



BIOWiN

THE HEALTH CLUSTER OF WALLONIA

ANNUAL REPORT 2022

Introduction

In 2022, the BioWin Cluster celebrated 17 years since its creation. Its role has evolved over the years, yet the selection and monitoring of collaborative Research and Innovation (R&I) projects remains the core business of the Cluster. Today, the Cluster also plays a more global role in implementing the sector's industrial policy.

The Cluster's strategy has been built around its two strategic projects dedicated to (1) strengthening the industrial production of biomedicines (biomanufacturing) and (2) health innovation in partnership with hospitals.

In order to strengthen these subsectors, the Cluster has supported **four Strategic Innovation Initiatives (SIIs)** as a response to a call from the Walloon government. Three of them were accepted.

The Cluster has also worked to develop two large-scale projects: (1) the **ATMP Hub** project, which aims to consolidate the value chain of cell and gene therapies in Belgium (end-to-end approach), including the industrial production of these products, and (2) the **BIOMAN** project (in collaboration with essenscia and the Digital Agency "Agence du Numérique"), which aims to increase the digital maturity of companies and consolidate the digitalization of the industrial production processes of biomedicines.

This year, at the request of the Government, BioWin has drawn up **two strategic roadmaps**:

- the first has the goal of consolidating the ATMP sector in Wallonia and Belgium
- the second aims to strengthen the medical technology sector in Wallonia (the submission was prepared with the Mecatech cluster, which will be finalized in June 2023)

In terms of research, in 2022, the R&I team analyzed twenty-seven R&I project applications, accompanied **seven submissions** up to the Internal Selection Committee and presented these dossiers and submissions to the region. **Four projects** were awarded funding by the Walloon government. These results include projects that were co-sponsored, as well as the final stages of projects from calls 34 and 35 launched in 2021 but finalized in 2022.



Introduction

In 2022, the Cluster deployed the **“Talent Now”** project, a public-private partnership involving the six largest Belgian recruiters and Le Forem, the Public Service for Employment and Vocational Training in Wallonia. The objective of the project is to respond urgently and pragmatically to the shortage of qualified profiles in the sector and particularly in the field of biomanufacturing.

In 2022, **the growth support service for young SME members** of the Cluster was consolidated with the start of the **Growth & Financing** mission (accompanying them to scale-up). Four companies have benefited from this support even in a particularly complicated context for fundraising and stock market listings.

Internationally, BioWin participated in a dozen missions, with the aim of strengthening the visibility of the sector and the region. The Cluster is involved in **one European project** (MAGIA2Market) and is the president of the Council of European Bioregions (CEBR).

In terms of **communications**, BioWin has also helped to ensure the visibility of the sector and the region.

BioWin currently has **242 member entities**, including 147 Walloon companies. **If we focus only on these 147 Walloon companies today**, the sector includes 20 000 FTEs, with an annual employment growth of 4,49% over the last seventeen years. **The added value of these companies at the end of December 2021 amounted to 8,139 billion euros.**

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REGIONAL HEALTH ECOSYSTEM

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MISSION, VISION,
APPROACH & STRATEGY



MISSION & VISION

OUR MISSION

Accelerate innovation to:

1. meet tomorrow's public health challenges of and
2. develop the knowledge, employment, and competitiveness of all the players in the health sector ecosystem in Wallonia.

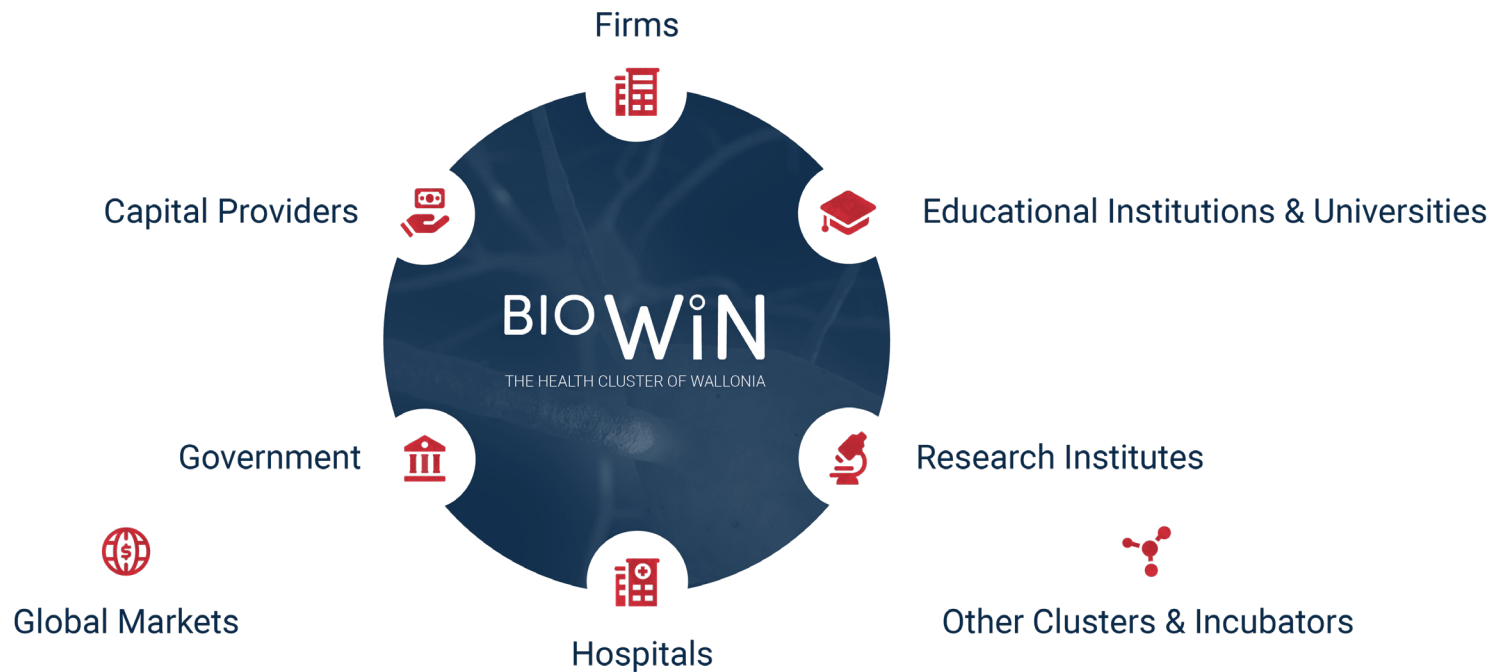
OUR VISION

By 2025,

- Wallonia will be internationally recognized for its world-class academic, clinical, and industrial research environment in the life sciences.
- the competitiveness of the Walloon (bio) pharmaceutical industry will be strengthened, and our region will have become one of the world's largest hubs in the research, development, and industrial production of vaccines and (bio)medicines.
- an efficient and competitive healthcare innovation ecosystem will have been created by connecting the hospital and business worlds.

Our approach

BioWin contributes to strengthening Wallonia's competitiveness and attractiveness by promoting collaborative initiatives between all the major players in the biopharma, medtech and digital health sectors.

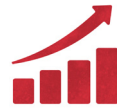


Our strategy

5 activities



Collaborative R&I projects



Growth & financing



Talent development



International development



Communications

4 strategic areas



(Bio)pharmacy
(including cell and gene therapy and industrial production of biologics)

The development and industrial production of therapeutic and prophylactic agents, including vaccines and cell and gene therapies in different treatment areas. Includes related services e.g., drug discovery, preclinical activities, clinical trials, etc.



Medical devices and in vitro diagnostics

The development of devices, equipment, apparatus, digital components and reagents to provide: (1) an alternative to medication for monitoring, relieving or treating a condition, or (2) an *in vitro* test to provide information about the pathophysiological condition of a patient.



Radiation applied to health

The use of ionizing radiation to diagnose and treat diseases. This area includes the development of proton therapy, isotope production equipment, biomarkers and decision support tools for imaging.



Digital health

The multidisciplinary use of massive data and artificial intelligence to serve 4P (predictive, preventive, personalized and participatory) medicine.

Our strategy

BioWin develops five types of activities in three strategic business areas:

- Promoting the emergence, setup, and monitoring of R&I projects
- Ensuring the development of a talent pool necessary for company growth
- Facilitating the development of SMEs and contribute to the region's international strategy in the field of life sciences. Attract foreign companies according to a well-defined strategy in collaboration with AWEX
- Directing SMEs towards the best sources of public and private funding
- Supporting communication efforts through several efficient tools such as the BioWin website, mailing lists, organization of theme-based events and international trade fairs, social media, and theme-based flyers

During the period of 2020-2023, the Cluster's Board of Directors has identified two strategic projects:

- Accelerate the development of the industrial production of vaccines & biologics in Wallonia and promote the digitalization of biomanufacturing processes (industry 4.0)
- Make Wallonia a champion in the field of health innovation through restructuring hospital networks and decompartmentalizing the hospital and business worlds

S3 and Strategic Innovation Initiatives (SIIs)



To consolidate these two major strategic directions, as part of the deployment of Wallonia's Smart Specialisation Strategy (S3), **the Cluster submitted four SIIs, three of which have been selected for funding by the government:**

ATMP Wal: The initiative aims to strengthen the value chain encompassing research, clinical development, production, and commercialization of cell and gene therapies as well as tissue-engineered medical products (Advanced therapy medicinal products or "ATMP").

MedReSyst: The initiative aims to develop a network medicine based on a holistic approach, relying on several types of data including biological, clinical, and exposomic data, and artificial intelligence.

MedTech Wallonia: The initiative aims to strengthen the MedTech sector in Wallonia: from the ideation of innovative projects through to industrialization and internationalization.

Our strategy

The BioMan project

BioWin obtained funding for the BioMan project as part of the “Industry of the Future” call for projects, launched in June 2021 by the Agence du Numérique (Digital Agency). BioMan’s objective is to enhance the digital transformation of companies with bioproduction activities. This project brings together 3 members of the “Industry of the Future” consortium: BioWin as coordinator, with the CETIC research center and the essenscia federation as partners.

The BioMan project has 3 components designed to reinforce 3 key stages of digital transformation relevant to biomanufacturing companies: raising awareness of the need to integrate the industry 4.0 concept, a digital diagnosis of companies aiming for digital transformation, and, lastly, supporting companies to create an action plan (either global or based on specific use cases) in order to progress in their digital evolution.

ATMP Hub

In 2022, BioWin submitted the ATMP Hub project in the framework of the Sandbox Initiative launched by Secretary of State Dermine. The ATMP Hub project has the objective to consolidate the value chain of cell & gene therapy in Belgium (end-to-end approach) including the industrial production of its therapeutic solutions.

The ambitious project will be carried out on a national scale and has been initiated by BioWin with the support of partners (Medvia, VIB, Janssens Pharmaceutica, UCB, Univercells, and more). The project is in line with other European initiatives developed to support the cell & gene therapy value chain, from early research to patients, and to reinforce the capacity of ATMP production in Europe.

In 2022, at the request of the Government, BioWin has drawn up two strategic operational roadmaps:

- An ATMP (Advanced Therapy Medicinal products) roadmap which was finalized in 2022.
- A medical technologies roadmap which is being developed in collaboration with the Mecatech Cluster. Work on this roadmap began in December 2022 and will be finalized 15 June 2023.

BioWin has reinforced its strategic projects through the activities performed by its five departments.





R&I PROJECTS

R&I Projects

In total, the R&I department (i) analyzed twenty-seven R&I project applications, (ii) accompanied seven dossiers up to the Internal Selection Committee and (iii) presented seven dossiers and submissions to the region. Four projects were awarded funding by the Walloon government. These results include projects that were co-sponsored, as well as the final stages that took place in 2022 (BioWin International Selection Committee, awarding funding) of projects from calls 34 and 35 launched in 2021.

Activities	Indicators
Project calls	3
Project application review	27 (14+3*+10**)
Project support to reach maturity	6 (4+2**)
Projects accompanied to the internal Selection Committee	7 (5+2**)
Project submissions to the Region	7 (4+1*+2**)
Projects funded	4 (2+1*+1**)
Project kickoffs	3 (2+1*)
Mid-term evaluation - go/no go	5 (4 + 1**)
Projects completed	6 (5+1**)

* Collaboration, BioWin as primary Cluster ** Collaboration with BioWin as secondary Cluster



TALENT
DEVELOPMENT

Talent development

In 2022, BioWin deployed the “Talent Now” project. This is a public-private partnership whose partners are: GSK, UCB, Takeda, ThermoFisher, Univercells, Janssen Pharmaceutica (private), and Le Forem (public).

The objectives of this project are as follows:

- Develop a talent recruitment strategy
- Increase the pool of available talent (reconversions, mobilization of atypical profiles, recruitment abroad, etc.)
- Centralize the demands of industrialists and develop solutions with companies, operators, and the network
- Increase synergies between the players in the field of continuing education who are currently working in an excessively dispersed manner

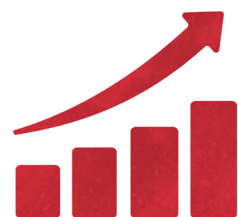


2022 activities

The activities performed by the Urgence Talents Group in 2022 can be summarized as follows:

- Quantification of the roles to be filled among the six members of the consortium and identification of the key roles in terms of volume.
- Identification of actions to be carried out around three axes through collaborative workshops
- Training and skills development
 - Improvement of the visibility of the training opportunities in Wallonia
 - Reinforcement of a “teaching” company culture, in particular to encourage providing internships
 - Reinforcement of training solutions on identified priority subjects
- Recruitment
 - Strengthening of the collaboration with le FOREM and using its tools to access a wider pool of talent, possibly to be (re)trained.
- Visibility and awareness
 - Better visibility of the sector
 - Increased information for students, teachers, and guidance for professionals, mainly supported by the essencia federation





GROWTH
& FINANCING

Growth & Financing

In 2020, BioWin offered a new growth support service to young SME members of the Cluster (seed/pre-seed; Series A).

The fundraising context was more complicated in 2022, but the member start-ups were still able to benefit from support from the operational team. This included diagnosis of growth obstacles and networking with consulting firms or investment funds.

These young SMEs gained valuable insights and support through:

- the expertise of the committee of experts (consulting firms, industrial experts, CXOs, etc.)
- the Cluster's in-depth knowledge of the company (if the company has benefited from a grant as part of a Cluster project)
- the Cluster's familiarity with the network of service providers/VCs (venture capitalists), locally or internationally

In 2022, the Growth & Financing team was strengthened with the hiring of a senior consultant. Four companies were supported on their journey to positive growth.





INTERNATIONAL
DEVELOPMENT

International development

The international strategy consists of consolidating the Cluster's Strategic Activity Areas in selected territories where the Cluster has identified opportunities (research and economic growth) for its members:

- Europe
- North America
- In Asia: China, South Korea, and Japan

The international strategy is based on 4 pillars:

- Ensuring the international visibility of Wallonia, the Cluster and its members.
- Activate networking and linkages between players in the best biotech and pharma hubs in the world.
- Promote the internationalization and development of members (especially SMEs) through strategic research and/or technology partnerships and exposure to specialized investors.
- Support AWEX in its mission to attract foreign investors and to coordinate the Business Parks.



International development

Participation in international actions organized by third parties

- BioEurope Spring & BioEurope Fall
- Belgian Economic Mission to the UK
- Belgian Economic Mission to the US
- BIO US
- ON HELIX
- BSMA Europe
- BIOJAPAN

(Co-)organization of networking events by BioWin:

- Workshop: “Advancing Manufacturing Faster for Next Generation hiPSC-Based Clinical Therapies” in collaboration with Catalent
- Life-on-chip conference
- Virtual Mission to China – Bootcamp, in collaboration with BioPmed, Lyonbiopole and Life Science Nord
- CxO networking reception (BioWin Day) focused on ESG: “Higher value creation by getting your environmental, social & governance proposition right”
- Masterclass “Patient data: for what intelligent use?” in collaboration with Le Patient Numerique
- Mission MedTech to the US following the MAGIA2Market project in collaboration with BioPmed, Lyonbiopole and Life Science Nord
- Buzz4Bio, Continuum for Biologics
- HealthTech Innovation Days (Paris)

- Mission MedTech to Japan following the MAGIA2Market project in collaboration with BioPmed, Lyonbiopole and Life Science Nord
- Science for health organized by Medvia, Flanders

Involvement in European projects:

- COSME - Clusters Go International - MAGIA2Market project
- Objectives: To continue building and strengthening networks in three target medtech markets: the US, China and Japan. The aim is to facilitate the access of European SMEs to these 3 countries through the network of international partners

Participation in European networks:

- CEBR (Council of European Bioregions: network of 38 European health clusters)
- The BioWin Cluster holds the presidency of CEBR, a European network of health clusters which facilitates networking and closer ties with the European Commission and its main administrations (DG Grow, DG Health, DG connect, etc.)



COMMUNICATIONS

Social Media

SOME KEY FIGURES

Year end performance



FOLLOWERS

8 500

↑ Up 15%

NUMBER OF POSTS

220



FOLLOWERS

2 100

↑ Up 5%

NUMBER OF POSTS

49

Social media constitutes a fundamental part of the information ecosystem, and there has been a growing interest in our two channels.

Best performing posts in 2022

Three LinkedIn posts are displayed. The first post, titled 'Urgence Talents', discusses talent shortages in biotech and has 181 likes. The second post, titled 'Mithra secures 100€ funding', mentions funding from existing investors and FDA/EMA approvals, with 152 likes. The third post, titled 'Member news: UCB announces U.S. FDA acceptance of new drug application and EMA MAA validation for zilucoplan', has 721 likes.

Two Twitter posts are displayed. The first is an announcement from BioWin - The Health Cluster of Wallonia about the #BioMan initiative, with 152 likes. The second is a tweet from BioWin - The Health Cluster of Wallonia about BioCentury, with 16 replies.

Website & email campaigns

SOME KEY FIGURES

Year end performance

USERS **15 000** PAGE VIEWS **64 000**



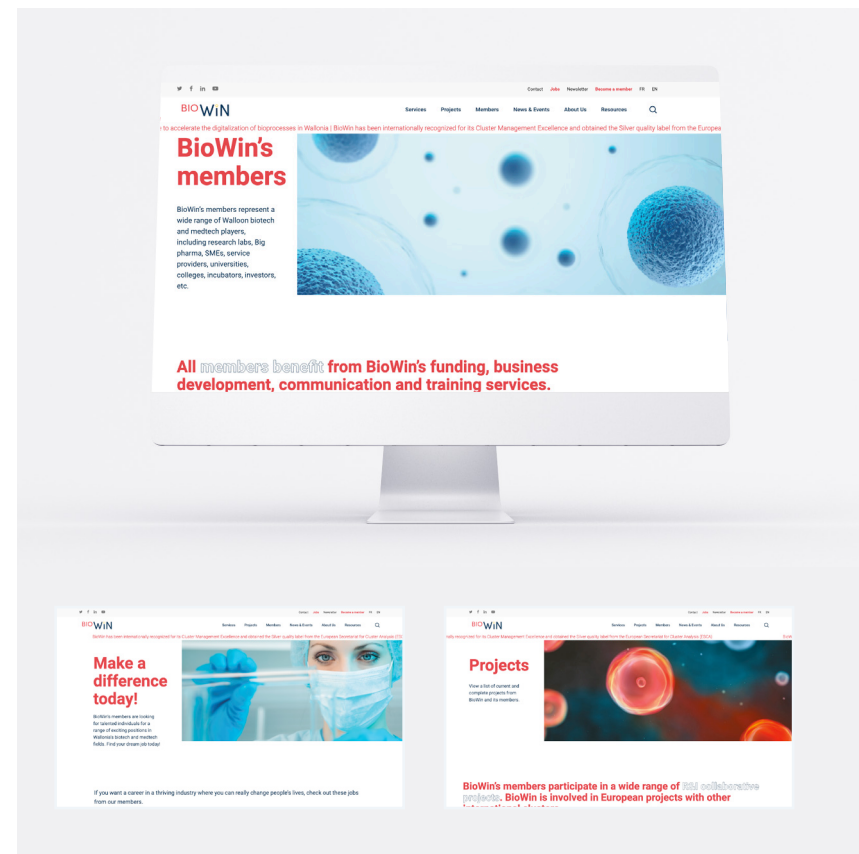
SUBSCRIBERS **2 380**



CAMPAIGNS **84**

Top 3 visited webpages

1. BioWin members
2. Jobs
3. Projects



Press coverage

SOME KEY FIGURES

Year end performance

SHARES

42

Total number of online, offline and social shares

ESTIMATED VIEWS

64 000

Prediction of lifetime views of coverage, based on audience reach & engagement rate on social

AUDIENCE

960M

Combined total of publication-wide Audience figures

ENGAGEMENTS

16

Combined total of likes, comments and shares on social media platforms

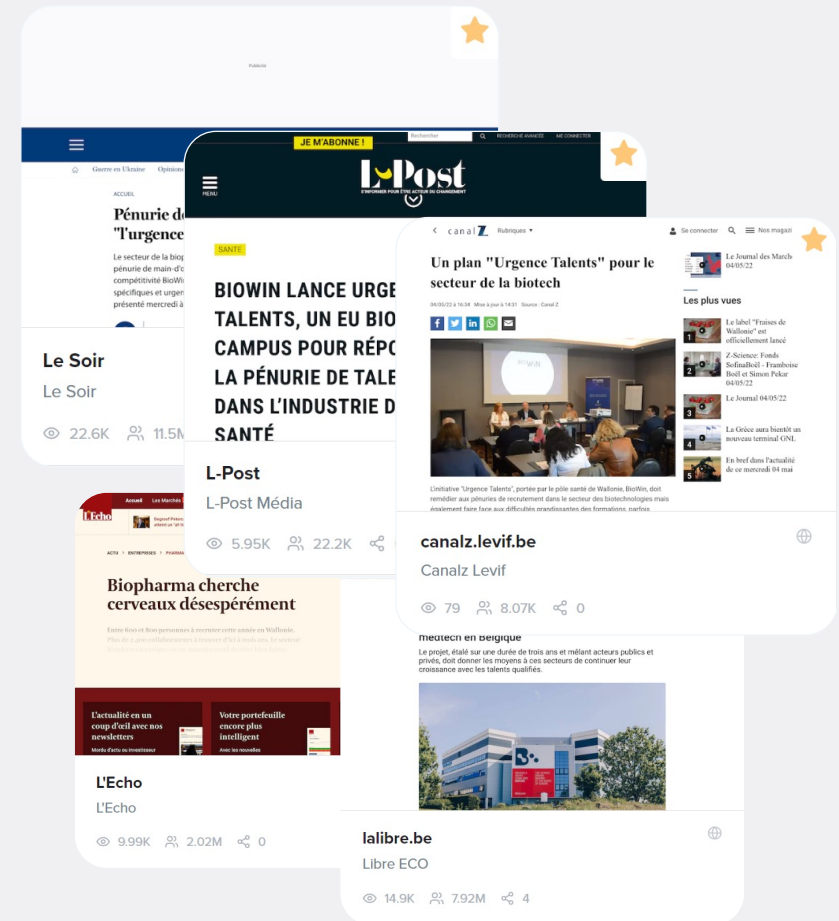
AVG. DOMAIN AUTHORITY

57

A 0-100 measure of the authority of the site coverage

Coverage: Since 2022, we have launched a media coverage plan with an industry expert agency. The figures show that this useful partnership continues to yield rewards.

Highlights





REGIONAL HEALTH
ECOSYSTEM

Wallonia is part of the Belgian biopharma valley



Technological advantage

Belgium is **ranked third across Europe** in terms of overall revealed technological advantage in biotechnology.¹



R&D and innovation

Belgium has the **second-highest** level of pharma R&D performed in the business sector.²



R&D investments

In 2021, the sector invested over € 14 million in R&D every day, amounting to a total of € 5,2 billion. **Since 2015, investments in R&D have more than doubled**, increasing by more than 35% in the past two years alone.³



Patent applications

In 2021, on average **more than one patent application was filed per day** in Belgium in the field of biotechnology and pharmaceuticals. Since 2015, the number of patent applications in those fields has increased by almost two-thirds.³



Clinical trials

In 2021, Belgium also confirmed its **position as the European leader** with 574 authorized clinical trials, 80% of which were initiated by biopharmaceutical companies.³

¹ The revealed technological advantage index is calculated as the share of country in biotechnology patents relative to the share of country in total patents of the five largest patent offices in the world (Europe, Japan, Korea, China, USA) Source: OECD Key Biotechnology Indicators

² Business Enterprise R&D (BERD) performed in the pharma industry, 2019, Million USD PPP/1 000 000 inhabitants, Source: OECD Main Science and Technology indicators

³ Source: 2022 Report to Society, pharma.be

A diverse ecosystem

BioWin currently has 242 members, including 147 Walloon companies. These include 12 large organizations that perform research or production activities in Wallonia.



242
MEMBERS
INCLUDING:



12
GLOBAL
LEADERS



Catalent

cenexi



PHARMACEUTICAL COMPANIES
or Johnson & Johnson



76%
INDUSTRIAL
MEMBERS
(including service providers)



61%
INDUSTRIAL
WALLOON
COMPANIES
(including service providers)



16%
ASSOCIATED
MEMBERS
(companies providing services)



61%
SMALL ORGANIZATIONS
(<50 FTEs)



10%
MEDIUM ORGANIZATIONS
(50-250 FTEs)



5%
LARGE ORGANIZATIONS
(>250 FTEs)



5
UNIVERSITIES



15
RESEARCH AND
TRAINING CENTRES



5
RESEARCH CENTERS

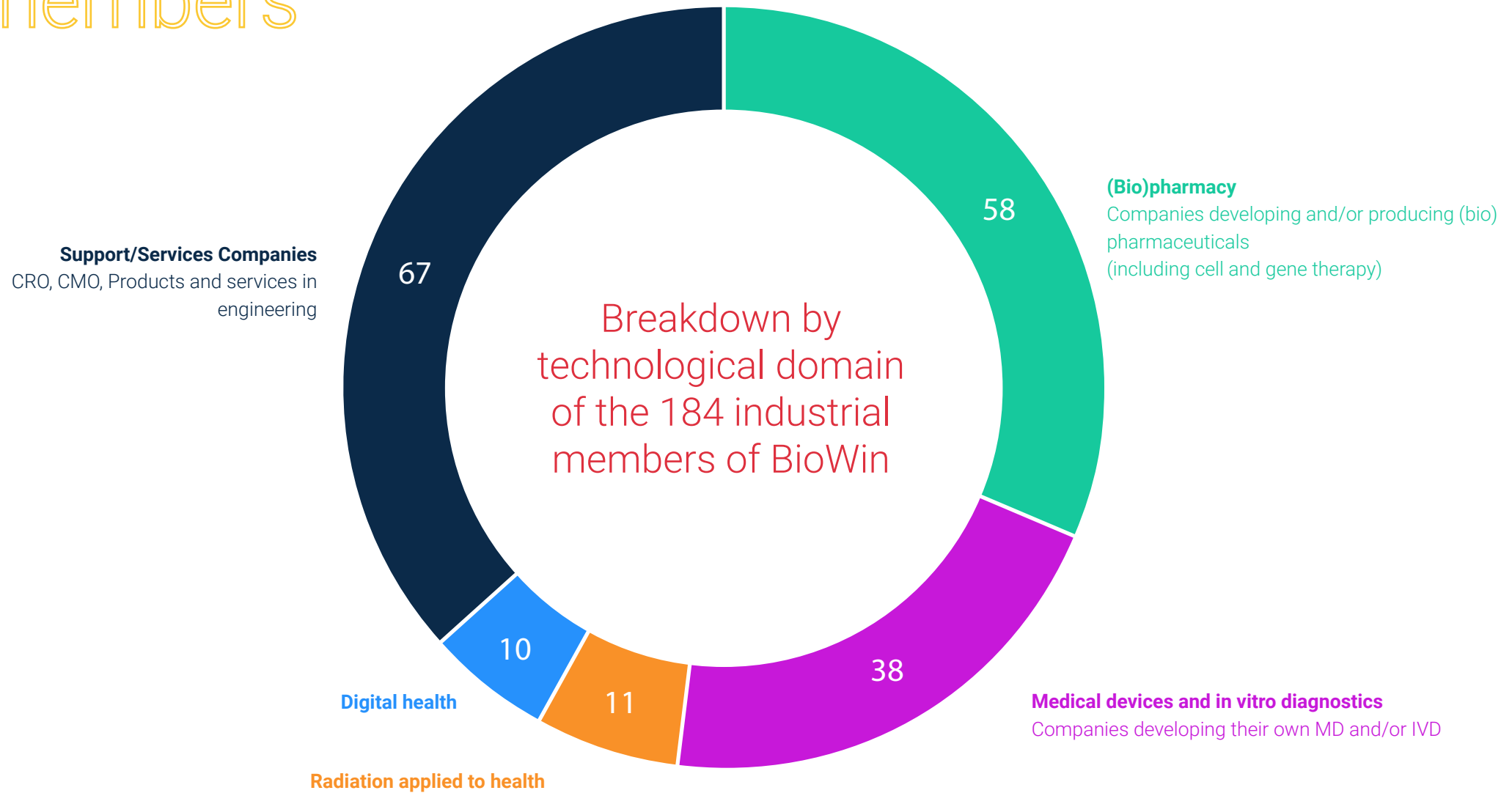


11 000
RESEARCHERS



20 000
HOSPITAL BEDS

Expertise of our company members



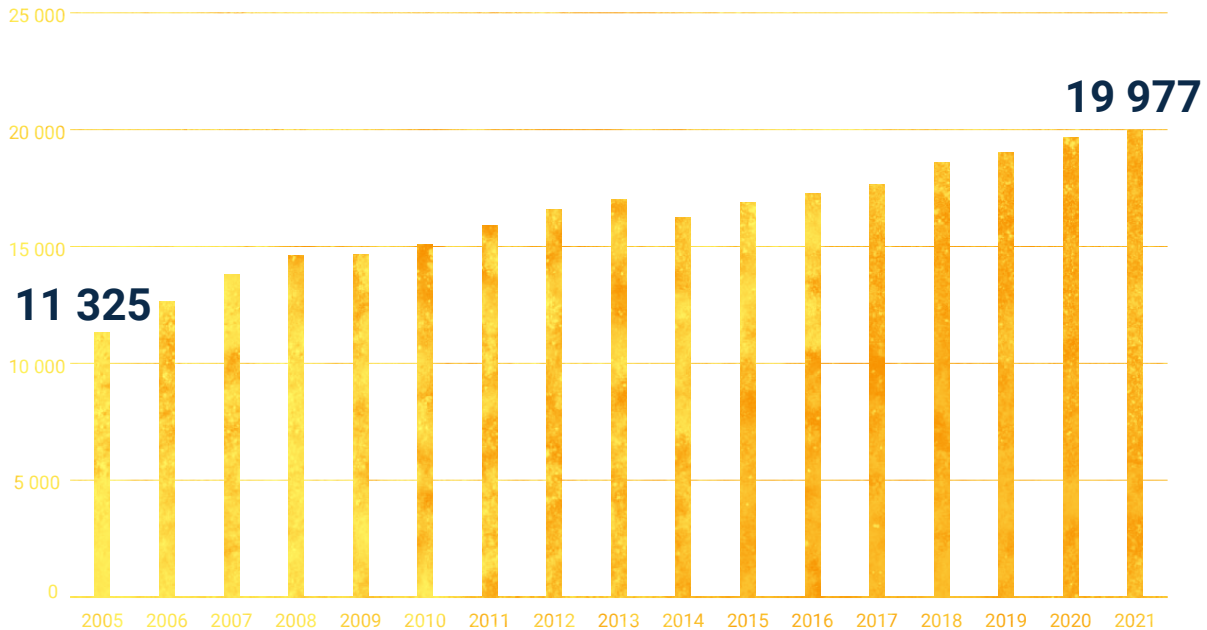
Economic impact

Evolution of employment in BioWin's 147 industrial members in Wallonia: graph, numbers, and overall trend



Since the creation of BioWin the average annual employment growth rate has increased continuously.

In our Walloon companies, the annual employment growth rate has been **4,5%** for the last 17 years (2005).



8 652 FTEs
job creation (2005-2021)

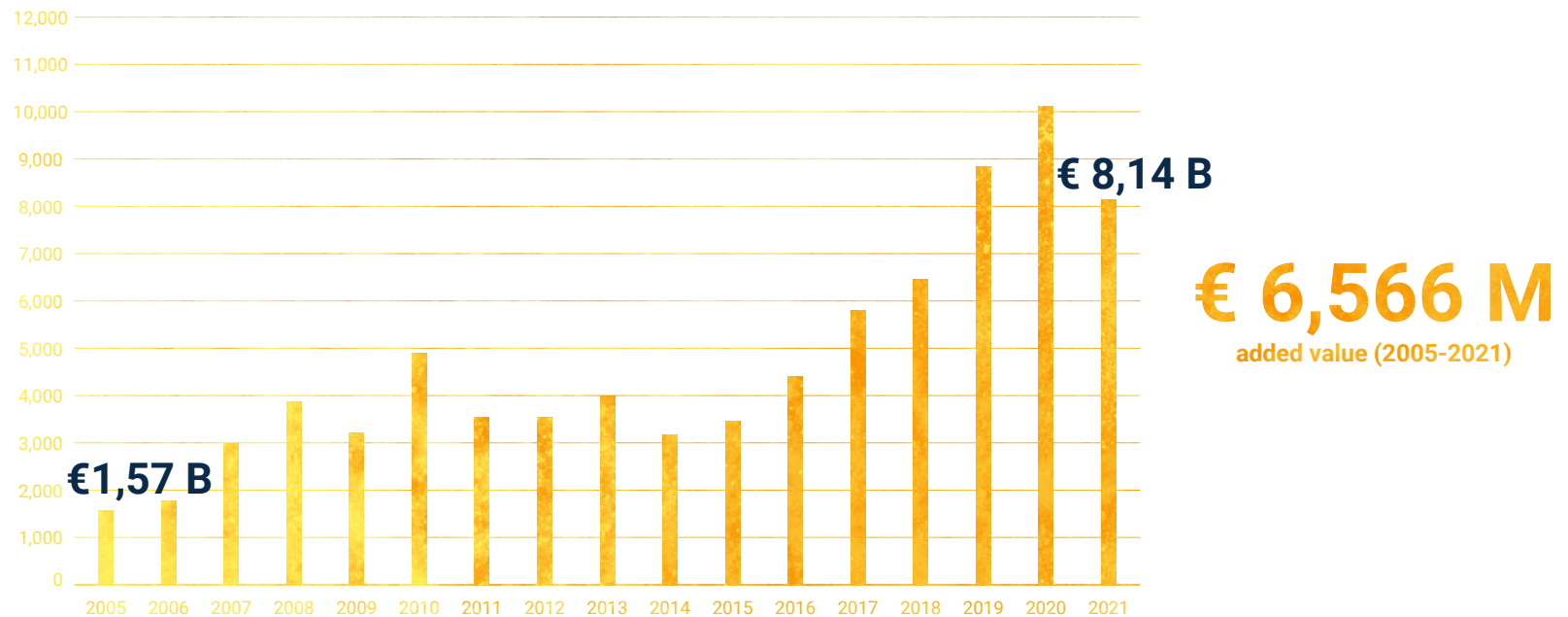
+76%
employment growth
since 2005

Economic impact

Evolution of added value for BioWin's 184 industrial members: graph, numbers, and overall trend



In 17 years, the added value of Walloon companies active in the sector has increased significantly. The added value* in 2005 amounted to 1,57 billion euros. At the end of 2021, this figure came out to be 8,14 billion euros.



* Added value is equal to turnover minus external purchases and corresponds to the remuneration of the production factors capital & labor (contribution to the Gross National Product)





COLLABORATIVE
R&I PROJECTS

Key figures for the portfolio of R&I projects include:



67
projects

(46 Completed / 21 Ongoing)
for a total budget of € 35,9 M, including
€25,1 M in subsidies



2
co-labelled



4
new projects
labelled in 2022

Vetphage (co-labeled with Wagralim),
Nemo, Softmed, Sputumai (co-labeled
with Mecatech)



€ 11 M
total budget
for the 4 new projects

including € 7,7 M
subsidies

The projects in
the portfolio have
generated:



126
patent
applications

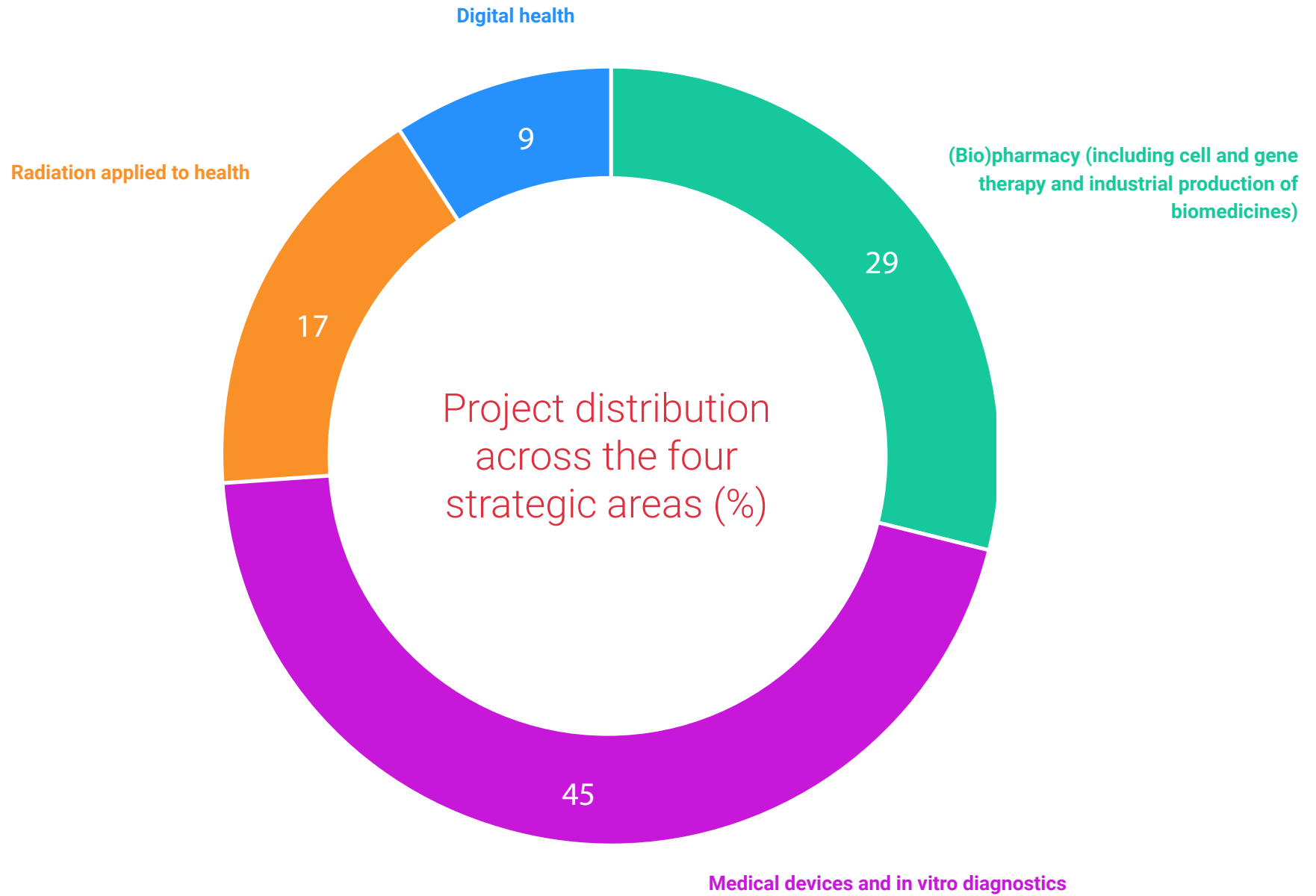


83
developed
products



39
developed
services

including companies,
research centers, & universities





GOVERNANCE, TEAM
& NEW MEMBERS

BioWin was established in 2006 as a not-for-profit organization.

Philippe Denoël has been the president of the Board of Directors since January 2018.

In 2021, BioWin was recognized internationally for the excellence of its Cluster management and obtained the “Silver” quality label from the European Secretariat for Cluster Analysis (ESCA). BioWin is the first Cluster in Belgium to obtain this European quality label.

GOVERNANCE

Philippe Denoel | President

Hugues Bultot | Vice-President

Serge Schiffmann | Vice-President

Xavier Hormaechea | Administrator

Gaetane Metz | Administrator

Christophe Allard | Administrator

Jean-François Acquisto | Administrator

Thibault Helleputte | Administrator

Melanie Mestdagt | Administrator

Jehan Lienart Van Lidth De Jeude | Administrator

Javier Martinez | Administrator

Julie De Wever | Administrator

Jean-Luc Balligand | Administrator

Michel Georges | Administrator

Carine Michiels | Administrator

Laurence Ris | Administrator

Olivier Vanlooche | Administrator

The BioWin Team

BIOWIN



Sylvie Ponchaut
Managing
Director



Damien Diop
Head of Membership &
International Development



Françoise Coléry
Head of Learning &
Development



Thierry Ferain
Director Innovation &
Growth



Marianne Ghyoot
Director Research &
Innovation



Loïc Germain
Senior Innovation Manager



Alexandra Schiettekatte
Head of
Communications



Carolina Heredia
Credit controller &
Data office



Bertrand Desmets
Marketing & Communication
Specialist



Bernard Linsmeau
Director Business
Development & Growth



To specifically support the growth and development of its members, BioWin plans to cooperate more proactively with its associate members: service companies whose quality and expertise could provide great added value to the entire ecosystem.

This partnership approach will enable BioWin to organize events around themes relevant to the concerns of Cluster members.

AGIO

International Financial and Business Solutions – Boots on the Ground / We advise across borders

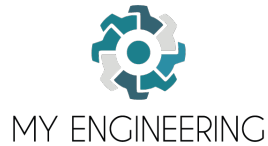
Agio Capital & Business Solutions is a cross-border advisory firm connecting European Life Sciences companies to Capital (VC/PE) and Strategic Partners in Asia, with a strong network in China.

KEYRUS life science

Keyrus Life Science – formerly known as Keyrus Biopharma – is the C2RO launched by the Keyrus Group, the “Making Data Matter” company. Keyrus Life Science is a unique Connected Clinical Research & Development Organization.

Deloitte.

As a leading audit and consulting practice in Belgium, Deloitte offers value added services in audit, accounting, tax and legal, consulting, financial advisory services, and risk advisory services. In Belgium, Deloitte has more than 5,100 employees in 11 offices.



In 2022,
17 new
members
joined the
Cluster

BIO **WIN**

THE HEALTH CLUSTER OF WALLONIA

Contact us

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www.biowin.org

