# The BIOPHARMACEUTICAL sector

An innovative key player in the Belgian economy



# **Pharma Figures**



# pharma\_be ASSOCIATION GÉNÉRALE DE L'INDUSTRIE DU MÉDICAMENT ALGEMENE VERENIGING VAN DE GENEESMIDDELENINDUSTRIE

## FOREWORD



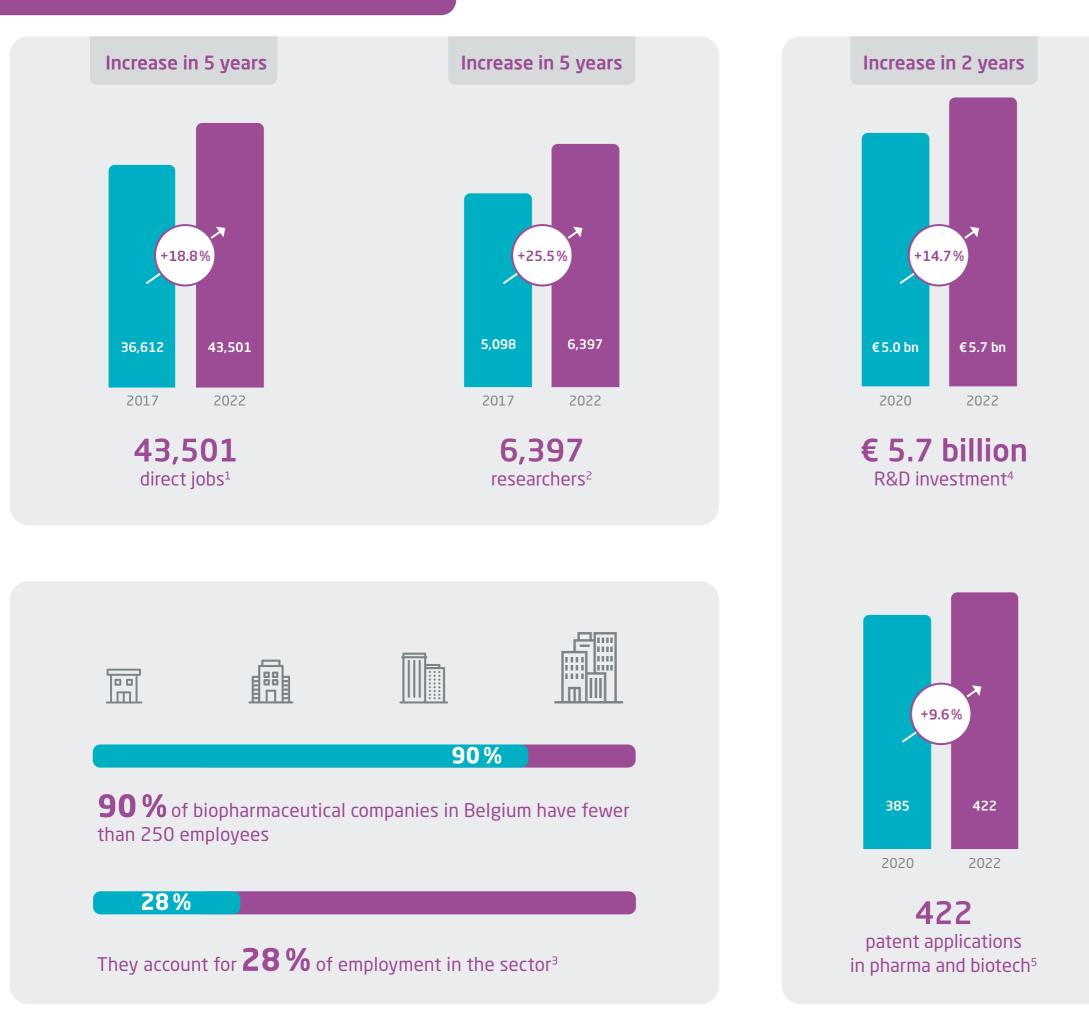
The biopharmaceutical industry reaffirms its position as a stronghold of the Belgian economy. Added value, employment and investment continued their upward trend over the last year, more than in the entire manufacturing industry. The recipe for success for this excellent performance is the continued efforts to innovate. In 2022, the biopharmaceutical sector invested  $\in$  5.7 billion on research and development. In five years, the number of patent applications increased by more than 50 %. This growth was some three times higher than the growth in all technology domains combined. As a result, our country is behind the development of many promising drugs and vaccines.

These positive results are also due to the strong ecosystem in our country, where knowledge institutions work hand in hand with the industry to develop successful new treatments. The new therapies developed or produced in Belgium make a real difference for patients worldwide. Belgium is a real export hub for medicines and vaccines, partly thanks to its excellent logistics facilities. Over the past five years, exports rose by more than 150%, also due to vaccine exports caused by the COVID-19 crisis.

The importance of the biopharmaceutical industry's footprint for our country cannot be underestimated. We should cherish this engine of growth, employment as well as innovations that benefit patients. An appropriate policy framework is necessary for this. A fiscal and regulatory framework that promotes innovation is crucial, in terms of protecting intellectual property rights but also in terms of making these innovations accessible to Belgian patients. Only in this way will the biopharmaceutical sector continue to fulfil its role as a driving force for our prosperity and well-being.

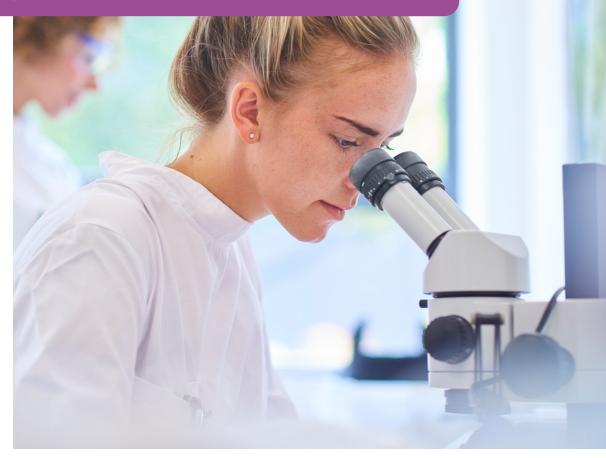
Caroline Ven CEO pharma.be

# **KEY FIGURES 2022**

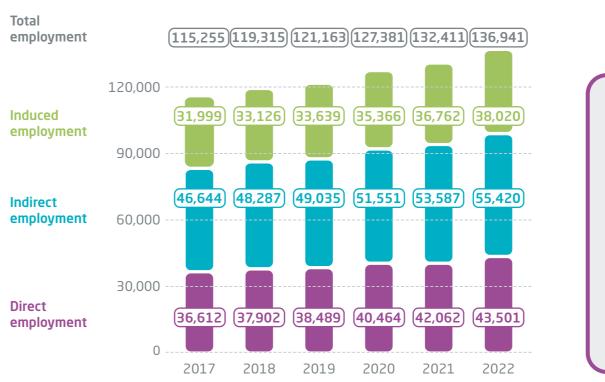


# Increase in 2 years +78.0% €56.2 bn €100.1 bn 2020 2022 € 100.1 billion exports<sup>6</sup> +101.6% € 19.4 bn € 9.6 bn 2020 2022 € 19.4 billion generated by trading

in medicines and vaccines<sup>6</sup>



Evolution of direct, indirect, and induced employment in the Belgian biopharmaceutical sector<sup>8</sup>



### A role model for our economy

In terms of jobs and diversity, the biopharmaceutical sector is clearly a role model for the Belgian economy. Its complexity and scope, ranging from research and development over production and logistics to marketing and distribution, implies that the sector needs very diverse profiles. In 2022, about one-third of employees had a primary or secondary education degree, while two-thirds had a higher education degree. Looking at the overall picture of Belgian industry, this ratio is just the opposite. The sector also stands out for its balanced employment of men and women<sup>7</sup>.

## Job engine in manufacturing

The biopharmaceutical sector continues to create additional jobs. In five years, for instance, employment rose by about 19 % to 43,501 employees. More than a quarter of those jobs are in SMEs, companies with fewer than 250 employees.

Job growth in the biopharmaceutical sector was significantly higher than in the overall manufacturing sector, which recorded growth of less than 4 % over the same period. As a result, the sector accounted for some 9 % of manufacturing jobs in 2022.

#### **43,501 employees** in the Belgian biopharmaceutical

sector in 2022

The sector accounts for nearly 9 % of manufacturing industry

Employment in the sector **more** than doubled over 25 years

## A growing impact on Belgian employment

The biopharmaceutical sector's growth rates not only exceed those of the manufacturing sector but also the growth rate of the private sector and the entire Belgian economy. However, it does not stop there. The sector also has a positive impact on employment in other sectors, just think of transport and logistics. This indirect employment accounts for another 55,420 jobs.

Moreover, if one considers the jobs resulting from the expenses incurred by all those workers (direct and indirect employment), the sector accounts for another 38,020 additional jobs. So for every job in the Belgian biopharmaceutical sector, two other jobs are created. The sector thus generates almost 137,000 jobs in Belgium.

#### Distribution of profiles in the biopharmaceutical sector in 2022

## **3** %

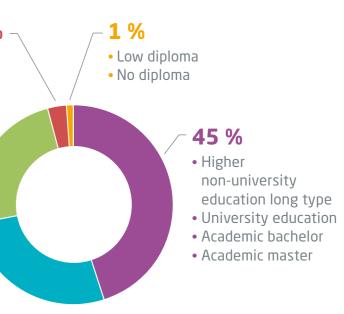
 Lower secondary education

## 24 %

 Higher secondary education

## Did you know? A QUARTER MORE RESEARCHERS IN THE SECTOR, OVER FIVE YEARS.

In 2022, 6,397 researchers were working in the biopharmaceutical sector in Belgium. That is an increase of some 25.5 % in five years. This growth figure also immediately shows the highly innovative nature of the sector.



## **27** %

Higher non-university education short typeProfessionally oriented education



## Research and development are in our DNA

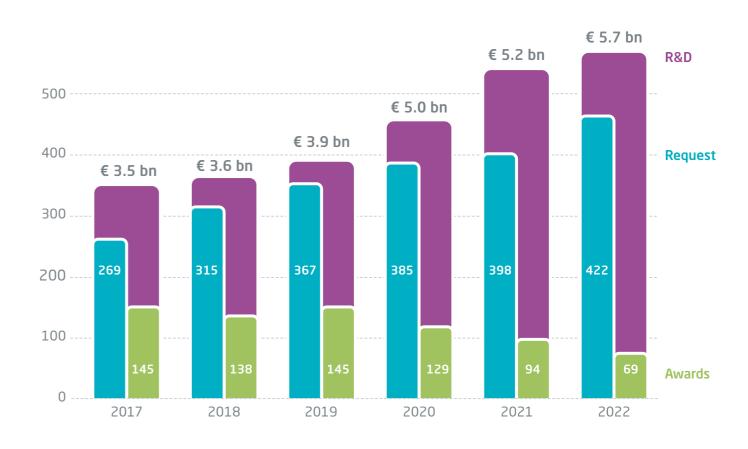
We have no natural resources in our country, but we do have knowledge. Research and development (R&D) are not only in Belgium's DNA but are also at the heart of the biopharmaceutical industry. Every year, the sector signs up for many important innovations. Their added value is immediately visible, because thanks to these innovations we live longer and better lives.

## No innovation without patents

The Belgian biopharmaceutical industry generated 422 patent applications in 2022, amounting to over one per day. These applications are crucial for the sector. Because the protection provided by patents is a prerequisite for continuing to invest in the very expensive and long-term research programms.

The biopharmaceutical sector continues to innovate year after year. In five years' time, the number of patent applications increased by more than half. This growth was some three times higher than the growth in all technology fields combined. Thus, in 2022, the sector accounted for over 16 % of the total number of patent applications in Belgium. This makes the biopharmaceutical sector an absolute leader in innovation.

#### Evolution of patents applied for/granted and R&D investments



#### **Every day over €15 million** is invested in R&D by the innovative biopharmaceutical sector<sup>9</sup>

#### **422 patent applications** which amounts to more than 1 patent application per day<sup>10</sup>

Five times more investment in R&D over 25 years<sup>11</sup>

# Did you know?

#### THE SECTOR INVESTS OVER €15 MILLION IN R&D EVERY DAY.

In 2022, the biopharmaceutical sector invested € 5.7 billion in R&D, almost 10 % more than the previous year. Over a five-year period, this represents an increase of over 62 %.

These impressive figures show that innovations cannot be taken for granted. The development of new, innovative, medicines requires a particularly large amount of time and resources. The biopharmaceutical sector is therefore the most R&D-intensive industry. Not only in Belgium, but also in Europe, the Belgian biopharmaceutical sector is weighing increasingly heavily on R&D<sup>12</sup>.





2021 was already an absolute record year, but in 2022, exports grew strongly again. For the first time, more than € 100 billion worth of medicines and vaccines were exported. Belgium thus confirms its unique position as an international medicine hub.

By 2021, exports were up 18 %. If you look at the past five years, the increase is more than 150 %. Unlike in 2021, the increase is not solely due to exports of COVID-19 vaccines. Their share remains stable, accounting for about a third of Belgium's total biopharmaceutical exports.

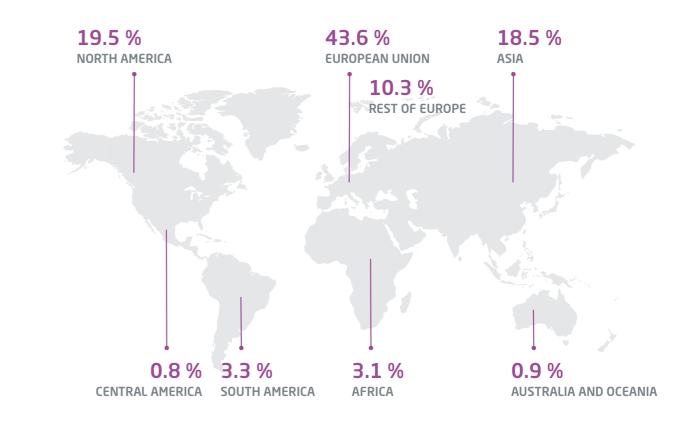
Quite a few Belgian sectors experienced an increase in exports in 2022. These growing export figures were mostly driven by high inflation. This effect plays much less in the biopharmaceutical sector,

partly due to regulated prices. This is also confirmed by the significant growth in export volumes.

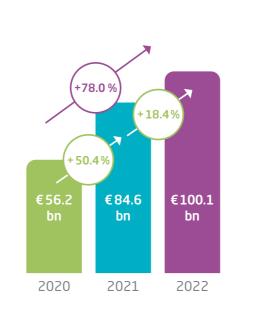
In terms of exports, therefore, the biopharmaceutical sector can also call itself a role model. In 2022, the sector accounted for about 17 % of total Belgian exports. This confirms the sector's position as an export champion.

#### A positive trade balance thanks to biopharmaceutical sector

Thanks to the strong increase in recent years, biopharmaceuticals were exported from Belgium for as much as € 275 million every day in 2022. Belgium's overall trade balance shows a surplus of  $\in$  11.8 billion. The biopharmaceutical sector has the largest surplus, contributing € 19.4 billion to the trade balance. Without the sector, Belgium would therefore have to present a negative trade balance for 2022.



Evolution of total exports by the Belgian biopharmaceutical sector





**Every day** € 275 million exports by the sector

>50 % of exports cross EU borders

17 % of total Belgian exports concern biopharmaceuticals

In 25 years, 14 times more exports of biopharmaceuticals and vaccines 11

## Did you know? **BELGIUM IS RATHER THE LAND OF BIOPHARMA INSTEAD** OF THE LAND OF BEER AND CHOCOLATE.

chocolate in 2022.

### Exports in and far beyond Europe

More than half of what the biopharmaceutical sector exports leaves the European Union. In the total Belgian exports, this is less than a third. The US is the main trading partner, accounting for almost 18 % of biopharmaceutical exports. Followed by Germany and Japan, accounting for 15 % and 8 % respectively.

	2022	то	P 5 NON EU	2022	
	15.4 %	ŧ	US	17.9 %	
	6.1 %	۲	Japan	8.0 %	
	6.0 %	*	UK	5.6 %	
s	3.7 %	-	Russia	2.0 %	
	3.4 %	3	Brazil	2.0 %	

Belgium may already be known as the country of beer and chocolate, but biopharmaceutical exports were 20 times higher, compared to beer and

# **ADDED VALUE AND INVESTMENTS**

## The importance of the biopharmaceutical sector

lobs, innovation, exports: in all these areas, the biopharmaceutical sector is a role model for the Belgian economy. But also, in terms of production, added value and investments, the sector is important for the overall manufacturing industry in our country. This is no coincidence either: in recent years, the sector managed to record steady growth in all these areas.

#### Production and added value

Despite the challenging international situation, the sector also managed to record over 2 % growth in industrial production last year, while it slightly decreased in the overall manufacturing sector<sup>16</sup>. Over a five-year period, it is even about a fourfold increase, a significantly better figure than other top sectors within the manufacturing industry: for instance, production in the food industry increased by 6 % over the same period, while production in the chemical industry actually declined.

Thanks to these strong figures, the biopharmaceutical sector has been the leading sector in terms of added value within the manufacturing industry since 2019<sup>14</sup>. In 2021, the biopharmaceutical sector accounted for some 17 % of the added value generated by the total manufacturing industry in our country. The biopharmaceutical added value tripled in 25 years<sup>11</sup>.

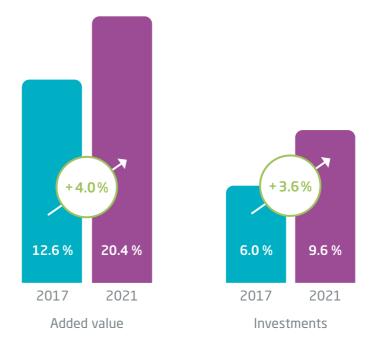


The increasing importance of the biopharmaceutical sector within the manufacturing industry

#### Investments in operating assets

The sector's ability to produce such strong figures is partly due to continued investment in assets, in addition to huge R&D efforts. In 2022, for instance, the biopharmaceutical sector accounted for almost 10 % of manufacturing investment.

The biopharmaceutical sector is gaining momentum year after year. Over a five-year period, the biopharmaceutical sector saw investments virtually double, while the other two sectors saw their growth amount to around 25 %<sup>15</sup>.



# Did you know?

#### THE BIOPHARMACEUTICAL **SECTOR IS PUTTING IN** A UNIQUE PERFORMANCE.

The biopharmaceutical sector is one of the only sectors in Belgium that continues to grow systematically, in terms of added value and employment and productivity.

#### Bronnen en voetnoten

- **1** NSSO pharma.be
- **2** pharma.be, Member Survey
- **3** Bureau Van Dijk, Bel-First pharma.be
- **4** pharma.be, Member Survey
- **5** European Patent Office, European patent applications 2011-2022 per field of technology
- **6** NBB, Foreign trade, Community concept
- **7** Statbel, Labour Force Survey, 2022
- **8** PWC, The economic and societal footprint of the pharmaceutical industry in Europe, June 2019
- **9** pharma.be, Member Survey
- **10** European Patent Office, European patent applications 2010- 2021 by field of technology. The figures refer to the fields of pharmaceutical and biotechnology
- **11** This figure has been adjusted for inflation
- **12** National Productivity Council, Annual Report 2021
- **13** NBB, Foreign trade, Community concept
- **14** NBB, Added Value (at basic prices)
- **15** Statbel, Turnover and investments as per VAT returns
- **16** Statbel, Industrial production index, working-day adjusted index



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