

# BELGIAN LIFE SCIENCES



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#### **SECTION 1**

## INTRODUCTION TO BELGIAN LIFE SCIENCES

## 1.1 Biotech ...

Biotech is traditionally divided into three types: healthcare, agriculture & foodstuffs and industrial applications. Hundreds of medicines and vaccines, but also a lengthy list of products, detergents and adapted plant varieties are the direct result of the underlying technology.

Although the principles behind biotech have been in use for centuries - consider traditional applications such as the use of microorganisms to make bread or brew beer – a real acceleration came in the years following the Second World War, with the unravelling of the mysteries of DNA. Not long afterwards, in the 1970s, two scientists in the United States managed to transfer genetic material.

This definitively laid the foundations for biotechnology. The first genetically modified plants were presented in the early 1980s, insulin was entering the market as the first biotech medicine in 1982 and the first laundry detergent with enzymes specially designed to break down fats was introduced in 1988. Since then, applications and developments have grown at a blistering pace, with breakthroughs in single cell technology, CRISPR/Cas9, diagnostics, photonics and more.

Sales of biotechnology-based medicines are rising rapidly. In 2019, turnover has more than doubled compared to nine years ago. A significant reason for the growth in biotechnology-based medicines is the increasingly close collaboration with the traditional pharmaceutical sector. Major pharmaceutical companies are starting their own research, buying out biotech businesses - as the Belgian pharmaceutical giant UCB Pharma did with the British company Celltech in 2004 - and taking over the distribution and marketing of biotech medicines.

Where in 2010 biotechnology accounted for 17% of worldwide sales of medicines, in 2019 this rate had already grown by ten percentage points to 27%. According to estimates by Evaluate, a commercial intelligence provider for the global life science industry, the market share will continue to grow.

As far as research and development is concerned, the number of patents applied for at the European Patent Office related to traditional pharmaceuticals is similar to the number of applications of a biotechnological nature.



#### Worldwide biotechnology drug & Over The Counter sales, 2010-2024 (in billion USD)

Source: EvaluatePharma® World Preview 2018 (estimation starting from 2019)



Worldwide Prescription Drug & OTC Sales by technology,

Pharmaceuticals Biotechnology

European patent applications by technical field, 2009 – 2018 (in number of patens filed with the EPO)



## ... & Belgium

Right from the start, Belgium was one of the absolute leaders in life sciences. Ground-breaking work was already being carried out in the 1970s at Ghent University, which is still a bastion of the life sciences sector. It was here that the first genetically modified plant in the world emerged, laying the foundations for green biotechnology. The same period also saw breakthroughs in genetics. Walter Fiers was the first in the world to sequence a full gene and a full genome. Meanwhile, Joseph Martial was gathering knowledge in the United States as a genetic engineer, which he would later apply at the University of Liège. At the University of Leuven, work carried out in the 1980s broke through as tPA, one of the world's first biotech medicines.

It was now down to business to bring the universities' basic research to market. In 1982, Plant Genetic Systems (PGS) was founded as one of the world's first biotech companies and conducted further work on discoveries in green biotech. Three years later, Innogenetics followed, with a focus on red biotechnology. It carried out pathfinding work on HIV testing and vaccines against hepatitis B and C. In the same year, Eurogentec also came into existence as a spin-off of the University of Liège, set up by Martial.

One characteristic that shows the guality of the companies and the stability of the sector in Belgium is that these three core companies still exist and are still based in Belgium, albeit in a different form. PGS has become part of the German company Bayer CropScience, Innogenetics part of the Japanese company Fujirebio and Eurogentec part of Kaneka Corporation, also a Japanese concern.

These first biotech businesses are now part of a substantial community of Belgian life sciences companies. According to estimates by the business federation essenscia/bio.be, the Belgian biotech industry accounts for some 250 companies. If we add the different subcontractants, the estimate goes up to nearly 400. This number is growing hand over fist. In the last five years alone, more than 35 biotech companies have come into being. Together, they employ around 30,000 people. This is an increase of more than 25% compared to ten years ago.

According to essenscia, even though Belgium only has 2% of the EU-28 population, it accounts for 6% of value added, 13% of exports and 10% of R&D of the European biopharmaceutical industry. In terms of R&D intensity, which is R&D divided by production, the Belgian pharmaceutical industry is the most R&D intensive, only preceded by the United Kingdom. Around 80% of the employees in biotech are active in the healthcare sector. No fewer than one in five companies is working to combat cancer, but inflammatory illnesses and immune system disorders are also sectors in the spotlight. The Belgian companies are working hard on vaccines, immunotherapy, radiotherapy, bioproduction, genetic engineering, and, of course, cell therapy and antibodies: the latter two being niches in which Belgium is an absolute world leader.

The growth of a knowledge-driven market like biotech is mainly concentrated in strong specialist clusters. In Wallonia that means Walloon Brabant and the areas around Charleroi and Liège while in Flanders, strong hubs are located around Ghent and Leuven. Brussels is also emerging as an important biotech playground, mainly for clinical trials with the highest concentration of academic hospitals, also partly due to the Université Libre de Bruxelles incubator in Charleroi.



## 1.2 Medtech ...

The sectoral industry association MedTechEurope describes medical technologies as "products, services or solutions used to save and improve people's lives. In their many forms, they are with you all the time, from prevention, to diagnosis to cure. There are three main categories of medical technologies:

- Medical devices (MDs) are products, services or solutions that prevent, diagnose, monitor, treat and care for human beings by physical means.
- In vitro diagnostics (IVDs) are non-invasive tests used on biological samples (for example blood, urine or tissues) to determine the status of one's health.
- Digital health and care refers to tools and services that use information and communication technologies (ICTs) to improve prevention, diagnosis, treatment, monitoring and management of health and lifestyle."

The core of modern medical technology is co-involved with significant developments in robotics, electronics, nuclear physics and optics. Thanks to thermometers, stethoscopes,

# European patent applications by technical field, 2009 – 2018 (in number of patents filed with the EPO in the indicated 10-year period)



Source: European Patent Office

microscopes, ophthalmoscopes, laryngoscopes and x-rays, doctors now have better ways to observe the functioning of the human body. Since the 1970s, computer technologies have increasingly been used, initially to perform calculations and store data, and latterly by using robotics to assist in operations. Other breakthroughs in fields like chemistry and engineering sciences have brought along even more possibilities for implants.

Medtech is therefore continuing to evolve, certainly in Europe. Between 2009 and 2018, no fewer than 116,103 patent applications relating to medical technology were made to the European Patent Office. No other sector does better. In 2018 alone, medtech accounted for 13,795 applications.

According to a study by IQVIA, a consulting company specialising in health information technologies and clinical research, medtech products worth 438 billion USD were sold worldwide in 2017. The company expected an average annual growth rate of 6% in the following years, amounting to a market size of 585 billion USD by 2022.

In 2017, North America was the largest market in the world for medtech, with a turnover of 162 billion USD. Europe followed in second place with sales of 134 billion USD. The third place was held by the Asian-Pacific countries, which are expected to bridge the gap with Europe in the next few years.

## Global medtech overview by regions, 2017 & 2022 (in billion USD)



Source: IQVIA white paper, the rise of global medical technology

#### ... & Belgium

Belgian medtech may get less attention than biotech, but it is comparable in size and, again, is world class. According to the latest report from the Belgian umbrella body beMedTech, more than 200 companies in Belgium are active in this sector. Together, they employ around 20,000 people and generate a turnover of around 3.5 billion USD.

The sector is also showing strong growth. In the Brussels region alone, the number of medtech companies has grown by 40% in recent years, which can, according to a EY study, mainly be explained by the growth of digital health applications, and thanks to programs to support start-ups such as the MedTech Accelerator® and the Belgian Medtech Booster, an initiative developed by MedTech Flanders &

MedTech Wallonia. In the last five years, more than two out of three Belgian medtech companies have experienced growth, a quarter of them surpassing 5% per year. Belgian companies are looking forward to an even more auspicious future. Indeed, 41% of the companies anticipate an annual growth of 1 to 5%, while 28% expect annual growth of more than 5% over the next five years. More than half the companies also expect to be recruiting in years to come.

A survey of its members carried out by beMedTech shows that most companies are active in medical devices – consumables (68%), followed by medical equipment and systems - medical investment goods (45%) and medical device software and/or digital health applications (43%).

#### The medical technology providers in Belgium, 2018 (in % of companies with identified products in portfolio)

 Medical devices – consumables

 Medical equipment and systems - medical investment goods

 Medical device software and/or digital health applications

 Medical equipment and systems (medical investment goods)

 Services (inside or outside the hospital walls)

 IVD

 Pharmaceutical products

 Para-pharmaceuticals / beauty products

Source: beMedTech



#### **SECTION 2**

## THE ECOSYSTEM UNDERLYING THE SUCCESS OF BELGIAN LIFE SCIENCES

It is difficult to pinpoint a single reason why the Belgian life sciences sector is flourishing as it is. The most common point of reference is the extended ecosystem. In first instance, this is based on research and development (2.1). This takes place in Belgian companies, universities, healthcare providers and pharmaceutical multinationals with operations in Belgium, but also in innovative research institutions that bring these players together.

This research is demonstrated by an impressive number of clinical trials (2.2) and patents (2.3). The legislator has created a stable and favourable environment for both components to thrive.

Belgian life sciences companies also have ever-increasing access to investments to cover the costs of long-term research until a fully-fledged product is developed (2.4). For growth, they can tap into private capital, semi-public investment funds and the flourishing stock market.

As companies have been active in the life sciences sector in Belgium for decades, a broad range of supporting measures are available. These cover materials, logistics, training and access to talent (2.5) but there are also many financial incentives from national and regional governments (2.6).

## The Belgian power of attraction

Many life sciences companies are set up every year by the Belgian universities and incubators. But Belgium also has an ever-growing ability to attract life sciences companies established outside of Belgium. A few examples of foreign companies moving to Belgium in recent years to enjoy the ecosystem are:

Biotech:		
Agomab	Italy	work on antibodies
PDC*Line Pharma	France	active in immuno-oncology
BCI Pharma	France	targeted therapies
Clarity Pharma	Australia	detection of coronary conditions
Medtech:		
Sequana Medical	Switzerland	implantable pump systems
Miracor Medical	Austria	interventional cardiology
Mitral Technologies	United States	interventional cardiology

## 2.1 Strong support for R&D

Gross domestic spending on R&D,

#### 2.1.1 Belgian R&D in an international context

Belgium spends 2.7% of its GDP on R&D. This is significantly above the EU-28 average of 2% and higher than the OECD average (which is 2.4%). Belgium also scores highly compared to its neighbouring countries.

It should therefore come as no surprise that Belgium plays a leading role in an extremely knowledge-driven and innovative sector like life sciences. The same trend shows in the number of researchers employed. In 2017, Belgium had 11.5 researchers for every 1,000 employees. The average for both the OECD and EU-28 is more than 40% lower, at around 8.3 researchers per 1,000 employees.



#### Researchers, 2016 - 2017 (per 1,000 employed)



Source: OECD

Source: OECD

#### 2.1.2 Companies as drivers for R&D

Biotech companies R&D expenditure, 2015 (BERD %)

1	Lithuania	22.2
2	Estonia	13.2
3	Slovenia	12.1
4	Belgium	11.1
5	Spain	8.4
6	France	7.8
7	Norway	5.6
8	Czechia	4.8
9	Poland	3.9
10	Italy	3.7
11	Portugal	3.2
12	Korea	2.6
13	Germany	1.8
14	Finland	1.6

Source: OECD

Belgian companies are well-known investors in research and development. This is reflected in research performed by life sciences companies. The OECD compared expenditure by biotech companies on R&D across several countries in relation to their total corporate spending. The resulting percentage gives a figure for "business expenditure on R&D" (BERD).

From this ranking, it emerges that in only three of the investigated OECD countries biotech companies invest proportionally more in R&D than their Belgian counterparts. The average stands at 7%, while for Belgian biotech companies it is far higher at 11.1%. When looking at biotech

Biotechnology R&D expenditures in the business sector, 2015 (in millions of USD PPP)

1	Spain	8,660.9
2	France	3,023.4
3	Korea	1,476.9
4	Belgium	1,405.3
5	Germany	1,345.6
6	Italy	639.1
7	Norway	190.9
8	Poland	183.9
9	Czechia	178.2
10	Slovenia	132.0
11	Finland	72.1
12	Portugal	57.2
13	Lithuania	52.9
14	Estonia	34.1

Source: OECD

companies' R&D expenditure expressed in purchasing power parity (PPP), we can see that Belgian biotech companies are among the highest investors.

This strong focus on R&D by life sciences companies in Belgium can be explained by the incentives provided by the Belgian federal and regional governments. According to the OECD R&D tax incentive database, Belgium features among the best countries for supporting R&D.

More information on supporting measures for R&D can be found further in this publication in section 2.6 - Broad financial support.

Direct government funding	and tax support for business I	R&D, 2016 (as % of GDP)
<b>J</b>		

		Direct Funding of BERD	Tax Support for BERD	Total
1	Russian Federation	0.3797	0.1071	0.4868
2	France *	0.1278	0.2869	0.4147
3	Belgium	0.0979	0.2981	0.396
7	United Kingdom *	0.0959	0.1516	0.2475
12	Netherlands	0.0194	0.1705	0.1899
26	Germany	0.0668	0	0.0668
29	Luxembourg *	0.0475	0	0.0475
40	Argentina	0.0025	0.0007	0.0032

Source: OECD (\* data from 2015)

Investments in research and development by the biopharmaceutical sector, 2014 – 2018 (in billion EUR)

4

#### 2.1.3 Universities as drivers for R&D

Belgian universities are known worldwide for their highquality, innovative research. In 2019, a Belgian university, KU Leuven, headed the list of Europe's most innovative universities for the fourth year running. According to this ranking, drawn up by Reuters, KU Leuven is the seventh most innovative university in the world, after six universities based in the USA. There are no fewer than seven Belgian universities in the top 100. Ghent University, the Université Libre de Bruxelles, Vrije Universiteit Brussel, Université Catholique de Louvain, the University of Liège and the University of Antwerp appear as well.

In section 1, we have already seen that the academic world is firmly focused on life sciences. The first biotech companies emerged as spin-offs from academic institutions or as professors' projects. Thirty years later, the same dynamic lives on. Every year, the universities of Ghent, Liège, Leuven, Brussels and others add to the number of spin-offs.

One of the many examples of universities focusing closely on R&D in the life sciences sector is Biopark Charleroi Brussels South. This is a biotechnology excellence cluster which combines two universities – the Université Libre de Bruxelles and the Université de Mons – and brings together a variety of organisations involved in scientific innovation. The site contains among others four dedicated research centres and an array of technology platforms.

#### 2.1.4 Big pharma as a driver for R&D

Pharmaceutical companies are also key drivers for R&D in Belgium. According to essenscia, the federation for chemistry & life sciences industries, all top 10 global biopharmaceutical companies have key activities in Belgium. Pfizer, Novartis, Johnson & Johnson, Sanofi, Takeda and GSK have major production facilities and R&D activity in Belgium, while Roche, Merck, AbbVie, Gilead and Amgen perform clinical trial activities and have sales offices in our country.

An investment manager at SRIW, the regional investment corporation of Wallonia, sees it this way in an interview in the Biotech special of the Belgian weekly news magazine "Trends Tendances Le Vif" (May 2019): "These [pharma giants] are providers of knowhow for new companies. It is not rare to have senior management in major groups creating or joining up with start-ups. They can also help biotech companies find backing from the pharmaceutical industry through licensing agreements, marketing, investment or even buyouts."

#### 2.1.5 Ecosystem supporting innovation

The Belgian ecosystem supporting life sciences innovation is diverse and complementary. A company interested to deploy its activities in Belgium may:

- join one or several clusters such as Biowin, lifetech. brussels, Flanders.Bio, MedTech Flanders or MedTech Wallonia.
- locate their activities in one or several scientific parks of the country: science parks surrounding famous research centers such as VIB or imec, incubators located close to academic hospitals such as EEBIC (Erasme hospital) or BLSI (Saint-Luc Hospital), UZ Gent, UZ Leuven, CHU (Centre Hospitalier Universitaire de Liège) and Brussels South Charleroi Biopark (ULB) to name a few.
- participate in an "acceleration program", such as the MedTech Accelerator ® or the MedTech Booster.

This ecosystem fulfils a key role as a link between research and business. For instance VIB, Flanders' strategic research institute for life sciences, established in 1996, had a unit dealing with technology transfer from the very start. In an interview with the Belgian newspaper "De Tijd" in December 2018, Rudy Dekeyser, a former director of the VIB, said that this made the organisation unique in Europe. Linking basic research with creating value for the company is essential. In Brussels South Charleroi Biopark there are also two units to help scientists find practical applications for the results of their research: patent approval and business development through the Bio-incubator and its partner investors.

The idea of organising and facilitating collaboration between different players is crucial in the Belgian ecosystem. BioWin or GreenWin only subsidize research projects if they bring together several companies (including at least one SME) and a university or research center. An example of this is Bridge2health, where the University of Liège, the CHU and the Meusinvest investment fund help promote projects. Other organisations such as VLAIO and Innoviris operate similar collaborative constructs.



#### 2.2 Health Biotech & Medtech: A hotspot for clinical trials

Belgium has a first-class framework for clinical trials. At a very early stage, in 2007, a Belgian guidance document for early exploratory trials was already launched. As a result, Belgium benefits from an outstanding reputation for over a decade now concerning clinical trials and tests on patients. The excellent collaboration between the government and the active phase I trial centres, united in the Belgian Association of Phase I Units (BAPU) also makes a contribution.

In July 2015, the Belgian federal government signed a 'Pact for the Future' with the pharmaceutical sector, setting out its ambition to create a stable framework for companies investing in pharmaceutical research and development in Belgium. One of the goals was to develop a 'strategic plan' to promote clinical testing in Belgium still further.

This has since been put into practice, inter alia by simplified administrative procedures for participation in clinical trials and with new legislation on phase I studies where the safety and the operation of a medical device or a drug are tested on a small group of patients or healthy people. Starting this kind of clinical trial now takes only 15 days. That is not just a fast process (such procedures often take a month elsewhere), but also a cheap one.

The results are clear to see. According to a study by the consultant Deloitte, Belgium is in second place in Europe for the number of clinical trials per inhabitant, behind Denmark. In 2018, no fewer than 543 applications were

made to start a clinical trial in Belgium: 9 percent up on 2017. Some 80 percent of the clinical trials were carried out on instruction from pharmaceutical companies. The remaining 20 percent of clinical trials took place in the academic world.

Last year, 13,000 Belgians took part in around 1,500 ongoing tests on new medicines. Strikingly, a third of all clinical tests were related to cancer research.

According to Deloitte, in 2017, 38% of clinical trials had a biological or biotechnological origin. However, the number of clinical trials in medtech also rose sharply. In the first three quarters of 2018, 48 clinical investigations were approved.

Clinical trial application per disease area in Belgium,



Source: Deloitte & Pharma.be

2017 (as % of total)

#### Clinical trials with medical devices by therapeutic area in Belgium, first 9 months of 2018 (in number of trials)



Source: beMedTech



#### 2.3 Generous patents system

Pushing ahead with research and development and clinical trials naturally results in breakthroughs and therefore generates patents. Here again, the government supports the companies and research institutions as one of the most tax-friendly countries for patents, thanks to the Innovation Income Deduction, a tax relief scheme for innovative companies in Belgium.

The principle behind the innovation income deduction is that up to 85% of a company's net earnings resulting from innovation is exempt from corporate taxation. This results in an effective tax rate of 5.1%. The incentive covers innovation revenues from, among others, patents, plant variety rights and orphan drugs.

The innovation income deduction applies to net income: the gross IP income minus current-year expenditures for the development of the IP asset. The following elements are included in those expenditures and should be derived from the gross income: expenditure for the acquisition of IP rights, related R&D expenses, expenditure for R&D outsourcing to related or unrelated parties, prior-year expenditure incurred in financial years ending after June 30, 2016.

In 2018, Belgian companies applied for no fewer than 2,360 patents, which is 10% more than the previous year. This is striking, given that the average growth across the EPO countries was only 4%. The life sciences sector contributes more than its fair share here. The pharmaceutical sector is the second most active applicant in Belgium, with biotechnology in third place and medtech in fifth. Thus, biotech and medtech together accounted for 12% of all patent applications in 2018.

## Belgian patent applications, 2018 (in number of applications)

TECHNOLOGY FIELD	2018
Other special machines	198
Pharmaceuticals	162
Biotechnology	153
Civil engineering	124
Medical technology	123

Source: European Patent Office

Many organizations already mentioned above and active in life sciences can be found in the top 10 list of Belgian patent applicants.

## Ranking of top 10 Belgian applicants, 2018 (in number of applications)

	2018
SOLVAY SA	348
IMEC VZW	198
UMICORE NV	97
UNIVERSITEIT GENT	66
AGFA NV	60
UCB PHARMA	55
MELEXIS NV	53
VIB VZW	45
K.U. LEUVEN	35
VITO NV	32

Source: European Patent Office

## 2.4 Broad access to investments

The life sciences sector is very capital intensive, biotech even more so than medtech. It takes years, or sometimes decades, to develop a medicine and bring it to the market. In the meantime, businesses, often start-ups or spin-offs, need sufficient capital. Belgium is a safe haven for life sciences companies looking for fresh investments, whether private, semi-public or public.

In 2018, around a billion euros was raised from investors. In the first five months of 2019 alone, private investors poured 112.8 million EUR into unlisted biotech growth companies. This clearly shows the rising trend of Belgian access to capital.

In the past fourteen years, 1.78 billion EUR has been raised in Wallonia. Over around the same period, VIB received investments valued at 1.2 billion EUR. Their inward investments, meaning international businesses in which VIB played an active role in their branches in Flanders, also raised more than 1.3 billion EUR in investment capital.



Improved access to investments is also evident in the everincreasing size of funding rounds. While the first funding rounds in the years following the financial crisis generally fluctuated around 5 million EUR, raising 15 million EUR for a start-up is nowadays no longer the exception. Increasing interest from international investors plays an important part in this evolution. Belgian life sciences companies received funds from a broad range of top-tier life sciences investors such as Abingworth (United Kingdom), Pontifax (Israel), Boehringer Ingelheim (Germany), Vesalius Biocapital (Luxembourg), BioGeneration Ventures (the Netherlands), Wellington Partners (United Kingdom), Mitsui Global Investment (Japan) and Perceptive Advisors (United States).

At the same time, Belgium has a number of semi-public investment funds that are firmly committed to life sciences investments. The Federal Holding and Investment Company (SFPI-FPIM) has holdings in around fifteen pharmaceutical entities (Ire-Elit, MaSTherCell, PDC Line Pharma, etc.)

In Wallonia, the SRIW (Société Régionale d'Investissement de Wallonie) is a crucial support for Belgian biotech and medtech businesses. The SRIW can invest two to ten million EUR, and between 2012 and 2017 alone it allocated 155 million EUR to investments in around thirty companies. A number of regional investment funds, including Meusinvest, Sambrinvest and Nivelinvest, are also active in the southern part of the country.

In Flanders, GIMV was one of the first investors in Biotech. It has a track record of more than thirty years in the biotech sector, in which it has invested almost 500 million EUR. GIMV was thus there at the start for successful biotech companies in Flanders, through the management of Biotech Fonds Vlaanderen. Since 2016, the holding company PMV (ParticipatieMaatschappij Vlaanderen) has been responsible for the management of this fund going forward. It is currently active in around thirty companies.

In Brussels, innovative life sciences companies may apply to research & development subsidies. These subsidies are granted by the public regional organization called Innoviris. The Brussels public investment fund is finance.brussels : it supports innovative companies by equity or convertible loans, depending on the stage, needs and level of risks that the company represents. Other available investment funds are Theodorus, mainly for academic-originated start-ups and the Seeder Fund for high-tech companies. The network of Belgian Business Angels, BeAngels might also be considered as an option for financing. The regional Brussels investment funds are strongly aligned with the direction of the cluster lifetech.brussels as recent investments illustrate it, with a coordinated regional support to startups like Neveo, Spentys, Kaspard, Sylho,...

In addition to the university investment funds such as Sopartec or Theodorus, there are also funds like V-Bio Ventures which was able to raise 76 million EUR without difficulty at its launch in 2016. Another such example is Fund +, set up a year earlier by Désiré Collen (the discoverer of tPA), which has 200 million EUR at its disposal. Other names in a non-exhaustive list of the investment funds active in Belgian life sciences include Vesalius Biocapital, Newton BioCapital, Droia, LRM, Capricorn, Qbic and the recently established Novalis.

Thanks to these funds, there is enough capital in Belgium to support risky but promising biotech and medtech businesses.

## A flourishing stock market

In 2018 and the first months of 2019, listed biotech companies in Belgium raised capital investments of more than 700 million EUR. The fact that Belgium has recently presented success stories from companies including Galapagos, IBA, Ablynx, Mithra Pharmaceuticals and ArgenX no doubt played a part in this.

More than ever, the Belgian stock market is the reference point for biotech and medtech businesses. In the first quarter of 2019, the market value of these companies listed in Belgium stood at 27 billion EUR. Belgium therefore represents around a quarter of the total value of the biotech and medtech businesses listed in Europe. This is despite the fact that both Ablynx (bought for 3 billion EUR by Sanofi) and TiGenix (bought

by Takeda for 500 million EUR) have left the Brussels stock exchange.

A Belgian listing is therefore very attractive for overseas companies. A small sample of the businesses that have made the switch includes Acacia Pharma from the United Kingdom, Curetis and Eckert & Ziegler, both from Germany, and the originally Swiss company Sequana Medical. In an interview with the Belgian newspaper "De Standaard" in January 2019, an analyst from the bank KBC Securities explained: "Biotech and medtech companies can raise capital in other countries too, but they risk a lower rating, so they can be pulled from the stock exchange more easily. Here, there is also capital available for subsequent funding rounds."



#### 2.5 Well-developed material and logistical support

In a highly specialised sector like life sciences, highly customized material and logistical support is essential. Dozens of small enterprises specialise in the most complex material, logistical and intellectual support.

The first bio-incubators were founded as early as the 1990s. They offer start-ups a specialist infrastructure, including research facilities, prototyping units and production units. Bio-incubators now occupy more than 100,000 square metres in Belgium. The incubators in the Charleroi Brussels South Biopark and in Ghent and Leuven are world class, and regularly add new equipment. To scale up, companies can turn to Bio Based Europe Pilot Plant, which is a global authority in this field.

The products of Belgian biotech and medtech companies are very complex, and demand adapted handling throughout their life cycle. This calls for appropriate logistics. Belgium can meet this need, not least through the Brussels National and Liège airports. Both are certified centres of expertise for the logistical processing of pharmaceutical products. The port of Ghent also has the largest biocluster in Europe.

Belgium is recognised as one of the world's leading logistics hubs. With annual exports totalling 40 billion EUR, Belgium is the second largest exporter of (bio-)pharmaceuticals in Europe. Nearly half of these products are exported to countries outside the EU, mainly Asia and the United States.

To ensure a constant stream of the right staff, academic institutions and other organisations work to provide the required education and training. Virtually all universities in Wallonia, Flanders and Brussels offer life sciences curricula. Graduating students have versatile profiles enabling them to work across the whole sector. At the same time, these academic institutions also offer a number of very specific courses, for example in clinical testing.

Because the demand for personnel is so high in the Belgian biotech and medtech sectors, various other initiatives have been launched. One of these is Cefochim, the training centre for the chemicals and biopharmaceuticals industry in Seneffe, which is an essenscia initiative. The centre delivers 140,000 hours of courses annually, and provides 30,000 training hours for businesses.

## 2.6 Broad financial support

The Belgian government and the three Regional governments support the life sciences sector in a number of ways.

Some of the many benefits in the R&D field include:

- investment deduction for R&D 13.5% of acquisition value/qualifying asset or 20.5% of the depreciated amount;
- exemption of payment of 80% of the personal income withholding tax of researchers in certain scientific fields;
- innovation income deduction up to 85% of a firm's net earnings from innovation is tax exempt.

Apart from that, there are a whole range of other support measures provided by both federal and regional governments in Flanders, Wallonia and Brussels, in areas such as:

- Financial aid
- Investment aid
- Financial aid in connection with internationalisation
- Aid relating to energy
- Aid relating to transport and the environment
- Financial aid relating to R&D and innovation
- Aid for employment and training
- Aid for regulatory compliance

The sectoral body essenscia has compiled a summary of all benefits available to companies.

Contact info@essenscia.be for a full overview.



#### **SECTION 3**

## STAKEHOLDERS

## **3.1** OFFICIAL PARTNERS

#### **FPS Foreign Affairs**

The promotion and defense of Belgian economic interests abroad is a top priority of the Federal Public Service (FPS) Foreign Affairs. This is done in a number of ways. FPS Foreign Affairs coordinates Belgium's ambitious trade and investment protection policy, it monitors market access problems and it provides diplomatic support to Belgian companies abroad. Moreover, FPS Foreign Affairs supports Belgian businesses in their international activities by coordinating the economic missions of HRH Princess Astrid, as representative of His Majesty the King, and through the State visits led by His Majesty the King.

FPS Foreign Affairs also actively promotes Belgium's international image as a good place to do business, by participating in international forums, such as the International Expositions and the World Economic Forum, by organizing bilateral visits and by ensuring Belgium's multilateral action in the relevant international organizations.

#### Follow us on: www.diplomatie.belgium.be/en



Foreign Affairs, Foreign Trade and Development Cooperation

#### Flanders Investment & Trade

Flanders Investment & Trade (FIT) promotes international entrepreneurship in Flanders in a sustainable way as a key factor in the social and economic development of the region. FIT does so by supporting the international activities of Flemish companies and by attracting foreign investors to Flanders. FIT assists, supports and stimulates companies in international business. FIT offers tailored advice and guidance. Companies can call on its network of contacts both at home and abroad. And FIT provides financial support and information on a wide range of financial incentives.

Flanders has many assets for ambitious Flemish enterprises and SMEs as well as for interested international companies. For Flemish companies, its region acts as a perfect gateway to global markets. For them, FIT tries to lower the threshold to doing business abroad. FIT promotes its services, provides information and knowledge about export and offers networking opportunities between entrepreneurs and brings them into contact with potential partners abroad.

Flanders is a pole of attraction for foreign companies: thanks to its central location in Europe, its strongly developed infrastructure, its innovative clusters and numerous other strengths. FIT tries to offer them worldwide publicity. FIT adopts a tailored approach to potential investors and convinces them of the opportunities for their company in Flanders. Furthermore, FIT focuses on existing investors in Flanders planning to expand their businesses locally. Innovative clusters are of key importance to Flanders as a knowledge region. FIT assists these clusters in their internationalization process and tries to attract foreign investors capable of strengthening clusters to grow into major international players.

Follow us on: www.flandersinvestmentandtrade.com





#### Wallonia Export-Investment Agency (AWEX)

The Wallonia Export-Investment Agency (AWEX) develops and manages the international economic relations of Wallonia, the Southern region of Belgium. The agency, which employs more than 400 people, promotes the competitive advantages of Wallonia internationally.

AWEX makes use of its global network of more than 100 offices to strengthen in a sustainable way the image of Wallonia abroad. To promote international business relations, AWEX exchanges commercial information with both the international business community and Walloon companies.

The agency provides exporters, importers and potential investors with information on:

- the region of Wallonia and its export potential by means of macro-economic data
- Wallonia-based companies and their products/services
- the potential of Wallonia-based companies for international partnerships

Furthermore, AWEX assists companies based in Wallonia with a wide range of services in regard to their international activities such as:

- gathering information on foreign markets
- carrying out individual market studies upon request
- organizing trade missions, group stands at international fairs, and visits to Wallonia by foreign dignitaries and captains of industry
- promoting commercial contacts with international organizations
- providing financial incentives for export activities
- organizing professional training of specific commercial skills
- increasing awareness of international business opportunities

In addition, AWEX has a key role in the expansion or development of the business of potential foreign investors. It offers its expertise in how to establish a business in Wallonia, as well as provide them with detailed information and tailored made assistance on local investment opportunities.

Follow us on: www.investinwallonia.be & www.awex.be

#### hub.brussels

hub.brussels, the Brussels Agency for Business Support (BABS) is offering free-of-charge solutions and advice for start-ups and scale-ups in Brussels and beyond, as well as services focusing on strategy, financing, clustering and internationalisation.

One of the missions of hub.brussels is indeed to facilitate the internationalization of Brussels' economy by helping Brussels businesses compete in global markets. More than 90 economic and commercial attachés located on every continent provide free support to SMEs, approach potential local prospects and partners, organize networking events, ...

A "Welcome Package" is available to potential investors, providing them with fully equipped office space for three months and a wide range of services so that they can experience the advantages of setting up business operations in Brussels.

Follow us on: www.hub.brussels





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## **3.2** LIFE SCIENCES PARTNERS

#### Agoria

Agoria is the Belgian federation for the technology industry. They pave the way for all technology-inspired companies in Belgium that increase our quality of life through the development and application of tech innovations. Agoria wants to use its unique position, specialist know-how and extensive international network to create the context to strengthen the dream marriage between entrepreneurial drive and technology.

BluePoint Brussels – Bd. A. Reyers 80 – 1030 Brussels Call us: +32.2.706.80.02 Mail us: info@agoria.be Contact person: Carole ABSIL - Head Healthcare Technology; carole.absil@agoria.be

Follow us on: www.agoria.be

#### beMedTech

beMedTech is the Belgian federation of the medical technology industry and has more than 200 affiliated companies. Its members are manufacturers and/or distributors and are divided into five product segments: in-vitro diagnostics (IVD), consumables, implants, medical investment goods (MES) and Extra Muros solutions, including Digital Health. Together they represent over 500,000 technologies for an annual turnover of €2.4 billion not including export and they account for approximately 16.820 FTEs in Belgium. beMedTech estimates that the total medical device industry in Belgium has a turnover of about €3.5 billion and employs about 20,000 people.

beMedTech has a clear vision: by uniting the Belgian manufacturers and distributors of medical devices the association strives to emphasize their positive role for the healthcare sector. The beMedTech members invest in innovative medical technologies and in the training and education of health professionals. Together with its members, the federation contributes in a responsible manner, both to the quality of patient care and to the sustainability of the healthcare system.

Follow us on: www.bemedtech.be



-AGORIA

#### bio.be/essenscia

bio.be/essenscia is the Belgian federation of companies active in biotechnology and life sciences. It is part of essenscia, the Belgian federation for chemistry and life sciences industries.

Acting out its advocacy role, bio.be/essenscia represents the interests of its members with regard to legislation and standards at various policy levels (Belgium, EU, OECD). Playing its



communication role, the federation promotes its members' excellence in delivering innovative products, services and technologies for a better life both today and in future times.

The mission of bio.be/essenscia is to foster a supportive environment and a stable legal framework in line with the trend for innovation, an essential factor for economic sustainability and employment growth in the sector as a whole and its capability to address major societal challenges.

bio.be/essenscia can rely on effective synergies within the main essenscia group, with its regional branches *Essenscia Wallonia*, *Essenscia Brussels* and *Essenscia Vlaanderen*, as well as with its product-specific subbranches. It has also privileged access to the expertise of a vast network of partners.

A point in case is that bio.be/essenscia acts as the sole Belgian national association contact point to EuropaBio, the European association for bio industries. Moreover, it is a member of ICBA, the International Council of Biotechnology Associations, jointly created by BIO and EuropaBio.

Follow us on: www.essenscia.be

#### **BioWin**

Created in 2006, BioWin, the Health Cluster of Wallonia (Belgium) is the regional reference player for all the stakeholders (companies, research centres and universities) involved in innovative (regional and international) R&D projects and/or skills development in the fields of health and medical technologies.

The biotech and medtech sector in Wallonia, a unique ecosystem in Europe!

BioWin brings together 250 members including 9 global leaders (GSK, IBA, IBM, IRE, Janssen Pharmaceutica, Kaneka-Eurogentec UCB, XPE Pharma & Science and Zoetis), 196 innovative SMEs, 5 private research centres, and 5 universities (UCLouvain, ULB, ULiège, UMons & UNamur).

BioWin members are active in the following key technological areas:

- (Bio)pharmacy
- Cell therapy
- Radiation apllied to health.
- Biomanufacturing
- Medical devices and diagnostics in vitro
- Data science

The cluster offers 4 types of activities to support businesses: support for the initiation and development of collaborative R&I projects, international business development, skills development and support for company growth.

The health sector in Wallonia: key facts & figures (2018)

- 20,000 hospital beds.
- European leader in clinical trial phase I.



- EUR 1.2 billion private R&D expenses.
- Favourable tax environment & R&D incentives.
- A unique logistic location at the very heart of Europe.

Moreover BioWin is Board member of the CEBR, Council of European Bio Regions, gathering all the big Clusters / BioRegions in Europe.

BIOMI

Follow us on: www.biowin.org

#### Catalisti

Catalisti is the Flemish innovation cluster for Chemistry and Plastics. It is supported as one of the six *spearhead clusters* within the innovation policy of the Flemish government. The mission of Catalisti is as follows: to achieve "a sustainable and competitive chemical & plastics converting industry in Flanders, achieved by an innovative power of world class R&D". The Catalisti ecosystem consists of large industrial companies, SME's and research institutes, along the broad chemical value chain. We believe collaboration in innovation will be key to face the challenges of the future, to stay competitive and to make the transition towards a truly sustainable branch of industry.

Therefore, we support the development of collaborative innovation projects among companies and between companies and research institutes.

The innovation agenda of the cluster is made up of the following 4 Innovation Programmes: *renewable chemicals, process intensification and optimisation, valorisation of side streams and advanced and sustainable products.* Within the Renewable Chemicals Programme, the use of different types of biomass as a resource for products is explored. These may be primary biomass coming from agriculture, forestry or aquaculture, but equally biomass side streams from grounds care or industrial activities. Both traditional staple crops like sugar beet, cereals and forestry products as well as new sources like insects and algae are being investigated.

All types of technologies that can contribute to the conversion of biomass to biobased products are supported, with an important role assigned to industrial biotechnology (e.g. fermentation as well as enzymatic catalysis).

Follow us on: www.catalisti.be

# CATALISTI

#### e-health.brussels

e-health.brussels is a platform unique in its kind in Europe where economic and public stakeholders focus alone or in partnerships some of their actions to the benefit of public health objectives. E-health.brussels has been launched in April 2016 and is supported by the Brussels regional government. The different members of e-health.brussels are :

- Brussels government via the cabinets in charge of economic and health competencies
- Abrumet, the organization in charge of the management of the Brussels Health Network for the safe and secured exchange of Electronic Medical Records. It gathers all Brussels hospitals and organisations representing general practitioners (FAMGB et BHAK).
- Agoria: the Belgian federation for the technology industry



- Gibbis: the employers' federation of the associative private sector of Brussels healthcare institutions
- Innoviris: Brussels regional agency for research and innovation support
- lifetech.brussels (hub.brussels): health cluster of the Brussels Capital Region
- PAQS: the Platform for Continuous Improvement of Quality of Care and Patient Safety (Plateforme pour l'Amélioration continue de la Qualité des soins et de la Sécurité des patients - PAQS ASBL) aims to promote, support and organise the development and implementation of initiatives of continuous quality of care and patient safety improvement in Brussels and Walloon healthcare institutions.
- Santhea: the employers' federation of healthcare institutions in Brussels and in the Walloon Region, including public and private sectors (non-commercial and nondenominational).

#### Objectives of e-health.brussels are:

- Identify, amongst public health objectives, the ones where innovation and new technologies can accelerate their achievement
- Prioritize actions
- Align needs and initiatives of different stakeholders
- Accelerate the availability of technological solutions and the secured sharing of health data to the benefit of patients and healthcare professionals in the Brussels Capital Region.

Follow us on: www.ehealth.brussels e-santé.brussels 🍛

#### flanders.bio

flanders.bio is a dynamic, member-driven organisation, currently boasting over 350 members both from Belgium and abroad. They assist their members in their value-creating efforts by organising networking events, training activities and partnering sessions, by supporting them on their international business development projects, providing them with customized services and building expertise.

Along with its members, flanders.bio is determined to stand out as the proud advocate of a reputable global-impact ecosystem in life sciences.

flanders.bio is supported by a number of strategic corporate and public partners, such as Flanders Investment & Trade, IQVIA, Janssen Pharmaceutica, KBC Securities, Modis, PMV. PwC, QbD, Select, VIB and the Flanders Innovation & Entrepreneurship Agency (VLAIO).

Follow us on: www.flanders.bio flanders.bio

#### Flanders Biobased Valley

Set up originally as Ghent Bio-Energy Valley at the initiative of Prof. Wim Soetaert in 2005, Flanders Biobased Valley (FBBV), grown from a PPP agreement among various stakeholders from academia, industry, regional, local and port authorities, currently promotes the development in Flanders of the biobased economy of the future. The main objective of this type of economy will consist in producing renewable biological resources and turning them into food, feed, and other biobased products like bioenergy, biomaterials and biochemicals (green chemistry).



FBBV does so by engaging in joint collaborative programmes and initiatives for technological innovation, in synergy creation between partners in the fields of R&D, structural policy development and logistics, as well as in a broad communication effort:

- technological innovation: building R&D expertise in the field of bio-energy and biobased products through coordination and facilitation of both national and international collaborative projects in co-operation with and on behalf of the industry;
- clustering, integration and customized services: identifying synergies for industrial partners, establishing novel ways of cooperation, clustering and industrial integration. A prime example of this integration effort is the *Bio Base Europe Pilot Plant*, the Ghentbased open innovation centre and one of the leading service providers for process development, scaling-up and custom manufacturing of biobased products.
- communication: informing and raising awareness among the public, industry, academia and government about the biobased economy, through a broad range of communication events (workshops, site visits, public debates, information campaigns,...).

Follow us on: www.fbbv.be

## FLANDERS BIOBASED VALLEY

#### **GIBBIS**

GIBBIS, the employers' federation of the associative private sector of healthcare institutions in Brussels, represents 48 member institutions spread over more than 50 sites in Brussels and covering the 19 communes of the Brussels Capital Region. The federation aims to be a reference partner for the political world, both at Brussels and at federal level, for the different stakeholders in the Brussels healthcare sector.

GIBBIS's mission is to defend the values of the associative private sector of healthcare in Brussels: the quality of care, the empowerment of the various actors in healthcare, the independence of management and the allocation of resources in healthcare institutions, the patient's freedom of choice, therapeutic freedom and equal access to care.

To adapt the sector to change, GIBBIS is convinced of the importance of innovation. Among other things, GIBBIS supports the need for e-health, an essential issue to enable efficient cooperation among healthcare providers. The sector must be able to invest in innovative projects with a high return on investment, such as digitisation of information.

GIBBIS strives to facilitate the sector's use of new technologies, in particular by informing its members and raising their awareness of its members about the importance of innovation and by enhancing cooperation with the various Brussels stakeholders, in particular through its participation in the e-health.brussels platform.

Follow us on: www.gibbis.be



#### GreenWin

GreenWin is the Walloon innovation cluster dedicated to the development of R&D partnerships (open innovation) and funding of ambitious industrial innovation projects in 3 business sectors:

chemistry, construction materials and environmental technologies. Those sectors represent



in Wallonia 85,000 direct jobs (26% from industrial employment) and 160,000 indirect jobs,  $\in$ 1.6 billion in R&D expenditure (60% of expenditure on private R&D) and  $\in$ 15 billion in exports (36% of Walloon exports).

GreenWin focuses on 9 strategic innovation areas selected for their potential to meet both the societal challenges of climate change and the deployement of a performing Walloon economy: green chemistry,  $CO_2$  transformation, biotechnologies, sustainable materials, energy storage and efficiency, building systems, recycling, soil and sediment, wastewater and sludge, air and sediments. Biotechnologies and life sciences provide key technologies to develop cutting edge innovations in GreenWin's projects related to i.e. water sanitation, soil remediation, landfill mining, or procecess intensification in chemical industries and biobased chemistry.

With nearly 200 members including over 150 corporates, GreenWin has certified 42 projects for a budget of &110+M.

GreenWin has coordinated 2 European projects and is a partner in 2 others.

GreenWin has launched 2 technological platforms (PEPIT, dedicated to the circularity of plastics and Buil4Wall) and is a member of 5 international innovation networks. It has also concluded 4 international peer-to-peer partnerships (800 contacts of its international network) and an interregional one with Flanders and Brussels.

Thanks to its activities, GreenWin finds itself at the heart of a network of businesses with a job growth rate of 20% and an added value growth rate of 40%.

Follow us on: www.greenwin.be



#### Innoviris

Innoviris is the Brussels regional agency for research and innovation support. As such, Innoviris provides funding to companies, research centres and non-profit organisations for research and innovation projects with added value for Brussels (response to societal challenges, job creation, economic development, etc.).

Projects can come directly from these three types of actors or be a response to calls for projects, thematic or not, organised by Innoviris. The objective of this regional support is to alleviate the risk taken by researchers and entrepreneurs.

Innoviris' commitments in the platform e-Health.brussels:

- Inform potential beneficiaries of existing funding formulas
- Evaluate funding opportunities for research and innovation projects developed by companies, research centres and/or non-profit organisations as part of the e-Health. brussels dynamic
- Enrich the platform with its knowledge in terms of innovative e-health projects (strategic e-health platform in 2013, European projects, spin-offs,...).

Follow us on: www.innoviris.brussels



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#### Imec

As a pioneer in nanoelectronics, imec is bringing the power of chip technology to life sciences. They combine extensive chip manufacturing facilities and bio-lab infrastructure with worldrenowned expertise in chip technology, MEMS, bio-electronics, sensors, photonics, imagers, microfluidics and biosciences.

They are the ideal development and manufacturing partner for your custom smart biochip solutions, from early R&D, design and prototyping to volume manufacturing.

Follow us on: www.imec-int.com



#### lifetech.brussels

lifetech.brussels is the health cluster of the Brussels Capital Region (BCR). It gathers 150 members (start-ups, healthcare professionals, academics, experts) and is part of hub. brussels, the one-stop-shop for entrepreneurs in the Brussels Capital Region. The vision of lifetech.brussels is to accelerate the availability of innovative solutions for patients and healthcare professionals, in order to contribute to the patient empowerment, the continuity of care, the personalized medicine and to help tackle challenges raised by the ageing population and fragile patients.

Main missions:

- Stimulating innovation and entrepreneurship in the fields of digital health and medical devices.
- Developing synergies between the different players of the sector in the BCR, by initiating joint projects and events.
- Promoting R&D activities and clinical competencies of Brussels' institutions.

Services:

• Cluster animation: organizing seminars and international missions; making sure that all opportunities and relevant information are transmitted to its members via a platform and a newsletter, whilst promoting members' activities.

Individualized support: offering an ad-hoc support to innovative company/project members. It does include:

- Prototyping services via the MedTech Atelier ®, a collaboration between lifetech. brussels, BLSI and Covartim
- Understanding the EU Medical Device Regulation and introducing the company to a pool of experts for personalized support
- Identifying key opinion leaders in the field of activity of the supported company
- Helping the company to prepare its investment file and introducing the entrepreneur to public & private investment funds specialized in MedTech sector
- Introducing the entrepreneur to IP/patent attorneys to check the strengths of your IP in Europe

Collective support: The objective of the MedTech Accelerator ® program is to accelerate the market access and deployment of disruptive MedTech (including digital health) innovations. It does take place once a year from February to June. The program is made of:

• 60+ hours collective coaching



- 20 hours individual coaching
- 3 visits
- 15+ testimonials
- 5 networking events
- 2 Pitch nights with jury panels
- 1 Medtech Accelerator® Award

Since 2016, 35+ projects/startups have benefited from the MedTech Accelerator®. Some Belgian success stories followed it such as MoveUp Care, Spentys, Kaspard, Axiles Bionics, Lys Medical,...

Manager lifetech.brussels: Azèle Mathieu; amathieu@hub.brussels

#### Follow us on: www.lifetechbrussels.com & www.medtech-accelerator.eu

#### MecaTech Cluster

The MecaTech Cluster, engine of innovation in mechanical engineering

With close to 290 industrial and academic entities involved in joint mechanical engineering projects, the MecaTech cluster is generating unprecedented dynamism. Since 2007, 113 projects were approved for a total investment of €337 million.

MecaTech Cluster's area of activity is mechanical engineering, which is undergoing a major mutation with the explosion of Digital and Industry 4.0.

Mechanical engineering is a transverse field that has applications in most industries, ranging from consumer products (automotive, household appliances, etc.) to healthcare, with machines and industrial processes in between. It is a field of knowledge that encompasses the entire product/equipment life cycle, from design to manufacturing, maintenance, and finally recycling.

Over the years, expertise in the sector has become concentrated on six priority markets (Healthcare & Well-being, Construction, Energy & Environment, Mobility & Transport, Defence and Security and Industry) for which the MecaTech Cluster companies provide products, services, and industrial machinery.

The MecaTech Cluster wants to boost the development of mechanical engineering firms inside high-growth-potential markets by:

- developing their projects through innovative collaborative projects;
- increasing their competitiveness by taking up industry 4.0 technologies and optimizing their material and energy resources;
- acquiring skills that are useful for developing and implementing these advanced technologies;
- internationalizing their activities by hooking them up to complementary international ecosystems.

MecaTech Cluster's mission is to support corporate transformation to create the jobs and business of the future by engineering and carrying out innovative projects with international ambitions.

Follow us on: www.polemecatech.be







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#### MedTech Wallonia

MedTech Wallonia : Boosting the Walloon MedTech Ecosystem

#### Strategy:

MedTech Wallonia is an initiative of three non-profit organizations (BioWin, WSL and MecaTech Cluster) of the Walloon region. This initiative has the ambition to be the relevant impulse for MedTech companies in Wallonia. Together with our regional and national partners, we want to create the best field for efficient and meaningful innovations for the MedTech sector.

MedTech Wallonia is the entry point for medical device and digital health projects in Wallonia. They are making the best of the expertise, the infrastructure and the ecosystem available in the region to bring up new opportunities.

#### Mission :

Their mission is to give a clear perspective of relevant support for MedTech companies and maximize available resources in their territory. They focus on strengthening the whole value chain of the MedTech landscape. Furthermore, they aim to promote the Walloon MedTech industry at a national and international level in order to improve global MedTech activities and create new jobs in Wallonia.

#### Brand:

Identity of the MedTech ambition of Wallonia, which brings together the actors and public and private initiatives launched within the initiative of BioWin, WSL and MecaTech Cluster.

#### Platform:

Showcase of the MedTech sector in Wallonia, which offers reference content and provides services to stakeholders involved in the implementation of the strategy.

Follow us on: www.medtech-wallonia.be



#### PAQS

Created late of 2013, the Platform for Continuous Improvement of Quality of Care and Patient Safety (Plateforme pour l'Amélioration continue de la Qualité des soins et de la Sécurité des patients – PAQS ASBL) aims to promote, support and organise the development and implementation of initiatives of continuous quality of care and patient safety improvement in Brussels and Walloon healthcare institutions.

PAQS's vision is to promote a healthcare sector aiming for excellence in its practices and structural function through the standardization of continuous improvement practices. To do so, PAQS:

positions itself as a Centre for expertise and innovation recognised for its know-how
on quality and patient safety in the healthcare sector, through the development of
knowledge along with general and specific competencies and the widely spread of
them to the healthcare sector,



BELGIAN LIFE SCIENCES

- develops global, consistent and effective services attuned to the sector's needs, based on three principles: support, education and resources;
- positions itself as a privileged partner to private bodies and the authorities or regional, community, federal and international public organisations regarding the area of quality and patient safety in the healthcare sector;
- develops and maintains a network bringing together stakeholders active in the field of quality and patient safety in healthcare, and works to link the various existing (and future) initiatives.

Follow us on: www.paqs.be



#### pharma.be

pharma.be, the General Association of the Innovative Medicines Industry, brings together more than 130 innovative (bio)pharmaceutical companies active in Belgium. These companies focus on research and development of new medicinal products for both human and veterinary use and employ more than 35,700 employees in Belgium.

#### Partner in health and innovation

As a committed partner of physicians, pharmacists, hospitals, authorities and other health partners, pharma.be's mission is to promote the best healthcare by promoting therapeutic innovation in the field of medicinal products for human use. Its top priority is therefore to allow patients the fastest possible access to the most recent treatments from research and development.

Follow us on: www.pharma.be

#### VIB

VIB is an excellence-based entrepreneurial research institute in life sciences located in Flanders. VIB's basic research leads to new and innovative insights into normal and pathological life processes. It unites the expertise of all its collaborators and research groups in a single *one-stop* institute, firmly based on its close partnership with 5 Flemish universities (Ghent University, KU Leuven, University of Antwerp, Vrije Universiteit Brussel and Hasselt University) and supported by a solid funding programme from the Flemish government.

VIB has an excellent track record on translating basic scientific results into pharmaceutical, agricultural and industrial applications. VIB's Innovation & Business team currently has a portfolio of 230 patent families. This team conducts about 120 partnering agreements with innovative companies each year. VIB is also firmly-rooted in a long-standing tradition of setting up start-up companies. Since its foundation in 1996, VIB has created 20 start-up companies, now employing over 875 people.

The link between basic research and valorisation has made VIB a catalyst for the ever-growing biotech hotspot in Flanders. In recent years, numerous biotech companies — both large and small — have settled down in the region, thanks to top-notch infrastructure set up and provided by VIB and the ready availability of new scientific talent from the VIB labs.





Follow us on: www.vib.be

#### VITO

VITO, the Flemish Institute for Technological Research, operates as an independent and neutral partner, at the interface between industry, academia and public authorities. VITO's Business Unit Separation and Conversion Technology focuses its research on sustainable chemistry and provides:

- a multi-disciplinary team of >100 high level experts;
- a wide range of lab- to pilot-scale infrastructure & equipment;
- fast and agile solutions, supported by early techno-economic assessments and decision frameworks;
- access to a broad network of expertise and funding opportunities;
- a strong patent portfolio in the core technology domains.

VITO partners with industry to increase process efficiency and sustainability, and to evaluate the potential of alternative non-fossil resources in new value chains. Renewable feedstocks of particular interest are lignin for production of aromatics, and lignocellulosic feedstock in general,  $CO_2$  and other gaseous substrates, as well as algae and insects. VITO is a founding member of Biorizon, a shared research centre, aimed at enabling commercial production of bioaromatics by 2025.

VITO's industrial innovation targets the transformation of classical thermo(chemical) conversion processes by mild catalytic processes, and the shift to less energy-consuming separation technologies.

More specifically, the design of novel process concepts as well as the improvement of existing ones, by combining VITO's core technology domains differentiates them from others:

- separation: membrane technology, extraction, electroseparation
- mild catalytic conversion: electrochemistry, biocatalysis
- integrated separation and conversion for process intensification.

Follow us on: www.vito.be



#### Wagralim

At the heart of Europe in the Walloon Region, the agri-food cluster Wagralim was created through collaboration between companies, universities, research centers and training centers. Their goal: create value, improve performance, and position itself on the international market, with innovation as common point.

Indeed, by focusing on collaboration, Wagralim implements innovative projects. Developing products with high added value, whose qualities meet the needs of customers and the demands of growing markets are essential.

Wagralim is a privileged partner of competitiveness: it provides access to a network of European industrial and scientific excellence. Its expertise in international collaboration is a powerful tool to position itself on the global market.



Labelled and supported by the Walloon Regional authorities as one of the 6 "competitiveness clusters", Wagralim has 3 strategic axes:

- 1) Promote and support businesses to develop products or ingredients beneficial to better health and nutrition. Specializing in various areas such as polyphenols and gut health, we provide scientific expertise and advanced performance.
- 2) Improve the efficiency and transparency of the sector, in order to provide high-quality and safe products to the market.
- 3) Provide new, innovative concepts and technologies to increase sustainability.

Nowadays, the Wagralim cluster represents:

- 200 companies & partners
- 50 labelled partnership projects
- EUR 8.6 billion turnover
- More than 60 new products and processes developed
- More than 1,100 jobs created.

To strengthen their position on the world market, Wagralim hosts foreign delegations, organizes trade and technological missions and finally, develops joint research project with foreign partners.



Follow us on: www.wagralim.be



# SUCCESS STORIES IN BELGIUM



INTERVIEW WITH Olivier Legrain, CEO of IBA

## MEDICAL DIAGNOSTICS

COMPANY

## lon Beam Applications (IBA)

REGION

Wallonia

Founded: 1986

Location: Louvain-la-Neuve

Number of employees: 1,400

Turnover (2018): 250 million EUR

Growth (2018): 10%

Investments (2018): 30 million EUR a year in R&D

Start of exports: 1986

Share of exports in turnover: 95%

Website: www.iba-worldwide.com





Founded as a spin-off of the Catholic University of Louvain in 1986, IBA (Ion Beam Applications S.A.) is a global medical technology company focused on providing integrated and innovative solutions for the diagnosis and treatment of cancer. The company is the worldwide technology leader in the field of proton therapy, which is considered the most advanced form of radiation therapy available today.

"IBA's proton therapy solutions are flexible and adaptable, allowing customers to choose from universal full-scale proton therapy centres as well as compact, single room solutions. In addition, IBA also has a radiation dosimetry business and develops particle accelerators for the medical world and industry," states Olivier Legrain, CEO of IBA.

### BETTER TREATMENT THROUGH PROTON THERAPY

"Proton therapy is an advanced form of radiation therapy that uses a highenergy proton beam for cancer treatment. In IBA-equipped proton therapy centres, cyclotrons accelerate protons to an extremely high speed, generating a controlled beam which is delivered through a nozzle to the targeted tumour," explains Legrain.

"In contrast to conventional photonbased radiation therapy, the proton beam will deliver most of its destructive energy within a small range inside the tumour, known as the Bragg peak, thereby reducing adverse effects to adjacent healthy tissues. And this is where the real advantage of proton therapy lies compared to other forms of radiation treatment: in the minimized overall exposure of healthy tissues," clarifies Legrain.

"Today, proton therapy is used to treat an increased number of cancers and is particularly appropriate in eye and brain cancers, head and neck cancers, prostate, liver, lung, breast, and paediatric cancers, as well as other tumours where treatment options are limited and conventional radiotherapy using photon beam presents unacceptable risks to patients," he adds.

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"The list of proton therapy benefits is quite long," Legrain asserts. "Proton therapy delivers a more efficient treatment due to the increased dose deposited inside the tumor, minimizes radiation exposure of healthy tissues, potentially reduces the risk of secondary cancers, potentially decreases the risk of side effects and, most importantly, may improve the quality of life for patients during and after treatment," affirms Legrain.

"Today, proton therapy represents less than 1% of radiotherapy treatments," Legrain notes regrettably. "However, based on experts' reports and the experience of large academic centres, at least 20% of patients would benefit from proton therapy. Our mission is therefore clear: make proton therapy accessible to more patients," concludes Legrain.

## WORLD LEADER

"We believe we are still in the early days of the full potential of proton therapy treatments. As a matter of fact, proton therapy technology could completely disrupt the way radiation therapy treatments occur," Legrain confidently affirms.

"Today, 190,000 patients have been treated using proton therapy worldwide and, among these patients, 56% have been treated using IBA systems, which is more than its competitors total number of installations combined," Legrain proudly declares. In the future, an increasing number of oncology patients will have access to this cutting-edge cancer treatment, of which the range of indications is expanding. As a matter of fact, "the number of patients treated per year with proton therapy could increase from 16,200 in 2015 to 300,000 in



"Today, 190,000 patients have been treated using proton therapy worldwide and, among these patients, 56% have been treated using IBA systems."

2030," asserts Legrain. "With more than 50% of proton therapy patients currently being treated using IBA systems, our solutions will largely contribute to this increase," he adds.

From the beginning, thanks to its technological innovativeness, the visibility of IBA's full range of products abroad was high. In fact, whilst the company is based in Belgium (Louvainla-Neuve, where the accelerators are produced), IBA's presence is now global with offices in the USA, China, Russia, and Germany. "Our export strategy has always been to position ourselves technologically rather than geographically. Because the proton therapy accelerator market is a niche market that is still emerging, we can say that our market is the world," affirms Legrain. This way, more than 50

IBA-powered proton therapy centres have already been sold worldwide.

## BREAKTHROUGHS

"Although IBA has already established contacts around the world, our future growth will inevitably be linked to Asia, and more specifically China," continues Legrain. "In this context, we value the benefit of Princely Belgian Economic Missions that give us the necessary leverage to seal a deal in this region. Continue to develop our activity in China is IBA's top strategic priority for the upcoming years," asserts Legrain.

In order to accelerate the adoption of proton therapy, IBA will remain focused on future technological breakthroughs in the proton therapy field. "New treatment techniques such as FLASH have the potential to dramatically change the landscape of radiotherapy and patient cancer care by enhancing the therapeutic window with a fast and powerful treatment that delivers a high dose of radiation at an ultra-high dose rate. In order to maintain our technological advance on our competitors and our position as a global proton therapy leader, we continuously develop innovative solutions while pushing the limits of technology," Legrain concludes.





INTERVIEW WITH Laurent Hermoye, Founder and CEO

## MEDICAL DIAGNOSTICS

COMPANY

REGION

Brussels

Founded: 2005

Location: Brussels

Number of employees: 2

Start of exports: 2006

#### Share of exports in turnover: 75%

Website: www.imagilys.com



The two-man company Imagilys has developed a brain imaging software suite, BrainMagix, "to help neuroradiologist, neurologist, and neurosurgeons treat severe neurological disorders," explains Dr. Laurent Hermoye, founder and CEO of Imagilys.

The program developed by Imagilys is mainly targeted at brain tumours, stroke, Alzheimer's disease, and multiple sclerosis. "BrainMagix has already helped to treat more than 2,000 patients," estimates Laurent Hermoye.

The software program is not only used for diagnosis and treatment planning purposes. It can also help to draw up a patient's follow-up care plan and to perform clinical trials. "The software comes in handy to test whether a drug to fight Alzheimer's disease slows down brain atrophy or not," adds Dr. Hermoye.

Although it is a software program, BrainMagix is considered as a medical

"BrainMagix has already helped to treat more than 2,000 patients."

device by the Medical Device Directive. Imagilys is ISO 13485-certified as a medical device manufacturer and BrainMagix is CE-marked. As part of the requirements for the CE marking, Imagilys also provides training to the radiologists and the physicians who will use the software.

### MAPPING THE BRAIN

BrainMagix combines the most advanced brain imaging techniques. It can process up to 10,000 MRI, CT, or PET images, with state-of-the-art algorithms. "Radiologists do not only lack the time to examine these 10,000 images individually, but they also would not be able to detect the subtle changes in such a high number of images. This is the main reason why they need our tools".





## **BELGIAN LIFE SCIENCES**

Furthermore, by comprehensively mapping the brain, BrainMagix makes it possible for neuroradiologists to locate functional areas of the brain. In fact, "beyond the images of basic MRI scans, the program can also detect language or motor areas," explains Laurent Hermoye. "These areas appear as colorful blobs on the image visualized in BrainMagix."

In other words, BrainMagix not only makes it possible to perform more accurate analyses of the brain but also helps neurosurgeons avoid damaging critical brain areas when removing a brain tumour. This helps minimize post-operative deficit, such as impaired vision, language disorders, or physical disability.

"The uniqueness of BrainMagix lies in the combination of multiple brain imaging techniques and in its fast and user-friendly workflow," explains Dr. Hermoye. "BrainMagix is one of the more comprehensive neuroimaging software solutions on the market".

#### A DELIBERATE CHOICE TO STAY SMALL...

"Unlike our competitors, we will always focus on the brain, and on the brain only," emphasises Laurent Hermoye. In this way, by addressing a very specific and specialized niche market, Imagilys has decided to stay small, without taking venture capital or calling on private investors. "We made the strategic choice to self-finance the company through the revenue of sales, with very little investment".

## ...WHILE CONQUERING THE WORLD

Although the CEO recognizes Belgium's undeniable assets in the sector and its "high density of state-



of-the-art hospitals, which provide excellent standards of care," the market Imagilys is addressing goes far beyond the Belgian borders. One could say that, like Belgium, Imagilys is modest in size but is not afraid to conquer the world, thanks to its expertise.

"Export is both an opportunity and a necessity, as this is a niche market," explains Laurent Hermoye. Hence, to date, the software has been sold on a yearly subscription-based pricing model to more than 50 hospitals and medical companies around the world (Europe, USA, Middle East, Asia).

"The uniqueness of BrainMagix lies in the combination of multiple brain imaging techniques and in its fast and user-friendly workflow." Originally, Imagilys started its export activity from an outbound marketing perspective to reach its first customers abroad. Today, it has established an inbound marketing strategy based on a global visibility (website, social media, seminars, etc.) and on the creation of top-notch educational content.

"Our main priority is to reach cruising altitude. We estimate that we will achieve this in about two years," explains Hermoye. "We have to direct our focus on existing contracts with global players, while progressively increasing our customer base and continuously improving our offer."

"Although we have a much better understanding of the brain than we did one century ago, thanks to all the recent imaging techniques, we are still very far from knowing everything and even further from understanding and curing all brain diseases," concludes Laurent Hermoye. BrainMagix will undoubtedly play a role in solving this brain teaser.





INTERVIEW WITH
Philippe Kaplan, Founder and CEO

#### MEDICAL DIAGNOSTICS

COMPANY

Kaspard

REGION

Brussels

Founded: 2017

Location: Brussels

Number of employees: 11

Start of exports: 2019

Website: www.kaspard.com

KASPARD

A SAFER BED EXIT



The Brussels-based start-up company Kaspard provides an eponymous, comprehensive fall detection solution to medical institutions, primarily nursing homes and hospitals, while taking into consideration each resident's risk profile and mobility patterns.

"Kaspard provides real-time information in medical institutions, day and night, in case of patient falls or prolonged bed exits," explains Philippe Kaplan, Founder and CEO of Kaspard. Falls are the leading cause of accidental death for the elderly. "One in two people over 75 years old falls on a yearly basis. In medical institutions, the average is even higher, with at least two falls per year," states Kaplan. "Needless to say, the longer the patient remains on the ground, the worse the consequences of the fall," continues Kaplan. Kaspard's solution responds to a triple challenge.

## A TRIPLE CHALLENGE

The first challenge the company addresses is that of decreasing both the consequences and the risk of falling, and thus playing not only an informative "The first challenge the company addresses is that of decreasing both the consequences and the risk of falling, and thus playing not only an informative but also a preventive role."

but also a preventive role. This is the most perceptible and fundamental challenge tackled by Kaspard. "When we started, we thought Kaspard would merely reduce the consequences of a patient's fall, thanks to the provision of real-time mobility information. However, based on university studies, we observed that falls were three times less common in Kaspard-equipped rooms," explains Kaplan.

This has a dual explanation. Firstly, "when people get out of bed, they feel good and walk around their rooms, but after a while, they get tired and fall." By intervening fifteen minutes after a bed

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exit but before a fall, Kaspard significantly reduces the risk of falling. Secondly, residing in a Kaspardequipped room will "increase patients' peace of mind and trust in their movements, because they know nurses will intervene within a certain amount of time when necessary."

The second challenge that Kaspard deals with is that of reducing the psychological consequences of a fall, by promoting a patient's autonomy and mobility. "After a first fall, a certain fear of recurrence can be created in the patient's mind, which limits their physical activity," explains Kaplan. "Older people need to maintain autonomy and mobility to prevent early deterioration of their health Encouraging movement without the fear of falling is a priority," Kaplan affirms.

The third and final challenge tackled by the Brussels-based company is to provide nursing staff with continuous information on potentially risky situations, by triggering real-time alerts. Moreover, this continuous flow of information allows Kaspard to collect data, produce activity reports and ultimately establish fall patterns, in order to become predictive.

"The next step for Kaspard in the future would be to add a string to its bow and play a predictive role, by knowing the patterns that lead to a fall and anticipating its occurrence," Kaplan believes.

### COMBINING HARDWARE AND SOFTWARE

The uniqueness of the Kaspard device lies in its composition: it combines hardware and software. "On one side, the hardware device, a sensor, is placed on the ceiling in front of a patient's bed. "The next step for Kaspard would be to add a string to its bow and play a predictive role, by knowing the patterns that lead to a fall and anticipating its occurrence."

It will detect the resident's risk-related movements while being inconspicuous and contactless in the sense that the patient does not have to wear a wristband," explains Kaplan.

"On the other side, the Kaspard detection technology, the software, is embodied within the hardware device. This means the collected information is processed locally without recording any video footage of the patient or placing information on the cloud," adds Kaplan. "Kaspard is thus completely nonintrusive and respects the patient's privacy." The collected real-time information is subsequently sent to nurses on Android smartphones, so that they can see when a patient falls, gets out of bed, or does not return to their bed. Philippe Kaplan also stresses that the duration of bed exits is personalized according to a patient's profile and is set up by the medical personnel.

## KASPARD @ HOME

Philippe Kaplan is well aware that some elderly people who do not want to

reside in a medical institution might prefer to have the Kaspard device at home.

"We can definitely contribute to the concept of letting elderly people keep living in their own homes for as long as possible," stresses Kaplan. "We are striving to bring our product to people who want to remain at home, and we hope to achieve this within two years."

"The technology is already perfectly suitable for domestic use, but we need to have a better understanding of how people want to integrate our solution at home. A crucial question we will have to answer is: who will play the role of the nurse and check on a person's situation?" Kaplan points out.

## EU EXPANSION STRATEGY

In 2018, the Brussels-based start-up company completed its pilot phase with six medical institutions that recognized the benefits Kaspard offers. One year later, the company moved into the French market and became referenced with UGAP, a French central purchasing body.

"Today we are only responding to the needs of a small fraction of the market: medical institutions in Belgium and, more recently, in France. However, our ambition is to be present in Europe within a few years," Kaplan asserts. "We can definitely expand by reaching out to large French groups that have a presence in other EU countries like Germany and Spain," he concludes.





INTERVIEW WITH Nicolas Cauche, CEO and co-founder

### MEDICAL THERAPEUTICS

COMPANY

## Brussels Medical Device Center (BMDC)

REGION

Brussels

Founded: 2016

Location: Brussels

Number of employees: 3

Turnover (2018): 600.000 EUR

Growth (2018): 72%

R&D investments: close to 100%

Website: www.bmdc.eu





The Brussels Medical Device Center, BMDC, is a collaborative platform involving physicians and engineers. Although BMDC was founded in 2016, it started building its expertise at the Université Libre de Bruxelles going back to 2003. "We capture ideas and needs from physicians and transform them into innovative medical devices used in clinics," Nicolas Cauche, the CEO and co-founder explains.

In order to get a new medical device to the market as fast as possible, BMDC covers several critical development stages up to reaching the proof of attractiveness of the product. As soon as this is the case, the product is transferred to an external company. This can be an existing company, or one created by BMDC. This allows BMDC to remain almost exclusively focused on R&D.

As a result, BMDC is playing a double role: firstly, helping physicians and ultimately also patients by improving devices, and secondly, helping start-ups, Brussels companies or international companies with a presence in Brussels "We capture ideas and needs from physicians and transform them into innovative medical devices used in clinics."

to develop groundbreaking medical devices. "We can provide a device for clinical use in collaboration with those who may not already have the permission to do so because they don't have an ISO 13485 certification in place. We can also perform actions that are too capital intensive for startups," Nicolas Cauche explains.

The first capital intensive step in the long journey towards a finished product is building a prototype based on the physician's idea. "This is really important. Once the physician has the prototype in his hands, it is easier to provide input. Based on those prototypes, we can start elaborating and improving the idea." For this purpose, BMDC built a prototype lab, supported



by the Brussels-Capital Region through Innoviris. It comprises a 3D printer, components and equipment to assemble and test prototypes.

After brainstorming with the physician based on the prototype, the second step is to make a real design and start the development of the product. "We subcontract certain validation and verification operations, such as biocompatibility and sterilization However, we are able to testing. perform several other tests in our premises, such as those involving traction force and metrology after exposure or accelerated aging condition," Cauche says. "The latter will make sure that the mechanical properties remain the same after intensive usage over a certain period. We have all equipment to perform this test in a short period of time."

In parallel, BMDC creates documentation required for the clinical validation of the device. After review and authorisation of the competent authorities, a safety evaluation is carried out followed by a performance study which can lead to the CE certification. After the first proof of attractiveness, the entire project is transferred to a company. "We currently have three collaborative industrial projects and two company creation projects," Cauche declares.

Just like Nicolas Cauche, the two other co-founders of BMDC (Professor Jacques Devière, Key Opinion Leader in GI endoscopy at Erasme Hospital, and Alain Delchambre, Professor of Mechanical Engineering at ULB) have strong expertise in collaborative development of medical devices in endoscopy. As a result, most projects since BMDC began have been in this field. "We currently have 4 projects in the R&D stage, while one is in the clinical stage. Most are confidential,



"Our flexible mechanics can also be applied in other fields of medicine such as urology, pneumology or digestive surgery. We are willing to consider ideas from physicians in these fields to create new devices."

but we can confirm that one of the projects is an innovative device for the treatment of esophageal diverticulum," Nicolas Cauche affirms.

As a nonprofit organization, BMDC also aims to reinvest its profits to work on products where there is a need for the patient but where there is no market. "We are beginning to work on pancreatic necrosis projects. Sufferers of this disease need some tissue removed, which is very difficult with the devices that are currently on the market. We are developing a new device to improve the outcome," Cauche explains.

BMDC's clear expertise in endoscopy does not prevent the organization from being open to all fields of medicine. "Of course, we have strong technical capabilities in flexible mechanics, which is really good for endoscopy," says Nicolas Cauche, "but those flexible mechanics can also be applied in other fields of medicine such as urology, pneumology or digestive surgery. We are willing to consider ideas from physicians in these fields to create new devices."

According to the CEO, the Brussels-Capital Region is the perfect place for an organization like theirs. It has three academic hospitals and a lot of physicians who are able to conduct research. Additionally, Brussels has 5 engineering schools, and a specific MedTech Accelerator was started in 2016 as a Brussels initiative developed by lifetech.brussels.

"There are already medtech consulting companies and product companies emerging in Brussels. With hub. brussels, we would like to develop manufacturing capabilities, such as a clean room that will allow device assembly in the Brussels area. If we create companies based on products, we hope to attract even more service companies to help with regulatory affairs or reimbursement, for example, or to develop specific manufacturing techniques. All of this is part of BMDC's vision: to help establish a fast-growing medtech valley in Brussels."





INTERVIEW WITH Cedric Ververken, CEO

## MEDICAL THERAPEUTICS

COMPANY

## Confo Therapeutics

REGION

Flanders

Founded: 2015

Location: Ghent (HQ) and Brussels

Number of employees: 38

Investment: seed financing of 6.7 million EUR and Series A funding in 2019 of 30 million EUR

R&D investment: around 90%

Website: www.confotherapeutics.com





Confo Therapeutics is a biopharmaceutical company that is discovering, and in the future will be developing, therapeutics for medical use. "Antibodies are at the heart of our technology platform," Cedric Ververken, the CEO of the company stresses, "but these are primarily used as research tools that enable us to discover and develop small molecules, pills or syrups based on chemistry."

The fact that Confo Therapeutics is mixing antibodies expertise with chemistry makes the company interesting, and, according to the CEO, unique. The technology it is using stems from top science, through a high-profile collaboration between the VIB lab of Jan Steyaert at the Vrije Universiteit Brussel (VUB) and Stanford University with Brian Kobilka, who received the Nobel Prize in Chemistry in 2012.

Together with Jan Steyaert at VIB and VUB and by utilizing ConfoBodies<sup>™</sup> to stabilize GPCRs in the active state, the scientists were able to determine the structure of several active G-protein coupled receptors, or GPCRs. "These GPCRs are receptors on the cell surface, embedded in the membrane, and they give signals from outside to inside the cell, leading to a biological response," Ververken explains. GPCRs are a very

"We do not want to be a one trick pony and focus everything on one drug, but instead push forward a pipeline of drugs."

successful class of target proteins for the pharma industry. It is estimated that almost half of the drugs sold today have a mode of action through GPCRs.

"Steyaert thought that if you could use this technology to stabilize GPCRs for determining a structure, then maybe you could also use it for drug screening. The application of the Confo technology for screening, combined with the ability to determine active structures as demonstrated by the academics, was the basis for the creation of Confo Therapeutics."

## PLAYING TETRIS

This screening approach of Confo Therapeutics is very different from the conventional high throughput screening which is typically used in the pharma industry. Pharma companies have large compound libraries which contain candidate therapeutics, sometimes millions of compounds. These are



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tested in a biological assay and checked for a particular pharmacological effect, and positive hits can then be a starting point for a drug. But GPCRs have a particular shape, and you need to find molecules that bind into the pocket on the protein and produce the desired pharmacological effect, which is not easy.

"Sometimes you do a high-throughput screening and you don't find anything that impacts the GPCR. Think about a game of Tetris - pharma is playing with big, clunky Tetris blocks where you need to be lucky they fit in the pocket of interest. What we are doing instead is using fragments. These are not small molecules, but smaller pieces of small molecules. Because we're testing much smaller compounds, we always find one that fits into the pocket on the protein. So in contrast to HTS we are working with very small Tetris blocks, which are easier to fit into the pocket of interest."

The fact that these starting points are tiny also means they are weak. It is impossible to pick up the signal if you throw them onto a cell and look for a biological response. Confo Therapeutics uses its ConfoBody technology to push the receptor into the active form and thereby increase the ability of fragments to bind to the receptor. Once a fragment hit has been found, its chemists can then optimize this towards a potent molecule.

Confo's approach to drugging GPCRs is somewhat comparable to Heptares, a company based in the United Kingdom. "Just like us, they use fragments, but using a different technology to stabilize the GPCR and which appears to be more geared towards the discovery of antagonists, namely molecules that can switch off a particular response. The



Confo technology is particularly powerful for agonist discovery, namely finding compounds that switch the receptor on."

## VAST OPPORTUNITIES

The scientists at Confo Therapeutics are specialists in GPCRs, and given their wide biological impact the company can use this expertise in almost every possible disease area. "The fact that these GPCRs are relevant to almost all functions of the body is a great advantage for us. It will enable us to have a broad portfolio of projects in different disease areas," Ververken emphasizes.

"Strategically, what we need to do as a company is make sure that we have multiple shots on goal towards developing therapeutics. We do not want to be a one trick pony and focus everything on one drug, but instead push forward a pipeline of drugs. We have a platform that can deliver multiple products, so that is what we are going to do."

The Series A financing round in 2019, which totalled 30 million EUR, gives Confo Therapeutics a runway of about three years. At the end of this period, the CEO wants to take a drug into the clinic. The next financing round would then cover the clinical studies to get to the valuable data point of showing that the drug is active in patients. "This is typically the most important value inflection point," Ververken says.

#### INTERNATIONAL INTEREST

Belgium boasts numerous investment funds with a keen interest in life sciences. Some of these, such as Capricorn, Qbic, VIB, PMV and V-BIO



Ventures, have been investing in Confo Therapeutics from the beginning. Michigan University from the United States also participated in the seed round alongside the Belgian syndicate partners. With Fund+ joining in the Series A the local support for Confo Therapeutics grew even stronger. These funds provide great support for seed financing and Series A investments, but to meet its ambitious goals, Confo Therapeutics also has to attract international investors, Cedric Ververken explains.

In the latest round, it was backed by BioGeneration Ventures from the Netherlands, Wellington Partners from Germany and Perceptive Advisors from the United States. "It is important that we were able to attract high-quality international VCs. This shows that we are on track to building a great company and will open doors in future private and potentially public financing rounds," Ververken emphasizes.

According to Cedric Ververken, one of the reasons for international investors' interest in Belgian life science companies such as Confo Therapeutics is the country's ecosystem, which he claims is "the envy of other countries" and "which may even be unique in the world". Ververken observes that in addition to the Belgian flagship biotech companies like Ablynx, argenx and Galapagos, the life sciences research institute VIB is central to this ecosystem. "They are great at grouping together top scientific labs and monetizing inventions, either through licensing agreements or through spinning out companies, thereby creating jobs and leveraging VIB science for the benefit of society. They've built something great and we are proud to be part of the VIB network."

<sup>1</sup> ConfoBody/ConfoBodies is a Trademark of Confo Therapeutics NV





INTERVIEW WITH **Denis Bedoret,** *CEO* 

## MEDICAL THERAPEUTICS

COMPANY

MaSTherCell

REGION

Wallonia

Founded: 2011

Location: Gosselies

Number of employees: 190

Turnover (2018): 17.7 million EUR

Growth (2018): 58%

Start of exports: 2013

Share of exports in turnover: over 90%

Website: www.masthercell.com





Founded in 2011 by a group of science and industry experts, MaSTherCell (Manufacturing Synergies for Therapeutic Cells) is a cell and gene therapy-dedicated Contract Development and Manufacturing Organization (CDMO) providing development process/assay and manufacturing services to the cell therapy community, mainly to private companies active in this field.

"As a leading CDMO, MaSTherCell is working hard to address the lack of commercial manufacturing capacity, especially in Europe," explains Denis Bedoret, CEO of MaSTherCell SA and President of MaSTherCell Global. "Our aim is to crystallize MaSTherCell's position as the ultimate cell therapy manufacturing partner for leading

"MaSTherCell offers a long list of key competitive advantages to both its customers and its partners." biotech companies seeking fast and cost-effective development of their product to get it to the market," states Bedoret.

### MANUFACTURING AND PROCESS/ ASSAY DEVELOPMENT MISSION

"At MaSTherCell, we believe the best way to serve our customers is to combine scientific expertise with business and operational acumen, to provide an unequalled process development and manufacturing service in the cell therapy field," Denis Bedoret says. "We assist clients with technology selection, business modelling, GMP (Good Manufacturing Practice). process development, quality management and assay development, to help them fulfil their objective of providing sustainable and affordable therapies to their patients."

"MaSTherCell offers a long list of key competitive advantages to both its customers and its partners," states Bedoret. "First, our approach is



custom-made and tailored to the specific requirements of our clients, and designed to ensure short lead times and competitive costs in getting products to the market. Second, drawing on in-house expertise stemming from both academic and industry backgrounds, our highly flexible staff structure has the ideal combination of scientific and marketoriented disciplines. Combining manufacturing and process development services also allows us to be positioned very early in the development of a product and to provide comprehensive support to our cell therapy customers. Third, our advanced Project Management Programme allows us to offer a centrally managed service that covers every step of the process 'from bench to market'," explains Bedoret.

#### FUTURE OBJECTIVES AND EXPANSION

Bedoret anticipates an uptick in commercial manufacturing stemming from a flurry of R&D activity around cell and gene therapies, with CDMOs standing to win new business. "Thanks to our customer-driven approach, our expertise in cell therapy and our location in the heart of Europe, we are ideally positioned for growth in this rapidly-evolving niche market," affirms Denis Bedoret. "Moreover, MaSTherCell places itself among the pioneers in this field and certainly has the opportunity to shape the market and write history," he continues.

This growth recently became apparent in March 2019, when MaSTherCell announced it had signed a lease agreement for a 5,700m<sup>2</sup> facility in Belgium. The new facility will become a state-of-the-art manufacturing and production site designed for latestage and commercially approved cell



"With this new site, we aim to be the first CDMO in Europe to have a dedicated area for large-scale commercial manufacturing."

and gene therapy products. It is expected to be operational in early 2021. "With this new site, we aim to be the first CDMO in Europe to have a dedicated area for large-scale commercial manufacturing," states Denis Bedoret. "We are only at the beginning of a long journey and now that the efficiency of products has been proven, doors will open for the commercialization and manufacturing of these products."

MaSTherCell is present not only in Europe (Gosselies, Belgium) with two plants, but also in the US (Houston, Texas). "The idea is to duplicate the activity of the Belgium-based company in other continents," clarifies Bedoret.

MaSTherCell's collaboration with Asian partners became public in March 2019, on the occasion of the Belgian state visit to the Republic of Korea, when it signed a 3-year collaboration contract with Kangstem Biotech, a biotechnology company specializing in developing cell therapies using mesenchymal stem cells derived from human umbilical cord blood. To highlight the importance of this collaboration for both companies, this contract was signed during an official ceremony in the presence of the King of Belgium and a delegation of industrial partners.

"With our new Asian partner, we will perform a technology transfer of FURESTEM-AD's process and we will manufacture FURESTEM-AD for Kangstem's European clinical trial. This partnership offers hope to patients suffering from chronic and severe atopic dermatitis. Ultimately, what we are most proud of is helping our customers to find a life-saving drug," Bedoret concludes.





INTERVIEW WITH
Shelley Margetson, CEO

## MEDICAL THERAPEUTICS

COMPANY



REGION

Flanders

Founded: 2016

Location: Beerse

Number of employees: 9

Investment: 14 million EUR to date, currently on the road for Series B investments

Website: www.octimet.com



OCTIMET is a start-up biotech company focusing on the fight against cancer, currently with a focus on lung cancer by targeted therapy. It is currently in the process of developing its lead compound, OMO-1, which has a strong pre-clinical and healthy volunteer data package.

The OMO-1 compound was discovered within Janssen Pharmaceutica in Beerse by Tim Perera, the current Chief Scientific Officer of OCTIMET. "Tim was very passionate about the potential of this compound, but for strategic reasons, Janssen did not pursue the development itself. They therefore facilitated him to set up a new company and made sure that this could be located within the Janssen J&J site in Belgium at JLABS@BE", explains Shelley Margetson, CEO of OCTIMET.

The lead compound of OCTIMET is a potent, highly selective MET kinase

"If your own compound doesn't generate many tolerability problems itself, it is much easier to team it up with other compounds. Therefore, we see the true value of the company in combining OMO-1 with other cancer treatments."

and OCT2 inhibitor. Physiologically, MET pathways play a key role in vertebrate embryogenesis, formation of the placenta, liver and skeletal muscle as well as liver regeneration, wound healing and so on. But the MET oncogene activated signalling pathway is known to be hyper-activated in identifiable subsets of a range of





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major cancer types. The MET receptor has recently been demonstrated to be a functional marker of cancer cells responsible for the development of resistance to radiotherapy, chemotherapy and targeted anti-cancer agents.

"Therefore, you want to inhibit the activation of the MET pathways when cancer strikes. However, this should only be done for the cancerous cells and not for the healthy parts of the body" Margetson clarifies. "Most kinase inhibitors block the pathway 24/7. This permanent blocking prevents the cancer from growing, but also means that the pathway is not active for the healthy functions of the body. We believe that this is at least part of the reason why the competitors' approaches show clinical toxicity."

OCTIMET on the other hand has a differentiated dosing strategy. "We give OMO-1 twice a day with 4 hours between each dose. This means that we have a complete target coverage for 8 hours only, but not for the remaining 16 hours. Although the levels never go completely down to zero, the MET pathway can still perform its functions within the normal tissues. Furthermore, our OMO-1 compound only blocks the kinase pathway that we are looking for, which is the cMET pathway. We believe that this is the reason our phase I patient safety profile appears positively differentiated from our competitors. Besides better tolerability, we believe our compound's non-kinase anti-tumour activities will result in differentiation from the competitors in the clinic."

"If your own compound doesn't generate many tolerability problems itself, it is much easier to team it up with other compounds. Therefore, we see the true value of the company in combining OMO-1 with other cancer treatments", Margetson says. "We



Tim Perera, co-founder and CSO.

"The grant opportunities available for start-up biotech companies are indispensable. Belgium has done really well in developing this."

recently started the evaluation of OMO-1 in combination with EGFR inhibitors in patients based on positive animal experiments, and we will be looking into a PARPi combination too after further validation of this approach preclinically. Everything still must be proven in the clinic, but we believe that our solutions are the best from a pre-clinical and scientific viewpoint. We are therefore excited to be on the road fund raising for our series B, which will allow us to go to the clinic with this combination approach, to truly demonstrate what we believe the differentiation potential of the compound is."

Historically, the headquarters and intellectual property of OCTIMET are located in Belgium. Shelley Margetson believes that this is a big advantage. "I've worked in England, France, the Netherlands and Belgium so I am in a good position to make a comparison. Other countries have their strengths, but what is very striking to me is the activeness of the ecosystem and how easily they manage to bring drug discovery and development experts together."

"The Belgian ecosystem is close and well organised and full of highlytrained people. For example, flanders.bio is very active and organises great events. Belgium also has VIB which is a great organisation with incredible in-house knowledge. VIB is also one of the seed investors of OCTIMET with V-Bio Ventures and Fund+. Having these and other dedicated investment funds such as Droia within Belgium is a big advantage.", Margetson explains. "And the grant opportunities available for start-up biotech companies are indispensable. Belgium has done really well in developing this and all of the above points. In doing so, it enables innovation. OCTIMET has already received support for R&D activities through two substantial grants via VLAIO, the Flanders organization for Innovation & Entrepreneurship, for over 2 million EUR."

OCTIMET is taking the leap from Belgium overseas. The company is doing clinical trials in Belgium, the United Kingdom, the Netherlands and France. Since March 2019, the company has also been present in the United States and it is looking to open additional clinical sites in Taiwan before year-end. "It is too early to discuss export, but we do already act on an international scale through our clinical sites and potential investors. By 2022, we will be closer to offering a product that has an international demand."





INTERVIEW WITH Florian De Boeck & Louis-Philippe Broze, co-founders

### MEDICAL THERAPEUTICS

COMPANY

Spentys

REGION

Brussels

Founded: 2017

Location: Forest, Brussels

Number of employees: 8

Awards and recognition: hub.brussels award 2019

Website: www.spentys.com





Spentys is a 3D scanning, 3D modelling and 3D printing company, producing tailor-made orthopedic immobilisation devices. "Our aim is to bring the added value of mass customization to the orthopedic world through 3D technology," says Louis-Philippe Broze, the co-founder of Spentys. "By reinventing orthopedics, we want every person who suffers from traumatic or chronic pathologies to receive the best care."

"Our solution is based on three steps," explains Florian De Boeck, Spentys' other co-founder. "The first step is to 3D scan the patient's limb. This is done directly by the medical practitioner, using the provided iPad supported scanner. The scanning itself takes no more than 30 seconds. After the scan the medical practitioner add specific parameters can concerning the morphology, required material etc. in a second step. This is turned into a 3D model directly on the platform using our specific algorithm. The model is checked by our designers to ensure high quality. The third and final step, which is the printing itself, takes place in the production center in Brussels using the latest printing technology.

"We want to be disruptive, but foremost we want to make products that fit the needs of hospital orthopedics departments."

The print can take between 4 to 10 hours. Therefore, Spentys primal targets are post-traumatic pathologies and chronic pathologies where time is not a pressing factor. "We have worked on white papers analyzing pathologies that are hard to treat in the conventional way and for which few solutions exist, such as club feet and Jaccoud's hand. Working on such complex pathologies also shows how broad the possibilities for this technology are. "This is a first step, to show the possibilities," Florian says. "but we can help doctors, orthopedic orthopedists and technicians for all pathologies."

## COLLABORATIVE DISRUPTION

Collaboration with healthcare providers is crucial for Spentys. The company considers itself a technology provider



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and works to make the added value of 3D printing accessible in the daily practice of healthcare providers. However, to do this, doctor's and orthopedic technicians opinions have to be integrated into the solution, "We do not want to bypass them, but seek to integrate their expertise to show them how helpful our technology is. We want to be disruptive, but foremost we want to make products that fit the needs of hospital orthopedics departments."

The advantages for orthopedics departments are self-evident. Patients receive customized splints that fit perfectly, according to their physiology and wishes. "This improves comfort for the patient in their rehabilitation and their daily life. We are currently even working to prove that it helps to shorten or ease the rehabilitation period. The first results are quite promising," explains Louis-Philippe. This is thought to be the result of using lighter splints for older patients, allowing aeration around the scar so it can breathe, using waterproof material and providing casts that are adjustable thanks to a strap-on mechanism.

## PREACHING FROM FERTILE ECOSYSTEMS

The fact that additive manufacturing is well known in Belgium is a great advantage for the development of the company, according to the founders. "You have this environment where everyone knows what 3D printing is, what the opportunities are and the potential it has. When we speak to investors and governmental organizations, they know what we are talking about because they have other companies and success stories in mind."

Additive manufacturing may be well known in Belgium, but internationally



speaking, Spentys' solution is still largely unique. It has few competitors in Western Europe, while the United States has only one similar company and one distributor. "But the real competitors are the traditional technologies," Louis-Philippe explains. "Our direct competitors are actually helping us, preaching the good news of 3D printing technology. We just have to do better than them, which is easier than breaking the status quo. It takes time to change the mindset."

The Belgian ecosystem in both life sciences and additive manufacturing is well developed. Newcomers such as Spentys can exchange information with true pioneers in the medical field whenever regulatory or practical questions arise. The ecosystem also includes higher education institutions. "We have trainees coming from universities such as ECAM in Brussels, which have already been trained on how to use 3D technology. I'm not sure whether anything similar is happening in other countries," Florian says. several governmental Moreover. organizations, such as Innoviris or Brustart, and institutions such as Sirris are stepping in with invaluable grants, funds and information.

When it comes to having international success, Florian and Louis-Philippe feel that the diverse Belgian culture is a great advantage. "Having different entities such as the Flemish, Walloon and Brussels-Capital Region in a single country and adapting to this situation makes it easier for us to go abroad and adapt to different environments. It is in our nature to be flexible and to listen carefully."

In its early phase, Spentys is carefully directing its export efforts towards markets where the mindset has already switched. It helps treat



patients in the Netherlands, Belgium, Switzerland and Mexico. The latter was due to a combination of circumstances, while the other three countries are comparable in that they are all rather small but very qualitative markets in the field of healthcare. "And they are more innovation friendly as well. When you have achieved results in these countries, it is a passport to enter more conservative markets such as France," points out Louis-Philippe.

Spentys already has a global mindset. "We have a good solution and good technology, so why not go fast?" Florian states. "If we continue producing the medical devices ourselves, we will need to open production centers all over the world to meet delivery time expectations. This could be an option, but our vision is to leave the printing to the hospitals and support them as a software company. An ever-increasing amount of hospitals already have 3D printers."

## CONTINUOUS IMPROVEMENT

"The 3D technology is already custommade and very interesting, but I'm certain we could do even better," Florian insists, underlining the driving values of the company, which are continuous improvement and patientcentered thinking. "We plan to integrate deep learning and predictive modelling in our company. We will be able to predict how a deformity or pathology is going to evolve and how to treat it. In the medical industry, everyone believes they have the best solution, but it is not really data based. There are plenty of different splints for the exact same pathology. Now we can collect data and make suggestions to doctors, orthopedists and orthopedic technicians."





INTERVIEW WITH Patrice Sellès, CEO

#### AGRO-BIOTECH

COMPANY



REGION

Flanders

Founded: 2013

Location: Ghent

Number of employees: 40

Investments: 17 million EUR raised in Series A & B rounds and 35 million EUR in series C

Website: www.agrosavfe.be



AgroSavfe develops next generation crop protection biocontrol solutions which can be applied both in fields and after the harvest to tackle major plant pests and diseases. Patrice Sellès, the CEO of the company, explains that its portfolio of protein-based biocontrol solutions helps farmers and the entire food value chain from three different aspects. "The first is to protect the crops in the field by fighting against the diseases and pests that reduce quality and yield. The second is to reduce the amount of chemical residues in the final produce. And the third is to extend shelf life and reduce food waste, which is a major challenge that is faced worldwide."

Today, the chemical crop protection market is worth close to 85 billion USD, with biological solutions representing about 5% of the total market size. "But chemical as well as biological solutions have their limitations", Sellès explains. "The former is very efficient but potentially harmful to the environment while the latter is safer for the ecosystem but is not as consistent in product performance."

AgroSavfe's technology, which is based on proteins (Agrobodies), presents a

third and alternative option. "By using proteins, we combine the efficacy and performance of chemical pesticides and the safeness of biological products. The use of proteins and peptides is not new in agriculture, but we are the very first to come up with a pipeline of solutions addressing key pests and diseases in a large variety of crops", explains Sellès.

## A FUTURE GIANT

This pipeline of solutions stems from the AGROBODY Foundry™ proprietary platform, the unique innovation engine of the company that is capable of bringing protein-based biocontrols to the market for a total research and development cost of around 30 million USD in about 7 years. Sellès explains that this differs from the production of a classic chemical active ingredient, which takes on average 11 years and 290 million USD to get to the market. Among the reasons for this difference is the targeted approach in the discovery phase as well as the more straightforward regulatory pathway that is granted to AgroSavfe. "We are in the process of demonstrating with regulatory agencies and partners around the globe the safety profile of our proteins and the absence of





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negative impact for our food, our farmers and our ecosystems."

The fact that products can therefore be developed faster and at a lower price makes the CEO confident that his company will become a solid competitor among established names such as BASF, Syngenta or Bayer in the future. "The rate of innovation and the breadth of our pipeline enabled by our proprietary AGROBODY Foundry™ platform is difficult to match with a classic chemical approach. We are creating a new and transformative industry capability. We have strong intellectual property on the biocontrol products as well as on the methods to produce them. It would be very difficult for other companies to replicate our R&D engine and our capabilities."

### **RICH PIPELINE**

AgroSavfe's most advanced product focuses on tackling diseases affecting food produce that is often directly consumed without washing or cooking it beforehand such as strawberries, grapes or fresh vegetables. For these kinds of products, the food safety authorities have strong regulations and standards in terms of chemical residues. Failing to meet these standards makes the crop almost worthless for the grower. "Using our products has a drastic impact on the levels of chemical residues that can be identified in food", Sellès explains. "We are developing a unique expertise in finetuning the molecules so that they have the activity and efficacy we need and degrade rapidly so that they leave no trace behind."

At least five other products are in the pipeline and a whole range of diseases can be targeted. "There are a lot of orphan diseases in agriculture which



affect small segments that are very valuable but lack solutions. Since the cost of bringing innovative solutions to the market is much lower for us and the timelines are shorter, we want to target challenges that no conventional chemical applications or biological applications are capable of addressing. While it will not be our main business focus, we have to look into it because we believe we are the best positioned company to address these issues."

"I've always been amazed by the ecosystem in Ghent. It is the last standing biotech ecosystem for agriculture in Europe."

## THE LAST BIOTECH ECOSYSTEM STANDING

"The fact that a company as unique as AgroSavfe is located in Belgium, and in Ghent more specifically, is not a coincidence" says Patrice Sellès, who is a seasoned professional in the field. "I've always been amazed by the ecosystem in Ghent. It is the last standing biotech ecosystem for agriculture in Europe. You would be hard pressed to find anywhere as relevant as Ghent when it comes to agriculture and food tech. Only the United Kingdom and the United States have comparable technology hubs."

"Belgium is an extremely attractive location to benefit from the strengths of the R&D. We have access to capabilities, know-how, partners and talents, but Belgium will not be our



main commercial market. Our strategy is to establish a subsidiary in the US to support the launch of our first product expected in 2022." In order to do so, AgroSavfe is already in the process of hiring employees in North America. In 2023, the company expects to launch its first product in the EU, while other parts of the world such as Japan, South Africa and Brazil will follow suit.

## A BETTER PLANET

"Working for a better planet is AgroSavfe's mission" Patrice Sellès stresses. "It is more than just a job. You may ask around: everyone of our employees is on a mission to transform agriculture, and food in general, in order to have less impact on the environment. Think about all the energy and efforts required to feed the world. Agriculture uses 70% of the fresh water globally as well as 50% of available land and still 1/3 of the overall food production will be wasted by the time it reaches our plate. If we can develop innovative products to protect this food with less impact on the environment, we will be part of solving this incredible challenge.

Therefore, AgroSavfe is focusing on developing products that can be applied in the field, during the harvest as well as post-harvest. "We are not a usual crop protection company", Sellès says. "We do not only protect crops in the fields. We are there from the planting of the seed to the food's appearance on our plates. We have fantastic results in field trials so far and we continue to generate data. At the end of the day, I am confident that AgroSavfe will not only become a solid company, generating a huge amount of value, but that it will also transform the way we produce food."



## SUCCESS STORIES IN BELGIUM



INTERVIEW WITH François Blondel, CEO

#### AGRO-BIOTECH

COMPANY

KitoZyme

REGION

Wallonia

Founded: 2000

Location: Liège

Number of employees: 49

Growth: compounded annual growth achieved over the last 8 years: + 35 % per annum

Prizes and awards:

- Trends Gazelles (Liège province, 2018 & 2019), "medium-sized company" category,
- Deloitte Technology Fast 50 (2015 & 2016), nominated in "fastest growing companies"

Website: www.kitozyme.com





Incorporated in 2000, KitoZyme is a biotech company and a spin-off of the University of Liège (ULiège). Thanks to its patented and unique technology, it is today producing two biopolymers: chitosan and chitin-glucan. Contrary to all the other chitosan producers around the world (the chitosan market is estimated at 2.4 billion USD in 2018), KitoZyme produces chitosan from an entirely natural source.

"The uniqueness of our product relates to its vegetal source," says François Blondel, CEO of the company since 2013. "Its plant-based origin is a significant advantage in a number of sectors that, for instance, do not want to risk allergic reactions by using chitosan derived from animal sources such as crabs or shrimps", he adds.

## FIRST BUSINESS UNIT: HEALTH CARE SECTOR

"Initially, through a heavy R&D and business development program, KitoZyme investigated a very large spectrum of applications for these two new biopolymers that were brought to "The well-being of over 850,000 people around the world has been significantly improved thanks to KitoZyme's solutions in the year 2018 alone."

the market," explains François Blondel. "After a long search period, we have narrowed down the scope of activities."

Originally, KitoZyme was selling its two ingredients (chitosan and chitinglucan) to healthcare partners or to other parties that, in turn, were using the biopolymers to develop their own product. In order to increase its valueadded chain, KitoZyme decided to develop products of its own.

"Moreover, combining our biopolymers with existing ingredients on the market that also have well recognized and scientifically proven value in terms of health benefits allows KitoZyme to



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offer a wider range of products. In fact, today, many of the products we have on the market combine our biopolymers with other ingredients," explains Blondel. On the distribution side, KitoZyme has, over the last few years, partnered up with some very large pharmaceutical companies such as Clariant, Sanofi, Omega Pharma or Ipsen, to name a few.

Thanks to its innovative range of products in healthcare, François Blondel and his team are proud to indicate that "the well-being of over 850,000 people around the world has been significantly improved thanks to KitoZyme's solutions in the year 2018 alone."

#### SECOND BUSINESS UNIT: FOOD, BEVERAGE AND AGRICULTURAL SOLUTIONS

Over the years, next to its established "Healthcare" business unit, KitoZyme has developed a second business unit, focused on food, beverage and agricultural solutions. Today, the first product in this segment is a product used by the wine industry.

In particular, KitoZyme provides today a very effective solution to wine makers who encounter an undesired bacterium ("Brettanomyces Bruxellensis") during the fermentation process. This bacterium, commonly called "Brett",

## "250 million bottles of red wine will be treated with KitoZyme products."

can develop in wine barrels, creating a smell that makes the wine unfit for consumption. This means large amounts of wine can be lost.

"KitoZyme provides a solution to fight this bacterium," explains Blondel. "By adding chitosan to their barrels, wine growers can eradicate the bacteria and save their production. This way, we estimate that this year alone, more than 250 million bottles of red wine will be treated with KitoZyme products," he adds and concludes with a smile: "in a certain way, you could argue that a Walloon SME based in Liège is in fact the saviour of the Grands Châteaux of the Bordeaux wine industry !".

## BELGIUM, COUNTRY OF EXPORT-GEARED "LIFE SCIENCES DIAMONDS"

KitoZyme's CEO is well aware of Belgium's unparalleled competitive advantages in the field of life sciences. "Belgium and the Walloon Region have been well-known brands in the life sciences sector for many years and will hopefully remain so in the future," Blondel asserts.

"The life sciences sector is one of Belgium's true diamonds. The challenge is to make sure Belgium protects and continues to grow this asset", he continues. "Increasing the size and the importance of the sector in Belgium and in Wallonia really is key. The emergence of other new sectors may be important, but we must never forget that further expanding and growing a big and already well-established sector such as life sciences into something even bigger is far more efficient in terms of impact on our economy."

Just like other companies within the sector, KitoZyme's production is very much geared towards export. "Over 90% of our production is sold abroad, primarily thanks to a worldwide network of distributors in over 30 countries," emphasises Blondel. For the time being, KitoZyme is indeed pursuing an export strategy based on its solid network of distributors. However, in a test phase, its finished products have also been brought to some markets through digital marketing channels.

"Now that financial profitability has been reached and demonstrated to be self-sustainable, I feel that the company is ripe for a new step. I am convinced that further expansion with enormous opportunities are awaiting KitoZyme in the years ahead," confidently concludes François Blondel.





INTERVIEW WITH
Professor Wim Soetaert, Founder and CEO

### INDUSTRIAL BIOTECH





REGION

Flanders

Founded: 2008

Location: Ghent

Number of employees: 80

Turnover: 10 million EUR

Growth: 30% annually

Export share: 90%

Website: www.bbeu.org



Bio Base Europe Pilot Plant is a service provider for process development, scaling up and custom manufacturing of biobased products and processes. This means production technologies that are not based on petroleum or other fossil materials, but on biomass. "In collaboration with our clients, we convert biomass into all sorts of products, ranging from bioplastics to biomaterials, biodetergents, biofuels, bio-dyes, etc. Almost every petroleumbased product that is made today can be produced based on biomass," explains Professor Wim Soetaert, the Founder and CEO of the Bio Base Europe Pilot Plant.

"Many people think of the pharma industry when talking about biotechnology. That is not what we do, we use biotechnology as a technology for industrial production" Soetaert clarifies. "We have very strong expertise in industrial biotechnology, based on fermentation and enzymatic processes, and all the subsequent downstream operations to purify the product. Additionally, we work on green chemistry to convert biomass with "95% of all innovation projects fail in the scale-up phase. It is for good reason that this phase is called the "valley of death" for innovations. We help companies to cross this valley of death."

chemical processes. Very often the final product is a combination of both biotechnology and green chemistry."

Thanks to the wide range of technologies for advanced manufacturing of biobased products utilizing a broad spectrum of modular unit operations, Bio Base Europe Pilot Plant is a one-stop shop for biobased processes. "When companies have a process that takes 5 or 6 steps to develop a product, ideally they want to perform those steps in the same place. We have the capacity to do so. If you have to start moving products around



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Europe, or even the world, it quickly becomes a logistical nightmare. The fact that we are located in Europe's biotechnology heartland, with among other things the biggest bio-based cluster in the port of Ghent, is clearly also an advantage."

Bio Base Europe Pilot Plant is best known for its scaling up capacity. The main clients are companies that have developed a process to manufacture a product, but do not have the capacity to deliver larger quantities than the ones their labs can produce. "Scaling up from a lab scale to an industrial scale is really difficult and very costly. You need a pilot plant for this, which the vast majority of companies cannot build themselves. It would cost them at least 10 million EUR and would take over 4 years to develop, so they better come to us. We have a dedicated pilot plant, which is faster, cheaper, more efficient and simply better. Here it would take them only a couple of months to optimize the process."

When the processes are being developed at the Bio Base Europe Pilot Plant premises, typically clients bring along their own personnel to assist. "That's the best technology transfer: through human eyes. Sending a report is good, but having the people on site is better. The companies like this too, because it gives them a better picture of how things evolve, what the problems are and how they can be resolved. It is a learning exercise for everyone," professor Soetaert explains.

Learning and, indeed, failure, are essential parts of the process when

"If you need to develop an industrial process, you want to find the best possible development partner. It really doesn't matter if they are on the other side of the world. That's why companies come to us."

scaling up. "Some people think scaling up simply means multiplying everything by a factor thousand. This could not be further from the truth. Scaling up is notoriously difficult, costly and risky, lots of things can go wrong. It is often a rather painful journey, like crossing the desert. 95% of all innovation projects fail in the scale-up phase. It is for good reason that this phase is called the "valley of death" for innovations. We help companies to cross this valley of death."

Soetaert explains that Bio Base Europe Pilot Plant provides process knowledge, first quantities of products per kilogram but, he jokingly adds, what the organization provides most of all is confidence per kilogram. "Working with us gives external validation of the technology, specifically for start-ups. It helps them build confidence, not least from their investors. We are a test ground, not only for the production process, but also for the technology itself. In the whole of Europe, there are only a few pilot plants like ours, and we are the one with a focus on industrial biotechnology and scaling up."

As an example, Soetaert refers to the

investment round of the Belgian company AgroSavfe, which recently managed to raise 35 million EUR. It developed its own product, but the scaling up was done at Bio Base Europe Pilot Plant. "This was without a doubt one of the factors that gave the investors confidence. That's what I call partnership. We help companies develop their technology to its full potential."

Unlike the company in the example above, most of Bio Base Europe Pilot Plant's clients are international. They account for about 90% of the turnover. "Belgium is far too small to keep a pilot plant like ours running," Soetaert explains. "Clients come from all over the world. Word of mouth is very important. After all, the bio-based industry is still a small community. It sometimes surprises us to see how many American and Japanese companies find their way to Ghent. But if you need to develop an industrial process, you want to find the best possible development partner. It really doesn't matter if they are on the other side of the world. That's why companies come to us" Soetaert says.

With important global evolutions such as the shift to a circular economy and the need for climate protection, the CEO feels that his organization's historical growth rate of 30% will be sustained, if not accelerated. Therefore, new investment plans for a new process hall and bigger fermenters, among other things, are on the table. Wim Soetaert puts it very simply: "We have to continue investing, because the world needs pilot plants like us."



## SUCCESS STORIES IN BELGIUM



INTERVIEW WITH George Blackman, CEO

#### NDUSTRIAL BIOTECH

COMPANY

Realco

REGION

Wallonia

Founded: 1968

Location: Louvain-la-Neuve

Number of employees: 55

Turnover (2018): 10.5 million EUR

Growth (2018): 12.5%

Investments (2018): +/- 12% of turnover is reinvested in R&D

Start of exports: 1998

Share of exports in turnover: 50%

Prizes, awards: European Business Awards for innovation, 2018

Trends Business Tour, 2016





The Louvain-la-Neuve-based company Realco develops, produces, and commercializes patented enzymatic solutions for hygiene purposes and wastewater treatment.

"Enzymes are like scissors. One enzyme molecule will cut organic residue three million times per second in order to degrade it, for cleaning or purification purposes, whereas a traditional chemical cleaning product will only move the residue without treating it," explains George Blackman, CEO of Realco.

"Because of their complete biodegradability and their pH neutrality, enzymatic cleaners are safe for both the environment and human health. You could say Realco resolves the paradox of being sustainable and efficient at the same time," Blackman adds.

#### CLEANING AND PURIFYING AGENTS

"Realco's expertise lies in the development, production and sale of

"You could say Realco resolves the paradox of being sustainable and efficient at the same time."

enzyme-based hygiene solutions to effectively and ecologically treat and eradicate the corresponding type of residue," explains Blackman.

Enzymes are proteins whose natural properties are twofold. "On the one hand, enzymes are powerful natural cleaning agents that irreversibly transform organic substances into water-soluble residues."

On the other hand, enzymes are also considered a potent purifying agent. "When enzymes break down organic detritus into smaller, water-soluble residues during the cleaning stage, they also allow bacteria to assimilate and transform these residues into natural substances." This purifying process has a positive impact on the

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environment and allows Realco to contribute to the treatment of wastewater, its second solution.

## NUMEROUS FIELDS OF APPLICATION

The cleaning and purifying properties of enzymes have attracted the attention of key players in the food chain who want to eradicate or prevent contamination and infection of their facilities. "The added value of enzymes can be exploited in various business units and applications," explains Blackman. "Realco's enzymatic solutions are used to clean food production plants and food industry equipment within the Food and Beverage sector," Blackman states.

"A first application is the day-to-day treatment of industrial equipment. In order to optimize the beneficial properties of enzymes, cleaning must ideally occur at a temperature between 20°C and 50°C. Cleaning at such a low temperature will allow food and beverage companies to save energy, so you could definitely say Realco is a contributor to sustainable development," affirms Blackman.

"Secondly, Realco's enzymatic solutions also make it possible to clean membrane filters, which are usually a hot spot of a production plant and are very difficult to clean. By providing a treatment solution for membrane filters, Realco increases the productivity of the production site," Blackman stresses.

"Thirdly, Realco's patented solutions make it possible to detect, treat and eliminate biofilms, i.e. resistant nests of bacteria that develop a protective matrix made up of organic polymers. These biofilms can contaminate food industry equipment such as exchangers, tanks, cooling systems, food pipes, membrane filters, etc. The abundance of biofilms in food industry apparatus will inevitably lead to serious contamination of finished products and, consequently, to losses." However, financial bv eliminating biofilm completely contaminations, the shelf life of finished products can be extended. This application is chiefly used in the beverage and dairy industries in order to guarantee food safety.

Realco's products not only have applications in the Food and Beverage industry, they are also widely used in the Food Services sector. "Within this second division, we address public collectivities such as hospital kitchens, school canteens and professional kitchens, i.e. restaurant chains. In this way, hygiene standards are optimized, and food safety and quality are assured."

"Lastly, in order to provide natural and efficient disinfection products to the consumer industry, we decided to offer our enzymatic technology to the households. To this end, Realco has developed a wide range of products, 'Eezym'. These products for home hygiene purposes are widely available in large retail stores," explains Blackman.

#### BREAKING NEW GROUND

"In order to stand out and maintain our technological lead, we have to continuously invest in R&D and innovate. The potential of enzymes is huge and we have launched a large number of projects, so the future can only be bright," Blackman points out.



As an example, Realco has also created a spin-off company named OneLife that provides enzyme-based technologies for the detection of a contamination, the decontamination and the eradication of a contamination in healthcare facilities. "Unprecedented standards of hygiene will be reached by using enzyme-based technologies in the hospital sector. OneLife reduces the risk of hospitalacquired infections, by improving the cleaning and disinfection of surgical instruments and operating rooms," states Blackman proudly.

## A WORLDWIDE LEADER

"Our technological expertise in the field of enzymes is exported all around the world. In 2009, Realco opened a subsidiary company in the US called Realzyme. Our company can also count on a worldwide network of partners and distributors operating in more than 20 countries, including France, Italy, South Korea, Japan, China, and the USA," states Blackman.

"Moreover, our experts are often sent out across the globe when a production plant faces a serious contamination. They will establish a contamination diagnostic and ultimately, propose a decontamination plan with preventive measures to avoid any future contamination," explains Realco's CEO.

"Our overt ambition, however, is to become a dependable long-term partner for the Food and Beverage industry by acting pre-emptively, before production plant contamination arises. We definitely want to establish long-term partnerships by providing efficient and sustainable enzymebased hygiene solutions," concludes Blackman.





# **DIRECTORY** OF COMPANIES

This directory is not exhaustive. For more information please contact Flanders Investment & Trade (FIT), Wallonia Export - Investment Agency (AWEX), hub.brussels, or the Belgian federations (see Chapter 1, Section 3.2)

ΕΝΤΙΤΥ ΝΑΜΕ	ZIP	CITY	REGION	WEBSITE	MEDICAL DIAGNOSTICS	MEDICAL THERAPEUTICS	AGRO-BIOTECH	INDUSTRIAL BIOTECH
2INGIS	1120	Brussels	Brussels	www.2ingis.eu	•			
3.LIFE	1082	Sint-Agatha-Berchem	Brussels	www.3.life	•			
3D-SIDE	1435	Mont-Saint-Guibert	Wallonia	www.3dside.eu	•			
3M	2070	Zwijndrecht	Flanders	www.3mbelgie.be		_		•
4 CLINICS (ALL4IT GROUP)	1410	Waterloo	Wallonia	www.4clinics.com		•		
A7 SOFTWARE (ANDAMAN7)	4100	Boncelles	Wallonia	www.a7-software.com		-		
ABBVIE BELGIUM	1300	Wavre	Wallonia	www.abbvie.be	_	•		
ABLYNX	9052	Zwijnaarde	Flanders	www.ablynx.com	_	•		
ACTEMIUM (PROMATIC W)	4040	Herstal	Wallonia	www.actemium.be	_			•
ACTOBIO THERAPEUTICS	9052	Zwijnaarde	Flanders	www.actobio.com		•		
AD HOC CLINICAL BVBA	8900	leper	Flanders	www.adhoc-clinical.com	•			
ADVANCED TECHNOLOGY CORPORATION (ATC-PHARMA)	4000	Liege	Wallonia	www.atc-pharma.be	_			•
ADVELOX	1040	Brussels	Brussels	www.advelox.com	•			
ADX NEUROSCIENCES	9052	Zwijnaarde	Flanders	www.adxneurosciences.com	•			
AELIN THERAPEUTICS	3001	Leuven	Flanders	www.aelintx.com		•		
AEPODIA	1348	Louvain-La-Neuve	Wallonia	www.aepodia.com		•		
AFMPS	1060	Brussels	Brussels	www.afmps.be		•		
AGROSAVFE	9052	Gent	Flanders	www.agrosavfe.com			•	
AJI BIO PHARMA SERVICES	9230	Wetteren	Flanders	www.ajibio-pharma.com				•
ALCO BIOFUEL	9042	Gent	Flanders	www.alcobiofuel.com				•
ALIGOS BELGIUM	3001	Leuven	Flanders	www.aligos.com		•		
AMGEN	1831	Diegem	Flanders	www.amgen.be		•		
ANALIS	5020	Suarlee	Wallonia	www.analis.be	•			
ANIMA BVBA	3570	Alken	Flanders	www.aneurotech.com		•		
ANMI (ADVANCED NUCLEAR MEDICINE INGREDIENTS)	4000	Liege	Wallonia	www.anmi.be		•		
ANTIGON SA	6041	Gosselies	Wallonia	www.antigon.eu	•			
APHEA.BIO	9052	Zwijnaarde	Flanders	www.aphea.bio			•	
APITOPE INTERNATIONAL	3590	Diepenbeek	Flanders	www.apitope.com		•		
AQUILON PHARMACEUTICALS	4600	Visé	Wallonia	www.aquilonpharma.com	•	•		
ARCELOR MITTAL	9042	Gent	Flanders	www.belgium.arcelormittal.com				•
ARGENX	9052	Zwijnaarde	Flanders	www.argenx.com		•		
ARSANNE CONSULTING	1428	Lillois	Wallonia	www.arsanne.com				
ARTECHNO	5032	Gembloux (Les Isnes)	Wallonia	www.artechno.be				•



ICAL DIAGNOSTICS	ICAL THERAPEUTICS	O-BIOTECH	ISTRIAL BIOTECH
MEDICA	MEDICA	AGRO-I	TSUGNI

ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Σ	Σ	Ă	Z
ARTIALIS	4000	Liege (Sart-Tilman)	Wallonia	www.artialis.com	•	•		
ASIT BIOTECH	4031	Angleur	Wallonia	www.asitbiotech.com		•		•
ASYLIA DIAGNOSTICS	2340	Beerse	Flanders	www.asylia.io	•			
AVECOM	9032	Wondelgem	Flanders	www.avecom.be				•
AVEVE BIOCHEM/GROUP AVEVE	2170	Merksem	Flanders	www.avevebiochem.com			•	
AVROXA	9052	Gent	Flanders	www.ultroxa.com	•			
AWELL	1000	Brussels	Brussels	www.awellhealth.com	•			
AXILES BIONICS	1070	Brussels	Brussels	www.axilesbionics.com		•		
B4PLASTICS	3630	Maasmechelen	Flanders	www.b4plastics.com				•
BASF AGRICULTURAL SOLUTIONS BELGIUM	9052	Zwijnaarde	Flanders	www.agro.basf.be			•	
BAXALTA (SHIRE)	1420	Braine-l'Alleud	Wallonia	www.shire.com		•		
BAXTER R&D EUROPE SCRL	1420	Braine-l'Alleud	Wallonia	www.baxter.be	•	•		
BAYER AGRICULTURE	1150	Brussels	Brussels	www.bayer-agri.fr			•	
BAYER CROPSCIENCE	9052	Zwijnaarde	Flanders	www.bayercropscience.com			•	
BCI PHARMA	4000	Liege	Wallonia	www.bci-pharma.com		•		•
BECARV	5580	Rochefort	Wallonia	www.becarv.com				
BELGIAN HEALTH INGREDIENTS GROUP (BHIG)	6041	Gosselies	Wallonia	www.bhig.be			•	•
BELGIAN VOLITION	5032	Gembloux (les isnes)	Wallonia	www.volitionrx.com		•		
BELGO GO BIO SCRL	4250	Hollogne-Sur-Geer	Wallonia	www.facebook.com/BelGoBio				•
BENEO	3018	Leuven	Flanders	www.beneo.com			•	•
BETA - CELL	3590	Diepenbeek	Flanders	www.beta-cell.com		•		
BEWELL INNOVATIONS	2520	Ranst	Flanders	www.bewellinnovations.com	•			
BIION SA	1348	Ottignies - Louvain-La-Neuve	Wallonia	www.sapristic-biion.com	•			
BIO.BE (IPG)	6041	Gosselies	Wallonia	www.bio-be.be	•			
BIO BASE EUROPE PILOT PLANT	9042	Desteldonk	Flanders	www.bbeu.org/pilotplant/				•
BIOCARTIS	2800	Mechelen	Flanders	www.biocartis.com	•			
BIOGAZELLE	9052	Gent	Flanders	www.biogazelle.com	•			
BIOLIZARD NV	9000	Gent	Flanders	www.lizard.bio	•			
BIOMARIC	9052	Gent	Flanders		•			
BIOMASS SOLUTIONS	4690	Bassenge	Wallonia	www.rewallonia.be/profiles/biomass-solutions/				•
BIO-RAD LABORATORIES	9140	Temse	Flanders	www.bio-rad.com	•			
BIOSOURCING SA	4000	Liege	Wallonia	www.bio-sourcing.com		•		
BIOTHÈQUE WALLONIE BRUXELLES	1090	Brussels	Brussels	www.biotheque-wallonie-bruxelles.be	•	•		
BIOWANZE	4520	Wanze	Wallonia	www.biowanze.be			•	
BIOWASTE RECYCLING	1410	Waterloo	Wallonia	www.biowasterecycling.com				•
BIOXODES	6041	Gosselies	Wallonia	www.bioxodes.com		•		
BIOXTRACT	1348	Louvain-la-neuve	Wallonia	www.bioxtract.com			•	
BIRD & BIRD	1050	Brussels	Brussels	www.twobirds.com	•	•		
BLUE FOOT MEMBRANES	3920	Lommel	Flanders	www.bluefootmembranes.com				•



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MEDICAL DIAGNOSTICS
MEDICAL THERAPEUTICS
AGRO-BIOTECH
INDUSTRIAL BIOTECH

ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Σ	Σ	Ă	Z
BOEHRINGER INGELHEIM	1200	Brussels	Brussels	www.boehringer-ingelheim.be		•		
BONE THERAPEUTICS	6041	Gosselies	Wallonia	www.bonetherapeutics.com	_	•		
BRISTOL-MYERS SQUIBB (BMS)	1420	Braine-l'alleud	Wallonia	www.bms.be		•		
BRUSSELS MEDICAL DEVICE CENTER (BMDC)	1050	Brussels	Brussels	www.bmdc.eu	_	•		
BURDINOLA	1421	Ophain	Wallonia	www.burdinola.com	_			•
CAELUS HEALTH	2340	Beerse	Flanders	www.caelushealth.com		•		
CALIDRIS BIO	9050	Gent	Flanders	www.calidrisbio.com				•
CAMEL-IDS	1080	Brussels	Brussels	www.camel-ids.com		•		
CANNOVEX	3590	Diepenbeek	Flanders	www.cannovex.com			•	
CAPAX	1861	Meise	Flanders	www.capax.be				•
CAPRION BIOSCIENCES	6041	Gosselies	Wallonia	www.caprion.com		•		
CARDIATIS	5032	Gembloux (Les Isnes)	Wallonia	www.cardiatis.com		•		
CARGILL R&D CENTRE EUROPE	1800	Vilvoorde	Flanders	www.cargill.be			•	•
CEBEDEAU	4000	Liège	Wallonia	www.cebedeau.be				•
CELABOR	4650	Herve	Wallonia	www.celabor.be			•	•
CELLSINE	1040	Brussels	Brussels	www.cellsine.com	•	•		
CELYAD	1435	Mont-Saint-Guibert	Wallonia	www.celyad.com		•		
CENAERO	6041	Gosselies	Wallonia	www.cenaero.be				•
CENEXI (LABORATOIRE THISSEN)	1420	Braine l'Alleud	Wallonia	www.cenexi.com		•		
CENTRE FOR DRUG DESIGN AND DISCOVERY (CD3)	3001	Leuven	Flanders	www.cd3.eu	•	•		
CERHUM SA	4000	Liège	Wallonia	www.cerhum.com		•		
CHEMBO	7522	Tournai	Wallonia	www.chembo.be				•
СНЕМСОМ	1070	Brussels	Brussels	www.chemcom.be		•		
CHEMSTREAM	3650	Edegem	Flanders	www.chemstream.be				•
CHRISTEYNS	9000	Gent	Flanders	www.christeyns.com				•
CHROMACURE S.A.	6041	Gosselies	Wallonia	www.sambrinvest.be/fr/galaxie/ChromaCure/		•		
CICN - CENTER OF INVESTIGATION IN CLINICAL NUTRITION	1348	Louvain-La-Neuve	Wallonia	www.cicn.be			•	
CIRCULAR ORGANICS	2300	Turnhout	Flanders	www.circularorganics.com				•
CISEO	5100	Nannine	Wallonia	www.ciseo.com		•		
CITRIQUE BELGE	3300	Tienen	Flanders	www.citriquebelge.com			•	•
CLEVER CONSULT	1861	Wolvertem	Flanders	www.cleverconsult.eu			•	•
CLUSTEO	1050	Brussels	Brussels	www.clusteo.com	•			
COBIORES NV	3000	Leuven	Flanders	www.cobiores.be		•		
COMPLIX NV	9052	Gent	Flanders	www.complix.com		•		
CONFO THERAPEUTICS	9052	Zwijnaarde	Flanders	www.confotherapeutics.com		•		
CONVERT PHARMACEUTICALS	4000	Liège	Wallonia	www.convertpharma.com		•		
CORDEN PHARMA BRUSSELS	1120	Brussels	Brussels	www.cordenpharma.com		•		
CORIS BIOCONCEPT	5032	Gembloux	Wallonia	www.corisbio.com	•			
COSUCRA	7740	Warcoing	Wallonia	www.cosucra.com			•	



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ENTITY NAME	ZIP	СІТҮ	REGION	WEBSITE	ΣE	Σ	<b>AG</b>	Ĭ
CRA-W	5030	Gembloux	Wallonia	www.cra.wallonie.be			•	
CROPDESIGN	9850	Nevele	Flanders	www.cropdesign.com			•	
CURAVAC	1330	Rixensart	Wallonia	www.curavac.com		•		
DE CEUSTER MESTSTOFFEN	2860	Sint-Katelijne-Waver	Flanders	www.dcm-info.be			•	•
DELPHI GENETICS	6041	Gosselies	Wallonia	www.delphigenetics.com		•		
DEVAN	9600	Ronse	Flanders	www.devan.net				•
DIAGAM	7822	Ghislenghien	Wallonia	www.diagam.com	•			1-
DIAGENODE SA	4102	Seraing	Wallonia	www.diagenode.com	•			
DIASOURCE IMMUNOASSAYS S.A.	1348	Louvain-La-Neuve	Wallonia	www.diasource-diagnostics.com	•	•		
DIGITAL IMAGE ANALYSIS IN PATHOLOGY (DIAPATH)	6041	Gosselies	Wallonia	www.cmmi.be	•			
DIGITAL ORTHOPAEDICS	1435	Mont-Saint-Guibert	Wallonia	www.digital-orthopaedics.com		•		
DNALYTICS	1348	Louvain-La-Neuve	Wallonia	www.dnalytics.com		•		
DNAVISION	6041	Gosselies	Wallonia	www.dnavision.com		•		
DOCTOR ANYTIME	1050	Brussels	Brussels	www.doctoranytime.be	•	•		
DOMOBIOS	1060	Brussels	Brussels	www.domobios.com		•		
DS ENGINEERS (DE SMET)	1435	Mont-Saint-Guibert	Wallonia	www.dsengineers.com				•
D-TEK	7000	Mons	Wallonia	www.d-tek.be	•			
DUPONT	8000	Brugge	Flanders	www.dupontdenemours.be				•
EASTMAN	9000	Gent	Flanders	www.eastman.com				•
ECAM BRUSSELS ENGINEERING SCHOOL	1200	Brussels	Brussels	www.vinci.be	•	•		
ECOTREASURES	9160	Lokeren	Flanders	www.ecotreasures.be				•
ECOVER	2390	Malle	Flanders	www.ecover.com				•
ELYSIA SA	4031	Angleur	Wallonia	www.elysia-raytest.com	•			
EMTEX	9190	Stekene	Flanders	www.emtex.be	•	•	•	•
ENDO TOOLS THERAPEUTICS SA	6041	Gosselies	Wallonia	www.endotools.be		•		
ENGIE LABORELEC	1630	Linkebeek		www.laborelec.com			•	•
ENZYBEL INTERNATIONAL	4530	Villers-Le-Bouillet	Wallonia	www.enzybel.be			•	•
EOC	9700	Oudenaarde	Flanders	www.eocgroup.com				•
EPPENDORF APPLICATION TECHNOLOGIES SA	5000	Namur	Wallonia	www.eppendorf.com	•	•		
ERC BELGIUM (EPITOPOIETIC RESEARCH CORPORATION)	5032	Gembloux (Les Isnes)	Wallonia	www.erc-immunotherapy.com		•		
ETHERNA	2845	Niel	Flanders	www.etherna.be		•		
EUROFINS AMATSIGROUP	9052	Zwijnaarde	Flanders	www.amatsigroup.com		•		
EYED PHARMA	4000	Liege	Wallonia	www.eyedpharma.com		•		
FERTIPRO	8730	Beernem	Flanders	www.fertipro.com	•			
FLEN HEALTH	2550	Kontich	Flanders	www.flenhealth.com		•		
FLUIDDA	2550	Kontich	Flanders	www.fluidda.com	•			
FOX BIOSYSTEMS	9140	Temse	Flanders	www.foxdiagnostics.com	•			
FRID MIND TECHNOLOGIES	6220	Fleurus	Wallonia	www.fridmind.com		•		
FUJIREBIO EUROPE	9052	Zwijnaarde	Flanders	www.fujirebio-europe.com	•			



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MEDICAL DIAGNOSTICS
MEDICAL THERAPEUTICS
AGRO-BIOTECH
INDUSTRIAL BIOTECH

ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Σ	Σ	4	É
FYTOFEND	5032	Gembloux (Les Isnes)	Wallonia	www.fytofend.com				•
GABI SMARTCARE	1050	Brussels	Brussels	www.gabismartcare.com	•			
GALACTIC	7760	Celles	Wallonia	www.lactic.com			•	•
GALAPAGOS	2800	Mechelen	Flanders	www.glpg.com		•	-	-
GENENCOR (DUPONT)	8000	Brugge	Flanders	www.biosciences.dupont.com				•
GLAXOSMITHKLINE PHARMACEUTICALS	1300	Wavre	Wallonia	www.gsk.com		•	-	/
GLOBACHEM	3800	Sint-Truiden	Flanders	www.globachem.com				•
GLOBALYEAST BELGIUM	9052	Gent	Flanders	www.globalyeast.com	_			•
GOVI	9031	Drongen	Flanders	www.govi.com	_			•
GRAFTYS	6041	Gosselies	Wallonia	www.graftys.com	_	•		
GREEN FRIX	7522	Blandain	Wallonia	www.greenfrix.be				•
GREENPOCH	6211	Mellet	Wallonia	www.greenpoch.com				•
GULLIVER BIOMED	9052	Gent	Flanders	www.gulliverbiomed.com	•			
HEART KINETICS	1070	Brussels	Brussels	www.heart-kinetics.com	•			
HEDELAB	7011	Ghlin	Wallonia	www.hedelab.be			•	
HELPILEPSY / EPIONE	1030	Brussels	Brussels	www.helpilepsy.com	•			
HUMAN WAVES	6041	Gosselies	Wallonia	www.humanwaves.be		•		
HYLORIS PHARMACEUTICALS	4000	Liege	Wallonia	www.hyloris.com		•		
IBA (ION BEAM APPLICATIONS)	1348	Louvain-La-Neuve	Wallonia	www.iba-worldwide.com		•		
I-COATS	2600	Antwerpen	Flanders	www.i-coats.be				•
ICOMETRIX	3012	Leuven	Flanders	www.icometrix.com	•			
ILEE INSTITUTE - UNAMUR	5000	Namur	Wallonia	www.ilee.unamur.be	•	•	•	•
IMAGILYS	1050	Brussels	Brussels	www.imagilys.com	•			
IMCYSE	4000	Liege (Sart-Tilman)	Wallonia	www.imcyse.com		•		
IMMUNO DIAGNOSTIC SYSTEMS (IDS)	4000	Liege	Wallonia	www.idsplc.com	•			
IMMUNXPERTS SA	6041	Gosselies	Wallonia	www.immunxperts.com		•		
IMPERBEL	1360	Perwez	Wallonia	www.derbigum.be				
INARI AGRICULTURE NV	9052	Zwijnaarde	Flanders	www.inari.com			•	
INBIOSE	9052	Zwijnaarde	Flanders	www.inbiose.com				•
INNOVADENT	1200	Brussels	Brussels	www.innovadent.ca		•		
INNOVATION SPRINT	1200	Brussels	Brussels	www.innovationsprint.eu	•	•		
INSTITUT DE PATHOLOGIE ET DE GÉNÉTIQUE ASBL (IPG)	6041	Gosselies	Wallonia	www.ipg.be	•			
INTERNATIONAL DRUG DEVELOPMENT INSTITUTE (IDDI)	1341	Louvain-La-Neuve	Wallonia	www.iddi.com		•		
INTUITIM	1140	Brussels	Brussels	www.intuitim.com	•			
IRE ELIT	6220	Fleurus	Wallonia	www.ire.eu		•		
ISTAR MEDICAL SA	1300	Wavre	Wallonia	www.istarmed.com		•		
ITEOS THERAPEUTICS	6041	Gosselies	Wallonia	www.iteostherapeutics.com		•		
JANSSEN PHARMACEUTICA	2340	Beerse	Flanders	www.janssen.com		•		
JANSSEN PMP	2340	Beerse	Flanders	www.janssenpmp.com			•	•



CAL DIAGNOSTICS	CAL THERAPEUTICS	D-BIOTECH	STDIAL BIOTECH
EDICA	EDICA	GRO-B	
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ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Σ	Σ	AG AG	Ī
JANSSEN-CILAG	2340	Beerse	Flanders	www.janssen.com		•		
JEMACO	5020	Malonne	Wallonia	www.jemaco.be				•
JSR MICRO	3001	Heverlee	Flanders	www.jsrmicro.be		•		1
KANEKA	2260	Westerlo-Oevel	Flanders	www.kaneka.be				•
KANEKA EUROGENTEC	4102	Ougrée	Wallonia	www.eurogentec.com		•		í –
KASPARD / KAPCARE SPRL	1170	Brussels	Brussels	www.kaspard.com	•			1
KEMIN	2200	Herentals	Flanders	www.kemin.com			•	•
KESSLER	6717	Attert	Wallonia					•
KIOMED PHARMA	4040	Herstal	Wallonia	www.kiomedpharma.com		•		
KISANO BELGIUM	1180	Brussels	Brussels	www.kisanogroup.com	•			í –
KITOZYME SA	4040	Herstal	Wallonia	www.kitozyme.com		•		•
KLK TENSACHEM	4102	Liège	Wallonia	www.tensachem.com				•
KNOWARE SA	1400	Monstreux	Wallonia	www.knoware.be		•		
LAMBDA-X	1400	Nivelles	Wallonia	www.lambda-x.com		•		
LANOLINES STELLA	7700	Mouscron	Wallonia	www.lanolin-stella.com				•
LAWTER	9130	Kallo	Flanders	www.lawter.be				•
LINDACARE	1040	Brussels	Brussels	www.lindacare.com	•			
LONZA VERVIERS	4800	Verviers	Wallonia	www.lonza.com				
MANETCO	1380	Ohain	Wallonia	www.manetco.be				•
MASTHERCELL	6041	Gosselies	Wallonia	www.masthercell.com		•		
MATERIA NOVA	7000	Mons	Wallonia	www.materianova.be				•
MDXHEALTH	9000	Gent	Flanders	www.mdxhealth.com	•			
MERCK CHEMICALS	3090	Overijse	Flanders	www.merckgroup.com		•		•
METRONOM HEALTH EUROPE SPRL	1435	Mont-Saint-Guibert	Wallonia	www.metronomhealth.com		•		
MEURICE R&D	1070	Brussels		www.meurice.org				•
MIDIAGNOSTICS NV	3001	Leuven	Flanders	www.midiagnostics.com	•			
MIRACOR MEDICAL SA	4340	Awans	Wallonia	www.miracormedical.com		•		
MITHRA PHARMACEUTICALS	4000	Liège	Wallonia	www.mithra.com		•		
MOBILE CLINIC	1180	Brussels	Brussels	www.mobileclinic.be		•		
MONSANTO (BAYER)	2040	Antwerpen	Flanders	www.monsanto.com			•	•
MOVEUP	1050	Brussels	Brussels	www.moveup.care		•		
MYCARTIS	9052	Zwijnaarde	Flanders	www.mycartis.net	•			
MYCELIA	9850	Deinze	Flanders	www.mycelia.be			•	•
MYMEDICOACH	1040	Brussels	Brussels	www.mymedicoach.com		•		
MYNEO NV	9000	Gent	Flanders	www.myneo.me		•		
NARILIS INSTITUTE - UNAMUR	5000	Namur	Wallonia	www.narilis.be	•	•	•	•
NAUTADUTILH	1000	Brussels	Brussels	www.nautadutilh.com		•	•	
NCARDIA (EX PLURIOMICS)	6041	Gosselies	Wallonia	www.ncardia.com		•		
NEUROPATH	1348	Louvain-La-Neuve	Wallonia	www.remedia.be/neuropath		•		



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MEDICAL DIAGNOSTICS
MEDICAL THERAPEUTICS
AGRO-BIOTECH
INDUSTRIAL BIOTECH

ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Σ	Σ	4	≤
NEXEON MEDSYSTEMS BELGIUM	4031	Angleur	Wallonia	www.nexeonmed.com				
NISCHALA TECHNOLOGIES	2610	Antwerpen	Flanders	www.nischalatech.com	•			
NOHO CARE	1050	Brussels	Brussels	www.noho.care		•		
NOVADIP	1435	Mont-Saint-Guibert	Wallonia	www.novadip.com		•		
NOVARTIS PHARMA	1800	Vilvoorde	Flanders	www.novartis.be	_	•		
NOVASEP	6041	Gosselies	Wallonia	www.novasep.com		•	•	•
NOVOSANIS	2110	Wijnegem	Flanders	www.novosanis.com	•			
NUCLEIS	4000	Liege	Wallonia	www.nucleis.eu		•		
NUTRITION SCIENCES	9031	Gent	Flanders	www.nutrition-sciences.com				•
NYXOAH SA	1435	Mont-Saint-Guibert	Wallonia	www.nyxoah.com		•		
OBLITA THERAPEUTICS	2980	Zoersel	Flanders	www.oblitatherapeutics.com		•		
OCTIMET ONCOLOGY	2340	Beerse	Flanders	www.octimet.com		•		
OLEON	2520	Oelegem	Flanders	www.oleon.com				•
	9940	Ertvelde	Flanders	www.oleon.com				•
ONCODNA	6041	Gosselies	Wallonia	www.oncodna.com	•	•		
ONCURIOUS	3001	Leuven	Flanders	www.oncurious.com		•		
ONELIFE SA	1348	Louvain-La-Neuve	Wallonia	www.onelife-biofilmfree.com	_			•
OOC SPRL	5600	Neuville	Wallonia		•			
ORA NEPTIS	5600	Philippeville	Wallonia	www.neptis-vsa.com	•			
ORIONIS BIOSCIENCES	9052	Zwijnaarde	Flanders	www.orionisbio.com	_	•		
ORTIS SA	4750	Elsenborn	Wallonia	www.ortis.com			•	
OSIMIS	4102	Seraing	Wallonia	www.osimis.io	•			
OVIZIO IMAGING SYSTEMS	1180	Brussels	Brussels	www.ovizio.com	•			
OWS	9000	Gent	Flanders	www.ows.be				•
OXURION	3001	Leuven	Flanders	www.oxurion.com		•		
OXYRANE	9052	Zwijnaarde	Flanders	www.oxyrane.com		•		
P&G	1853	Grimbergen	Flanders	www.nl-be.pg.com	_			•
PALL ARTELIS	3320	Hoegaarden	Flanders	www.artelis.be		•		
PDC LINE PHARMA SA	4000	Liège	Wallonia	www.pdc-line-pharma.com	_	•		
PERSEUS	9830	Sint-Martens-Latem	Flanders	www.perseus.be				•
PFIZER	1050	Ixelles	Brussels	www.pifzer.be	•	•		
PHARMAFLUIDICS	9052	Zwijnaarde	Flanders	www.pharmafluidics.com	•			
PLASMA INDUSTRIES BELGIUM	1120	Brussels	Brussels	www.plasma-industries.be				
POLLET	7501	Tournai	Wallonia	www.pollet.eu				•
PRAYON	4480	Engis	Wallonia	www.prayon.com				•
PROGENUS	5032	Gembloux (Les Isnes)	Wallonia	www.progenus.be			•	
PROMETHERA BIOSCIENCES	1435	Mont-Saint-Guibert	Wallonia	www.promethera.com		•		
PROVIRON	2620	Hemiksem	Flanders	www.proviron.com				•
PUR VER	5030	Gembloux	Wallonia	www.purver.be				•



CAL DIAGNOSTICS	CAL THERAPEUTICS	- BIOTECH	
MEDICAL	MEDICAL	AGRO-BIC	

ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Ш	Ξ	AGI	2 Z
PURNA	2870	Puurs	Flanders	www.purna.be				•
QUALITY ASSISTANCE	6536	Donstiennes	Wallonia	www.quality-assistance.com		•		
QUALITY PARTNER	4040	Herstal	Wallonia	www.quality-partner.be			•	•
QUIMESIS	1300	Wavre	Wallonia	www.quimesis.be		•		
RADIOMATIX	1050	Brussels	Brussels	www.radiomatix.com	•			
REALCO	1348	Louvain-La-Neuve	Wallonia	www.realco.be				•
REDEBEL REGULATORY AFFAIRS	6221	Saint Amand	Wallonia	www.redebel.be				•
REGENESYS BVBA	3001	Leuven	Flanders	www.regenesys.eu		•		
REJUVENATE BIOMED	3550	Heusden-Zolder	Flanders	www.rejuvenatebiomed.com		•		
REMYND	3001	Leuven	Flanders	www.remynd.com		•		
RENASCI	8400	Oostende	Flanders	www.renasci.be				•
RENEWI VALORISATION & QUARRY	1435	Mont-Saint-Guibert	Wallonia	www.renewi.com				•
RENOL	1070	Brussels	Brussels	www.renolcare.com		•		
REVATIS SA	4000	Liege	Wallonia	www.revatis.com		•		
REWIND THERAPEUTICS	3001	Leuven	Flanders	www.rewindtherapeutics.com		•		
ROUSSELOT	9000	Gent	Flanders	www.rousselot.com				•
SAGITTA BIOTECH	7170	Manage	Wallonia	www.linkedin.com/company/sagitta-biotech		•		
SALAMANDER U	5351	Haillot	Wallonia	www.salamanderu.com		•		
SANIFOX	5590	Ciney	Wallonia	www.sanifox.com				•
SANOFI BELGIUM	1831	Machelen	Flanders	www.genzyme.be		•		
SANOFI BELGIUM	1831	Diegem	Flanders	www.sanofi.be		•		
SAPPI	3620	Lanaken	Flanders	www.sappi.com				•
SAVICS	1180	Brussels	Brussels	www.savics.org	•			
S-BIOMEDIC	2340	Beerse	Flanders	www.sbiomedic.com		•		
SCHEPENS	3560	Lummen	Flanders	www.schepenscompany.be				•
SESVANDERHAVE	3300	Tienen	Flanders	www.sesvanderhave.com			•	
SGS LAB SIMON	1301	Bierges	Wallonia	www.sgs.be		•	•	•
SKELETAL CELL THERAPY SUPPORT SA	6041	Gosselies	Wallonia			•		
SOLVAY	1120	Brussel	Flanders	www.solvay.be				•
SOPURA	7180	Seneffe	Wallonia	www.sopura.com				•
SOTECNA	4530	Villers-Le-Bouillet	Wallonia	www.sotecna.be				
SPECTRALYS BIOTECH	6041	Gosselies	Wallonia	www.spectralysbiotech.com		•		
	1050	Brussels	Brussels	www.spectralysbiotech.com		•		
SPENTYS	1050	Brussels	Brussels	www.spentys.com		•		
STEROP	1070	Brussels	Brussels	www.sterop.be				
STRATICELL SA	5032	Gembloux (Les Isnes)	Wallonia	www.straticell.com		•		
SUNRISE (EX NEOMA LABS)	5101	Erpent	Wallonia	www.hellosunrise.com		•		
SYNABS	6041	Gosselies	Wallonia	www.synabs.be		•		
SYNDESI THERAPEUTICS	1348	Louvain-La-Neuve	Wallonia	www.syndesitherapeutics.com		•		



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MEDICAL DIAGNOSTICS
MEDICAL THERAPEUTICS
AGRO-BIOTECH
INDUSTRIAL BIOTECH

ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Σ	Σ	Ă	Z
SYNERGIA MEDICAL	1435	Mont-Saint-Guibert	Wallonia	www.synergia-medical.com		•		
SYNGENTA	9052	Zwijnaarde	Flanders	www.syngenta.be	_		•	
SYNGULON	4102	Seraing	Wallonia	www.syngulon.com			•	
TAKEDA BELGIUM	1930	Zaventem	Flanders	www.takeda.com		•		/
TALIX THERAPEUTICS	1190	Brussels	Flanders	www.talixtx.com		•		
TARADON LABORATORY	1480	Tubize	Wallonia	www.taradon-laboratory.com		-		
TECTERO	9042	Gent	Flanders				-	•
TELEMIS	1348	Louvain-La-Neuve	Wallonia	www.telemis.com	•			
TELIX PHARMACEUTICALS SPRL BELGIUM	4000	Liege	Wallonia	www.telixpharma.com		•		
TEREOS	9300	Aalst	Flanders	www.tereos-starchsweeteners.com				•
TESSENDERLO CHEMIE	3645	Hasselt	Flanders	www.tessenderlo.com				•
THE AUTOMATIC CONTROL LABORATORY	7000	Mons	Wallonia	www.autom.fpms.ac.be	_		•	•
THT	5032	Gembloux (Les Isnes)	Wallonia	www.tht.be			•	
TIGENIX	3001	Leuven	Flanders	www.tigenix.com		•		
TILMAN SA	5377	Baillonville	Wallonia	www.tilman.be	_	•		
TOSOH EUROPE	3980	Tessenderlo	Flanders	www.tosoheurope.com	_			•
TRANSFURANS CHEMICALS	2440	Geel	Flanders	www.polyfurfurylalcohol.com	_			•
TRASIS SA	4430	Ans	Wallonia	www.trasis.com	•			
TRINEAN, PART OF UNCHAINED LABS	9050	Gent	Flanders	www.unchainedlabs.com	•			
TUNSTALL	1083	Brussels	Brussels	www.tunstall.fr	•			
UCB PHARMA	1070	Brussels	Brussels	www.ucb.com	_	•		
	1420	L'alleud	Wallonia	www.ucb.com	_	•		
UCLOUVAIN	1348	Louvain-La-Neuve	Wallonia	www.uclouvain.be		•	•	•
UGENT TECH TRANSFER	9052	Zwijnaarde	Flanders	www.ugent.be/techtransfer	•	•	•	•
UNIVERSITÉ LIBRE DE BRUXELLES	1050	Ixelles	Brussels	www.ulbtto.be	•	•	•	•
ULIÈGE	4000	Liège	Wallonia	www.uliege.be	_		•	
UMONS - PROTEOMICS AND MICROBIOLOGY LAB	7000	Mons	Wallonia	www.web.umons.ac.be	_		•	•
UNAMUR	5000	Namur	Wallonia	www.unamur.be				•
UNI-COM	1200	Brussels	Brussels	www.uni-com.eu	•			
UNIVERCELLS	6041	Gosselies	Wallonia	www.univercells.com		•		
VAN HEEDE	7040	Quevy	Wallonia	www.vanheede.com	_			•
VANDEPUTTE OLEOCHEMICALS	7700	Mouscron	Wallonia	www.vandeputte.com				•
VÉSALE PHARMA	5310	Noville-Sur-Mehaigne	Wallonia	www.vesalepharma.com		•	•	•
VIROVET	3001	Leuven	Flanders	www.virovet.com		•		
VITRICELL	4000	Liège	Wallonia	www.beangels.eu/deals/vitricell		•		
"VRIJE UNIVERSITEIT BRUSSEL	1050	Ixelles	Brussels	www.vubtechtransfer.be	•	•	•	•
WAL.AGRI	5140	Sombreffe	Wallonia	www.walagri.be			•	
WBC VENTURES	4000	Liège	Wallonia	www.wbc.ventures		•		
WISHBONE	4400	Flemalle	Wallonia	www.wishbone-biotech.com		•		



EDICAL DIAGNOSTICS	EDICAL THERAPEUTICS	RO-BIOTECH	
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ENTITY NAME	ZIP	CITY	REGION	WEBSITE	Σ	Σ	AG	Z
XPRESS BIOLOGICS	4041	Milmort	Wallonia	www.xpress-biologics.com		•		_
YAKULT HONSHA EUROPEAN RESEARCH CENTER FOR MICROBIOLOGY	9052	Gent	Flanders	www.institute.yakult.co.jp/english/about/labo/			•	
YESSE TECHNOLOGIES BVBA	3000	Leuven	Flanders	www.mousensor.com	•			
YUN	2845	Niel	Flanders	www.yun.be				•
ZEBRA ACADEMY	1050	Brussels	Brussels	www.zebra-telemedicine.com		•		
ZENTECH	4031	Angleur	Wallonia	www.zentech.be	•			
ZOETIS BELUX	1348	Louvain-La-Neuve	Wallonia	www.zoetis.be		•		
YESSE TECHNOLOGIES BVBA YUN ZEBRA ACADEMY ZENTECH ZOETIS BELUX	3000 2845 1050 4031 1348	Leuven Niel Brussels Angleur Louvain-La-Neuve	Flanders Flanders Brussels Wallonia	www.mousensor.com www.yun.be www.zebra-telemedicine.com www.zentech.be www.zoetis.be	•	•		



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