaceutical sector



R&D investment in the biopharmaceutical sector – total
2024

In absolute terms, too, Belgium is among the European front-runners. In 2024, the Belgian biopharmaceutical sector invested some 6.0 billion euros in R&D, equivalent to 16.4 million euros a day. This places Belgium firmly in second place, second only to Germany, even though our country ranks eighth by population size. Investment in Belgium is roughly equal to that of Italy, Denmark and Spain combined, which rank fourth, fifth and sixth. Belgium thus accounts for approximately one-fifth of all R&D investment within the EU27.

No. 2 in the number of clinical trials per capita



Number of approved clinical trials – per capita
2024

In 2024, the Belgian authorities approved 476 clinical trials. After two consecutive years of decline, there was once again an increase, although the number remains below the level of previous years. For now, Belgium retains its position, after Denmark, as the country with the highest number of clinical trials per capita, followed by the Netherlands.

This strong starting position should not, however, be taken for granted. Other member states, including the Netherlands, are gradually closing the gap with Belgium. Moreover, countries such as Spain have recorded an increase in the number of approved clinical trials for two years running. Continued efforts are therefore needed to further strengthen Belgium’s appeal for clinical research and to maintain our leading position.

02

PATENTS

Patents as a necessary condition for innovation

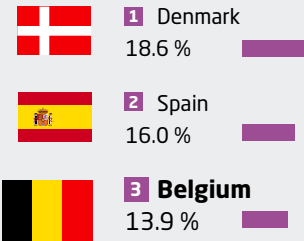
No. 2 in the number of biopharmaceutical patent applications per capita¹



Number of patent applications in the field of pharmaceuticals and biotechnology – per capita
2025

Another important indicator of innovation is the number of patent applications. In 2025, the Belgian biopharmaceutical sector recorded a decline in the number of patent applications for the second year in a row. At 353 applications, the number is more than 15 % lower than the previous year. The number of applications in the other EU27 countries is falling as well, but there the decline is limited to approximately 3 %. This is not a general trend, however: countries such as Denmark and Sweden are actually performing better than in previous years. In terms of patent applications per capita, Belgium is in second place, a long way behind front-runner Denmark and closely followed by the Netherlands.

No. 3 in the share of biopharmaceutical patent applications in the country²

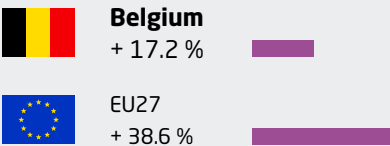


Share of biopharmaceutical patent applications in the total number of patent applications in the country² – total
2025

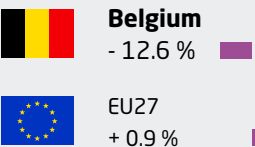
When we set the number of biopharmaceutical patent applications against the total number of patent applications in a country, we see that the decline that began in 2024 is continuing in 2025. Belgium nevertheless retains its place in the European top three. With a share of 13.9 %, Belgium remains comfortably ahead of France, which takes fourth place with 8.0 %.

Despite the falling share, it remains clear how crucial the biopharmaceutical sector is to research and innovation in Belgium.

Continuing to invest in innovation



Trend in R&D investment in the biopharmaceutical sector – per capita
2020-2024



Trend in the number of patent applications in the field of pharmaceuticals and biotechnology – total
2021-2025

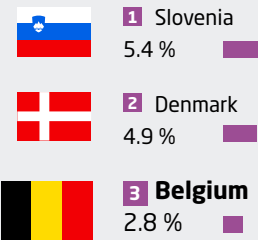
In recent years, the biopharmaceutical sector in Belgium has been losing ground to other European countries. While more and more countries are recognising the value and strategic importance of a strong biopharmaceutical sector and investing in it in a targeted way, growth in Belgium continues to lag behind. R&D investment per capita in the Belgian biopharmaceutical sector rose by approximately 17 % between 2020 and 2024, compared with almost 40 % in the other EU27 countries.

In terms of patent applications, the signal is even clearer. Whereas the number of biopharmaceutical patent applications in Belgium fell by almost 13 % over the same period, the other EU27 countries still recorded slight growth. These developments show that Belgium's leading position cannot be taken for granted. Continued efforts are essential to maintain and strengthen the sector's appeal and innovative character.

03 JOBS AND PRODUCTIVITY

The importance of human capital

No. 3 in the share of biopharmaceutical employment relative to total employment in the country



Share of employment in the biopharmaceutical sector (direct, indirect and induced)³ in total employment in the country – total
2024

In 2025, the biopharmaceutical sector in Belgium accounts for approximately 44,500 direct jobs. If we also include indirect and induced employment, this rises to approximately 140,000 jobs. In other words, more than one in forty jobs in Belgium is linked to the biopharmaceutical value chain. This places Belgium third in Europe. In 2024, employment in the sector fell for the first time, a trend that also continued in 2025. We see something similar in the other EU27 countries, yet there are several countries, such as Denmark and Sweden, which are managing to achieve strong employment growth in the biopharmaceutical industry. This decline has also caused the sector's share of total employment in Belgium to slip slightly, while in the other countries in the top three this share continues to rise.

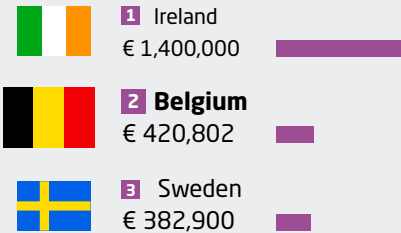
No. 4 in biopharmaceutical R&D jobs per capita



Biopharmaceutical R&D jobs – per capita
2024

In terms of R&D jobs, Belgium lost ground in both 2024 and 2025. As a result, the number of researchers in the biopharmaceutical sector has fallen to approximately 6,300. While Belgium drops to fourth place in Europe in terms of R&D jobs per capita, many other EU27 countries are seeing positive growth in their number of researchers.

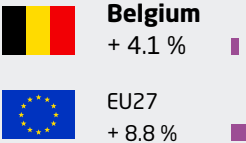
No. 2 in gross value added per employee



Direct gross value added – per employee
2022

Employees in the biopharmaceutical sector remain exceptionally productive, including in Belgium, which ranks second in Europe in terms of the added value generated by each employee. Each employee in the sector generates more than twice as much added value as the EU27 average.

Sustained investment in talent as the engine of innovation



Growth in biopharmaceutical R&D jobs – total
2020-2024

A strong commitment to human capital, and to researchers in particular, is essential in order to be among Europe's innovation leaders. Belgium has a large number of researchers, but because of the decline recorded in 2024, growth in the number of researchers between 2020 and 2024 was limited to 4.1 %. In the other EU27 countries, growth over the same period was considerably higher, at 8.8 %. Countries such as Denmark and Sweden are clearly performing better in this respect. To maintain its strong position within Europe, it remains crucial for Belgium to invest in an attractive climate for research, innovation and the further development of the biopharmaceutical sector. The right policy choices are urgently needed so that Belgium can strengthen its position as a European leader in research, innovation and biopharmaceutical development.

04 EXPORTS

Innovation with global impact

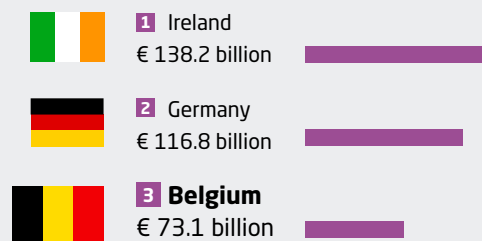
No. 3 in exports of biopharmaceutical products per capita



Exports of biopharmaceutical products – per capita
2025

In 2025, Belgian biopharmaceutical sector exports were almost 7 % lower than in 2024. This decline is not solely attributable to falling exports of COVID-19 vaccines but reflects a broader downturn in exports. Exports from the other EU27 countries actually rose by almost 14 %. Even so, in 2025 Belgium retained its third place in Europe for international trade in biopharmaceutical products and vaccines per capita. Thanks to this strong export position, Belgian biopharmaceutical innovations not only contribute to better healthcare for patients at home but also reach millions of patients worldwide.

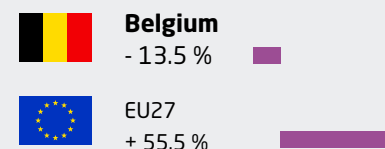
No. 3 in exports of biopharmaceutical products



Exports of biopharmaceutical products – total
2025

Not only per capita but also in absolute export figures, Belgium is among European leaders, despite the country's limited size. Thanks to a strong logistics infrastructure, with two airports and a seaport offering specialised services for the export of biopharmaceutical products, Belgium has developed into an important hub for the sector. Despite the decline in exports since 2022, Belgium still occupies third place, after Ireland and Germany.

Focus on exports



Trend in exports of biopharmaceutical products – total
2021-2025

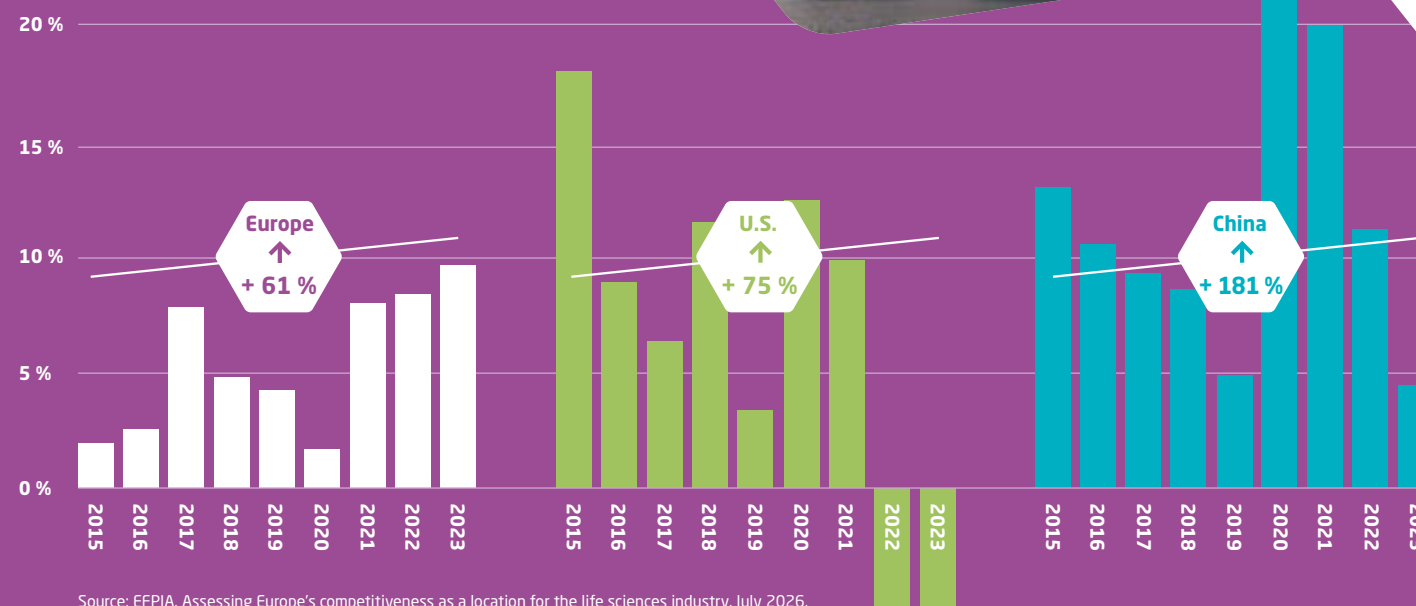
In terms of exports, Belgium saw a downturn of almost 14 % between 2021 and 2025. This decline is largely attributable to the winding down of exports of COVID-19 vaccines. When these are controlled for, exports of biopharmaceutical products rose by 18.3 % over the same period. This performance nevertheless lags behind the other EU27 countries, where exports increased by 55.5 % over the same period. This result is driven by countries such as Ireland and Italy, which are investing heavily in the development of their biopharmaceutical sector. International competition is increasing as a result, putting Belgium's position as a leading European export hub under ever greater pressure.

EUROPE UNDER PRESSURE IN A RAPIDLY CHANGING GLOBAL INNOVATION CLIMATE

This publication focuses on the comparison between European countries, but the biopharmaceutical sector operates in an increasingly competitive global context. In this context, Europe is under growing pressure from both the United States and China. While the U.S. is strengthening its position as world leader by attracting major investment in research and development, China is rapidly emerging as a leading player in biotechnology, medicine development and advanced therapies. The challenge for Europe lies not so much in a lack of innovation, but in the fact that other regions are advancing more quickly, supported by a more powerful and more targeted policy dynamic. As a result, Europe's relative weight within global biopharmaceutical innovation is declining. This development is visible across the entire innovation chain: R&D investments, patent applications, clinical trials, and new medicine.

Annual growth rate of R&D investment by domestic and foreign companies (2015-2023)

Growth in biopharmaceutical R&D investment in Europe clearly lags behind that in the U.S. and, above all, China. In addition, several companies have recently announced that they will be making significant investments in the U.S. in the near future.

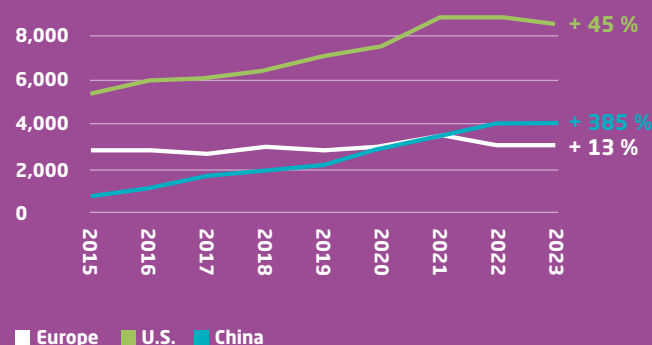


Source: EFPIA. Assessing Europe's competitiveness as a location for the life sciences industry. July 2026.



WIPO patent applications in pharmaceuticals and biotechnology (2015-2023)

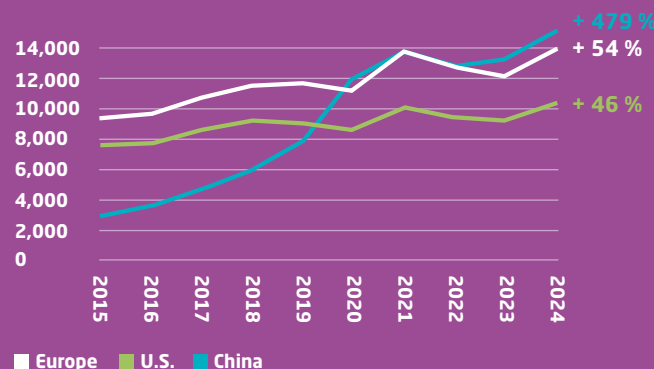
Europe is losing ground in biotech and pharmaceutical patents. The U.S. still excels in this area, but China too has been filing more patent applications than Europe since 2021.



Source: OECD. Patents by WIPO technology domains.

Number of interventional clinical trials by WHO region (2015-2024)

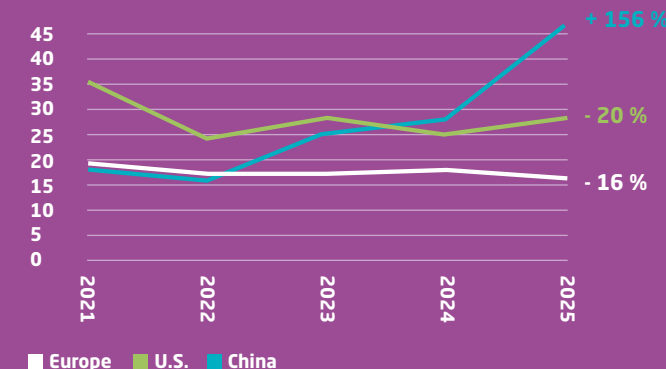
In clinical trials, Europe's share of global research activity is declining because of the strong growth in China and, by extension, across Asia.



Source: WHO, Global Observatory on Health Research and Development. Number of trial registrations by location, disease, phase of development, age and sex of trial participants.

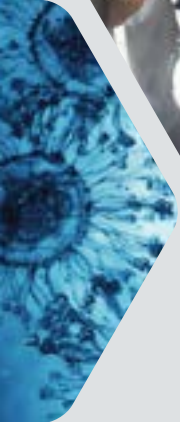
Number of new chemical and biological entities by region of origin (2021-2025)

Finally, the origin of new medicines is shifting as well: China has overtaken both Europe and the U.S. and, in 2025, became the region with the largest number of new medicines worldwide.



Source: EFPIA. The pharmaceutical industry in figures. Key data 2026.

Together, these indicators point to a structural shift in global innovative capacity. For Europe and Belgium, this is a clear warning: without faster, more coherent and more forward-looking policy choices, it will continue to lose ground in the development and commercialisation of the medicines of tomorrow.



Footnotes

1. Biopharmaceutical patents refer to patents in the pharmaceuticals and biotechnology domains.
2. Benchmarking is limited to countries with at least 2,000 patent applications in order to avoid comparability problems.
3. In addition to direct employment in the sector itself, we also take account of indirect jobs (e.g. jobs in Belgium at suppliers providing raw materials or services to the biopharmaceutical sector) and induced jobs (jobs created in Belgium by the spending of employees working in the biopharmaceutical sector).

Sources

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

- Statbel
- Eurostat
- National Bank of Belgium (NBB)
- National Social Security Office (NSSO)
- EFPIA, The Pharmaceutical Industry in Figures, Key Data 2026
- 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 comparison made in this publication relates to the EU27 countries (United Kingdom not included). For certain indicators, the data for 2025 are not yet available. In that case, the comparison was based on data for 2024.

