The Danish Government

Strategy for life science towards 2030

NOVEMBER 2024

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Preface

The life science industry in Denmark stands on the shoulders of a long and impressive history. Groundbreaking solutions such as insulin, hearing aids and ostomy bags originate from Denmark's life science sector. In addition, the collaboration between life science companies, the healthcare system and Danish researchers has helped to significantly improve the treatment and quality of life for patients while the sector also plays a crucial role in solving future healthcare challenges.

In recent years, the life science industry has grown in both size and importance for Danish growth and prosperity. Today, life science is a dominant industry in the Danish economy and one of Denmark's most important commercial strongholds. In other words, the life science sector is a cornerstone in our economy, while it benefits our welfare state, healthcare system and patients in this country and around the world.

At the same time, we face the reality of an aging population, more patients with chronic diseases and major recruitment challenges. This calls for public-private collaboration and innovative solutions, because the sector can and will contribute to solving the challenges we face. It is more important than ever that the foundation is in place to ensure that good solutions make it all the way to the patient - especially in a healthcare system that has developed many groundbreaking treatment options.

Therefore, we can write a new chapter in the history of life science if we manage to realise the huge potential of the sector by 2030. This raises a simple yet critical question: How do we accelerate the positive development of Danish life science in a rapidly changing world?

Behind the sector's many innovative solutions is a strong foundation of healthcare research, a willingness to invest, technological know-how and, not least, highly skilled employees. It is the innovative, technology-driven solutions that will become the disease prevention, diagnostics and treatment options of the future while simultaneously releasing time for our healthcare professionals to focus on their core task.

These conditions, among others, are crucial if we are to have a smart healthcare system and realise the industry's potential towards 2030. However, this development does not happen by itself and there are no quick fixes. As a small, open economy, Denmark is deeply dependent on other countries, which is why Danish companies are impacted when stability and trade become replaced by increased tensions between great powers, protectionism, concerns about supply chains for our businesses, restrictions on access to raw materials and wars around the world.

The changing world means that business politics has become geopolitics, and health and business politics are becoming even more intertwined. And we therefore need to reinforce our strongholds. That we need to attract foreign investments to Denmark. That we need to make it even easier to create tomorrow's innovative solutions and to establish and run a business. That the international effort must be targeted, expanded and coordinated so that Denmark is a strong player both in the EU and around the world. That life science companies and public authorities through Danish health diplomacy need to cooperate more effectively to improve the conditions for exports to priority markets.

That is why the Government is now presenting Denmark's new life science strategy. A strategy that towards 2030 will create even better framework conditions, develop the life science industry as a Danish position of strength and contribute to creating a coherent and future-proof healthcare system for the benefit of patients. A strategy that will support Denmark's future position as a world leader in innovative life science solutions and world-class patient care. A strategy with the clear ambition for Denmark to become a leading life science nation in Europe. The strategy will support the sector's opportunities to further increase exports towards 2030 and ensure that the sector's solutions contribute even more to creating a coherent, robust and future-proof healthcare system.

The strategy has been developed in close collaboration with relevant stakeholders to get a clear picture of the challenges across the sector and to ensure that the strategy is based on initiatives that can make a difference in the sector. In continuation of this, we would like to acknowledge the great work of the Danish Life Science Council. The Danish Life Science Council has specified a clear direction for how Denmark can become Europe's leading life science nation by accelerating long-term structural development, and the Council's recommendations have therefore been an important starting point for the Government's life science strategy.

With the strategy in place, it is now time to execute the strategy so we can realise the great potential in the industry. So we together can write a new groundbreaking chapter in the history of the life science sector in Denmark and internationally.

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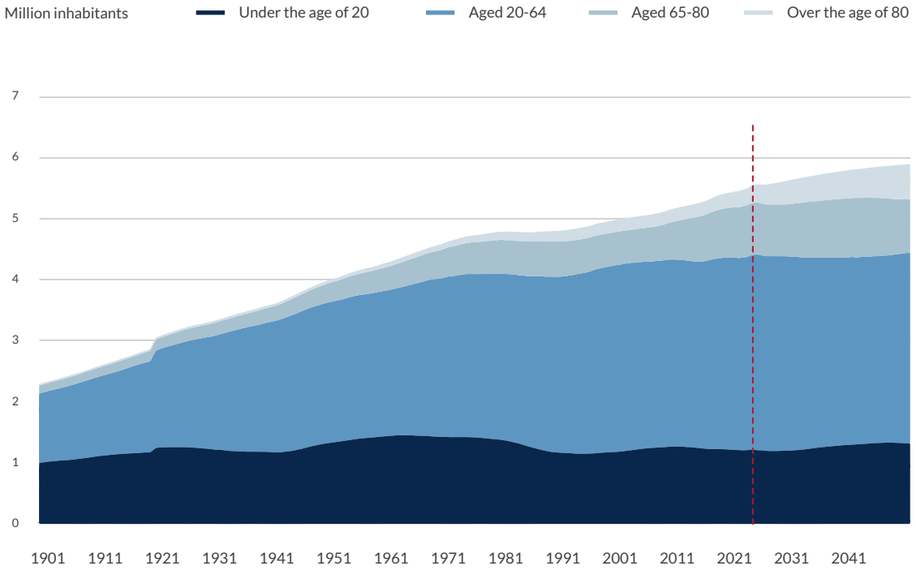
Challenges and opportunities for Danish life science

The life science sector is one of Denmark's most important commercial strongholds and a fundamental part of our welfare society. The sector's innovative research and healthcare solutions are created in close collaboration between companies, researchers and healthcare professionals, and they contribute to creating crucial developments for patient treatments and new workflows in our healthcare system, while the industry also contributes significantly to the Danish economy being as strong as it is today.

However, geopolitical tensions and a changing competition landscape have a direct impact on Danish life science companies. International markets are putting up barriers around themselves, and the competition and international race for attractive framework conditions and for attracting investments has intensified. It has become fundamentally more difficult to navigate in a reality characterised by increased uncertainty, complexity and geopolitical competition.

Figure 1

Population growth by age group, 1901-2050



Source: Sundhedsstrukturkommissionen: Sundhedsvæsenets udfordringer. ('Health Structure Commission: The challenges of healthcare.') 2023. Statistics Denmark, StatBank Denmark, tables BEFOLK1 and FRDK123

The healthcare system is facing major challenges in Denmark and many other countries. We are no longer just talking about the demographic drag but about the "double demographic pressure" resulting from more elderly people and citizens with chronic diseases while the healthcare system is increasingly experiencing a shortage of staff.

Despite a high level of innovation in the life science sector, it is often too slow to deploy and implement effective and innovative healthcare solutions that can improve the quality of life, preventive measures and treatment options for individuals while at the same time ease the pressure on the healthcare system.

The global and national health and economic political challenges require political action. That is why the life science strategy contains a number of concrete initiatives impacting the entire sector. The initiatives aim, among other things, to strengthen the life science ecosystem to make it easier for new companies to establish themselves and gain foothold as well as to ensure close public-private collaboration where patients and healthcare professionals benefit from the sector's effective and innovative solutions. Finally, the initiatives must contribute to creating better conditions for production, labour and investments, including from foreign companies.

What is life science?

Life science is a term that covers several areas, defined in this publication as pharmaceuticals, medical biotechnology and medical devices, including health technology, assistive technology, welfare technology, healthcare applications, AI solutions, etc.

They shall also strengthen the prerequisites for export, international cooperation and the promotion of Danish interests both in the EU and internationally.

The strategy contains five chapters covering the key challenges and opportunities for the sector and a number of initiatives in key areas. However, realising the level of ambition and opportunities in Danish life science also requires both public and private actors to engage in the realisation of the strategy's goals and initiatives so that the life science sector can reach the next level.

Recruitment is becoming more difficult

In the coming years, a generational shift will lead to high employee turnover and a worsening recruitment situation in the healthcare sector.

This is especially true for social and healthcare assistants and social and healthcare helpers who make up a large proportion of employees in the municipal healthcare and elderly care.

The importance of the industry for Denmark

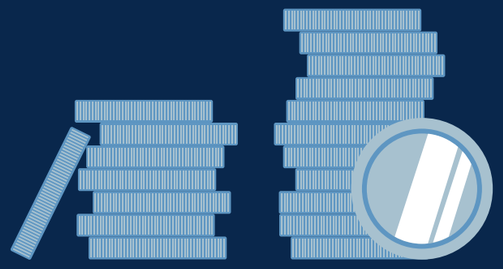
In recent years, the life science industry has grown in both size and importance for Danish growth and prosperity. Today, the life science industry is a driving force behind Denmark's GDP growth and one of Denmark's key positions of strength.

Life science is also one of Denmark's largest export industries. There has been a positive development in Danish exports of life science products over the past 13 years. Exports have increased from DKK 65 billion in 2010 to a whopping DKK 174 billion in 2023. With an average annual export growth rate of over 8 pct., the life science industry has managed to increase exports significantly during this period. In 2023, exports from the life science industry accounted for almost 20 pct. of Denmark's total export of goods. The preliminary export figures from 2024 also show that life science exports in the first half of the year are higher this year compared to 2023.

In addition, there are the exports that do not cross the Danish border, i.e. products that are produced by Danish companies abroad and sold abroad. For the life science industry, these exports are estimated to have grown from DKK 55.7 billion in 2022 to DKK 107.7 billion in 2023.

The employment in Denmark's life science industry has also grown significantly in recent years. From 2010 to 2021, employment in the life science industry grew by 43 pct., and in 2021, the latest year for which we have data, life science companies in Denmark employed over 63,000 full-time equivalents (FTEs). Every year, the industry creates more Danish jobs for people of all levels of education.

In 2021, the life science industry contributed DKK 36.5 billion to public finances in the form of corporate taxes and personal taxes. Of the DKK 36.5 billion, DKK 22.7 billion was personal taxes from



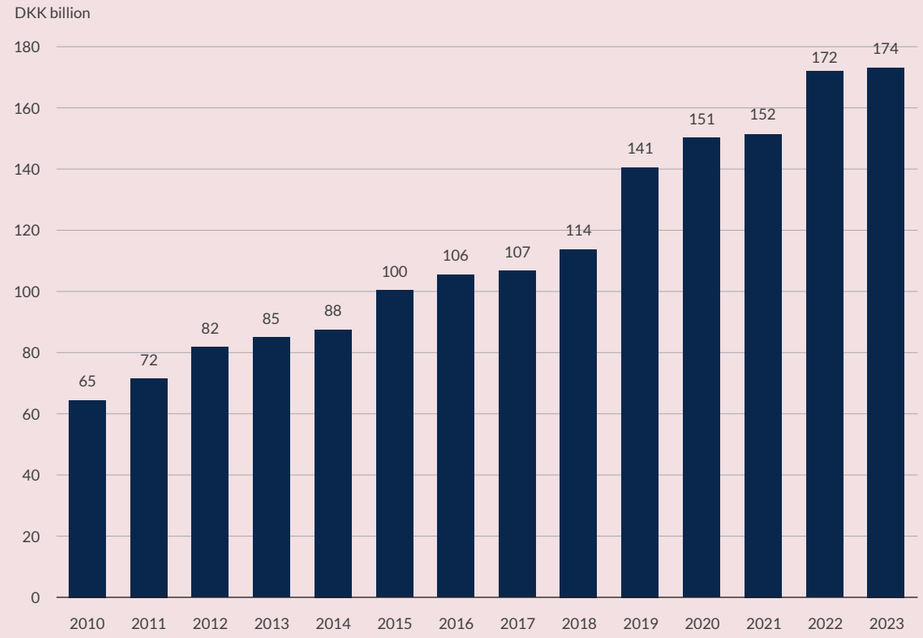
DKK 36.5 billion

In 2021, the life science industry contributed DKK 36.5 billion in tax payments.

Source: Ministry of Industry, Business, and Financial Affairs based on Statistics Denmark, 2024.

Figure 2

Export of Danish life science products, 2010-2023

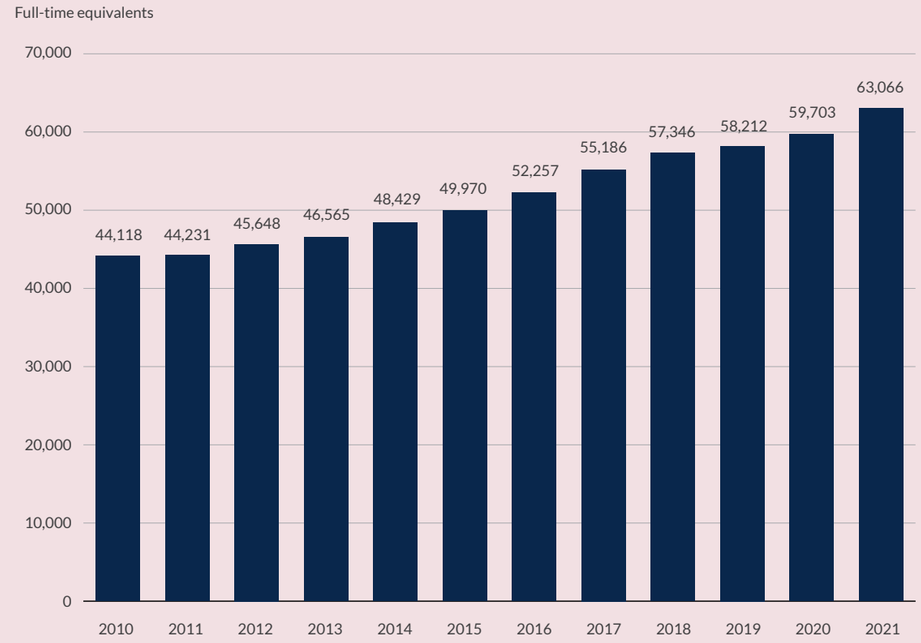


Note: The export calculation is based on the border crossing principle, i.e. it covers the exports that cross the Danish border. Statistics Denmark has revised the export figures in 2024.

Source: Ministry of Industry, Business, and Financial Affairs based on Statistics Denmark, 2024.

Figure 3

Employment in the Danish life science industry, 2010-2021



Source: Ministry of Industry, Business, and Financial Affairs based on Statistics Denmark, 2024.

employees in life science companies, i.e. income taxes and labour market contributions. The remaining DKK 13.8 billion was life science companies' corporate tax payments. The tax revenue collected from companies and employees in the life science industry has more than doubled between 2010 and 2021.

The importance of the life science industry to the Danish economy is also clear when you look at the industry's production. The pharmaceutical industry, which makes up the largest share of the total life science industry, has been crucial to the growth in total industrial production in Denmark in recent years, cf. figure 4.

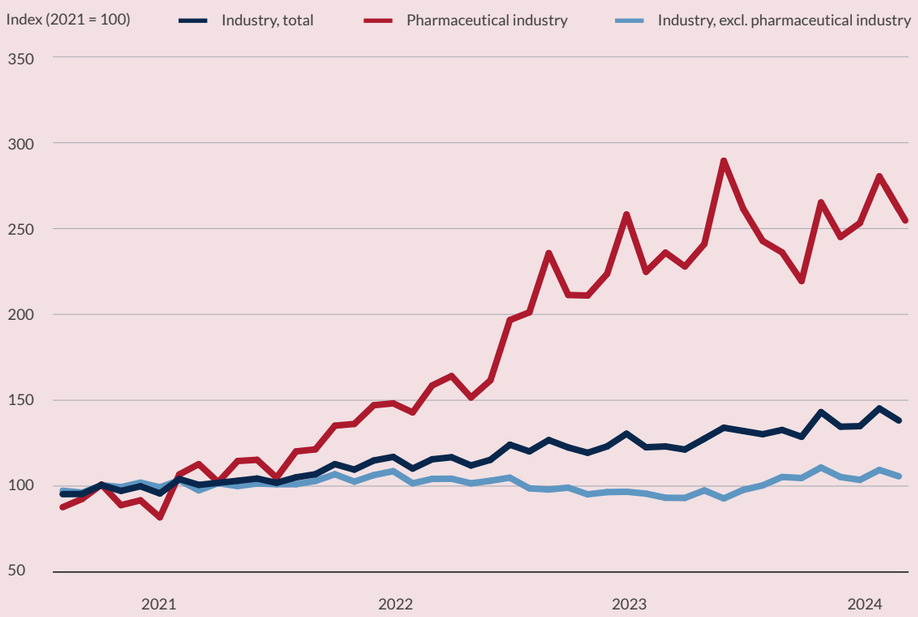
In addition, the pharmaceutical industry has boosted the overall value creation in the Danish economy in recent years. The economy has seen a general increase in gross value added since 2020, followed by a significant increase in value creation from 2021 driven by the pharmaceutical industry, cf. figure 5.

For those reasons, Denmark is one of the countries in Europe with the highest productivity and value added for the life science sector. In addition, Denmark is one of the countries with the largest proportion of people employed in the life science industry. Denmark also has a strong profile in life science research and the publishing of life science-related publications. Denmark is also relatively highly ranked compared to other EU countries when it comes to the number of clinical trials per capita. However, there are many European countries that export more life science products in absolute terms than Denmark, including Germany, Belgium, the Netherlands, Ireland, France and Italy.

Denmark has relatively high level of access to new, effective medicines compared to other European countries. The presence of a strong pharmaceutical industry and research environment helps to make Denmark an attractive country to market innovative treatments in - even though the Danish market is quite small compared to other European markets. These factors also contribute to Denmark being able to maintain a relatively stable security of supply when it comes to medicines that benefit Danish patients.

Figure 4

Industry production, 2021-2024

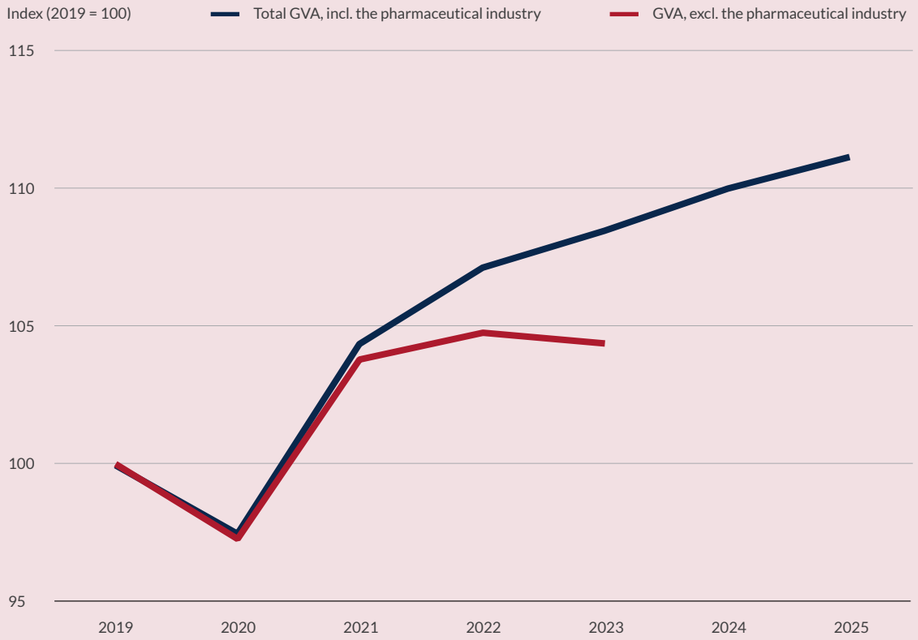


Note: The numbers in the figure are seasonally adjusted. The numbers are calculated as an index, i.e. in relation to a certain starting point, specifically the production in 2021 which is set as the baseline figure of 100.

Source: Statistics Denmark, 2024.

Figure 5

Gross value added (GVA), 2019-2025



Note: Gross value added (GVA) is calculated for each industry as production at basic prices minus intermediate consumption at purchaser prices. GVA is calculated as an index, i.e. in relation to a certain starting point, specifically the GVA in 2019, which is set as the baseline figure of 100. 2024 and 2025 show the expected gross value added.

Source: The Ministry of Economic Affairs : Økonomisk Redegørelse ('Economy Report'), December 2023.

Vision and benchmarks towards 2030

The national strategy for life science specifies the direction for the development of the life science sector in Denmark towards 2030. The strategy builds on the 2018 Growth Plan for Life Science and the 2021 Strategy for Life Science, and it is based on the recommendations the Government received from the Life Science Council in December 2023. The strategy has been developed in close collaboration with relevant stakeholders to get a clear picture of the challenges across the sector and to help ensure that the strategy is based on initiatives that can make a difference in the sector.

The previous strategies have created a solid foundation and launched a number of important initiatives that have contributed to Denmark being a strong life science nation today. However, there is still great deal of unrealised potential. If we create the right framework and strengthen the close collaboration between public and private actors, the life science industry in Denmark can grow significantly in the coming years. Estimates suggest that exports could increase to around DKK 350 billion in 2030, which is double the current level. We can also achieve a smarter and future-proof healthcare system for the benefit of patients if we improve access to innovative healthcare solutions and treatments and more effectively bring research and knowledge about patients into play.

The Government's vision is for Denmark to be a leading life science nation in Europe by 2030. The strategy will support the sector's opportunities to double exports by 2030 and aim to ensure that the sector's solutions contribute even more to creating a coherent, robust and future-proof healthcare system.

As an extension of the vision, the Government has specified six strategic benchmarks, all of which play an important role in the development of life science in Denmark. In order to monitor the progress of the strategic milestones towards 2030, a number of indicators have been selected.

The vision and strategic milestones are intended to specify a common direction and unite actors in and around the life science sector around the common goals. The Danish Life Science Council is broadly composed of representatives from Danish and foreign life science companies, the healthcare system, research institutions, patient associations, business organisations and trade unions and has a natural role to play in this context. If the development of the life science sector is to reach the specified benchmarks, it will therefore require that all actors contribute.

Benchmarks		Indicators
1	Denmark must do more to support new viable companies in the life science industry.	Denmark should be among the countries in Europe that create the most new, viable life science companies per million inhabitants.
2	Via a stronger research and IT infrastructure, Denmark must translate our unique healthcare data into groundbreaking research, the dissemination of artificial intelligence and increased innovation to create better treatments for patients.	In the years leading up to 2030, Denmark should be among the countries in Europe that conduct the most clinical trials per million inhabitants.
3	Denmark must promote access to innovative, effective and labour-saving healthcare solutions and innovative medicines to improve the health of citizens and to future-proof the healthcare system.	Denmark must be among the countries in Europe that quickly provides patients with access to new, effective healthcare solutions (pharmaceuticals and medical devices) where there is documented and cost-effective added value.
4	Denmark must support attractive framework conditions in order to attract more life science production and more foreign investments.	By 2030, the life science industry's production activities and foreign investments in Danish life science must be above the level in 2024, measured by the index of pharmaceutical industry production and foreign investments in Danish life science.
5	Through a focused health diplomacy and cooperation between public authorities, Denmark must continue to play an active international role to solve global health challenges and support the export of Danish healthcare solutions.	Better export conditions in the Danish focus markets (Germany, UK, USA, France, Japan, South Korea, Norway and Canada) are to contribute to increased exports, thereby helping Danish life science exports reach DKK 350 billion in 2030.
6	Denmark must be a strong player in the EU to support Europe as an attractive life science region and ensure that Denmark's life science sector operates in competitive regulatory framework conditions.	The joint European framework conditions must contribute even more to supporting companies' investments in research and development in the European life science industry - as is the case in the US.

Vision for life science in Denmark towards 2030:

Denmark must be a leading life science nation in Europe for the benefit of patients, the Danish healthcare system and the Danish economy.

Overview of new initiatives

1 A stronger growth layer

1.1. Explore opportunities to promote access to venture capital, including working to promote joint European initiatives

2 Enhanced research and better use of health data

2.1. Establish a fourth Medical Research Ethics Committee (MREC) and initiate analysis work in the field of research ethics

2.2. Further develop Trial Nation

2.3. Continue to strengthen clinical research

2.4. Realise *the vision for a better use of health data*

2.5. Initiate strategic work to deploy artificial intelligence in the healthcare system

3 Better uptake of innovation in the healthcare system

3.1. Establish a health innovation index

3.2. Conduct an analysis regarding impact assessments of digital healthcare solutions

3.3. Further develop the data-driven model for value-based procurement

3.4. Investigate the possibilities for establishing a National Centre for User Collaboration ('Nationalt Center for Brugersamarbejde')

3.5. Initiate a strategic work on labour-saving solutions in the Danish healthcare system

3.6. Conduct an analysis on alternative pricing models

3.7. Promote the development and deployment of ATMPs

4 Attractive framework conditions for production and more foreign investments

4.1. Designate new industrial parks

4.2. Create a one-stop shop for manufacturing companies

4.3. Work to attract more foreign investments

4.4. Explore the possibilities for better use of water in pharmaceutical production

4.5. Introduce a model for industry differentiation of the requirement for a separate work permit

4.6. Establish an international elite summer school

5 International cooperation and health diplomacy

5.1. Strengthen and target bilateral authority cooperation and health diplomacy

5.2. Retain and attract foreign investments in life science

5.3. Increase company involvement and public-private collaboration on export and investment

5.4. Strengthen the marketing of Danish life science via Healthcare Denmark

5.5. Strengthen the EU-level political action in life science and industrial policy

5.6. Strengthen Denmark's engagement in the European cooperation on Heads of Medicines Agencies (HMA) and the European Medicines Agency (EMA)

6 Together for the development of the life science sector

6.1. Continue the work of the life science units

6.2. Conduct an external evaluation of the strategy

6.3. Increase security in the Danish life science environment

Chapter 1

A stronger growth layer

The growth of life science in Denmark has been rapid in recent years, driven primarily by a few large medical and pharmaceutical companies. Large and strong companies are important for the economy, and especially for patient care and healthcare - but it is also important that we strengthen the entire growth layer of life science companies and ensure that we create the best possible framework for startups so that even more life science companies can grow into great Danish scaleups.

Denmark is well placed to create more successful new life science companies. Denmark has a strong position when it comes to research and development in the healthcare and life science sectors. This is largely due to the massive investment in health and life science research in recent years from both the public and private sector. The investments come from the public research-financing funds and the research reserve as well as funds spent on research in the regions. The universities' basic research funds also contribute. In 2022 alone, more than DKK 12 billion was spent on health research in the public sector. This makes health research the single largest research area in Denmark. In 2020, life science companies invested almost DKK 16 billion in their own research and development, which corresponds to approximately one third of the Danish business community's total investments in their own research and development. Denmark's strong position in the field of health-related scientific research is also reflected in the fact that Denmark is at the top of the ranking list when calculating life science publications per million inhabitants among European countries.

However, there is still potential to better translate health science research and development into innovation and entrepreneurship in the life science sector. Several analyses show that Denmark is not sufficiently able to translate its strong position in research into new viable companies. We need do better in this area. There are great benefits for our

Strategic benchmark

Denmark must do more to support new viable companies in the life science sector.

Indicator towards 2030

Denmark should be among the countries in Europe that create the most new, viable life science companies per million inhabitants.

society, patients and the healthcare system if Denmark succeeds in translating more of the groundbreaking life science research and knowledge at Danish universities and hospitals into new products and companies.

With the strategy for life science, we must ensure that Denmark better supports new viable companies in the life science sector. We can achieve this by:

- Creating closer collaboration between research environments, healthcare and businesses
- Promoting access to venture capital

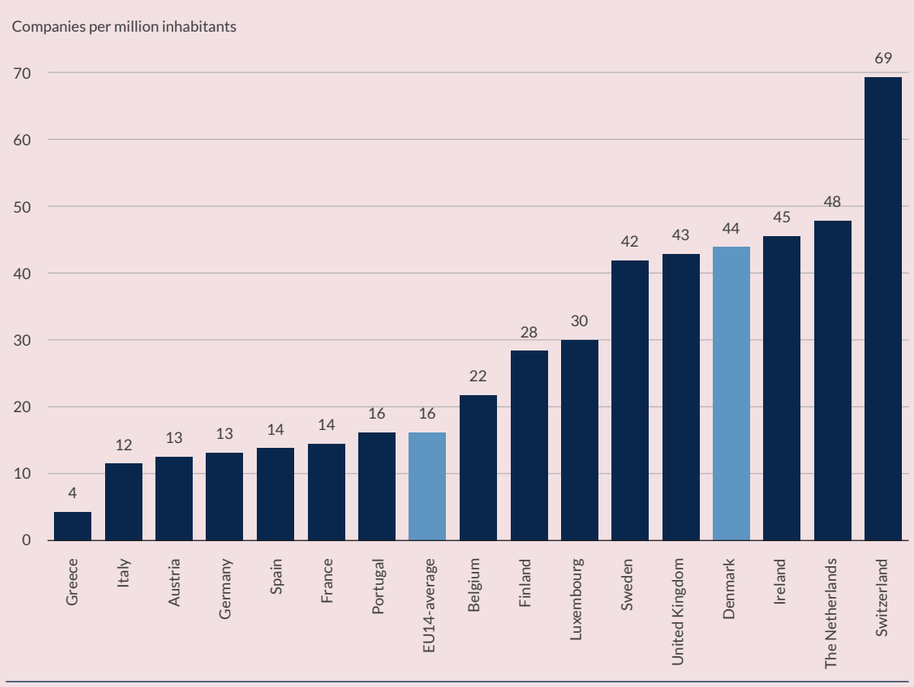
Figure 1.1

Indicator 1:

Viable life science companies per million inhabitants, 2015-2020

Note: The figure includes the EU14 countries, the UK and Switzerland. The period measured is 2015-2020, as this is where the data is most robust due to data delays on the number of startup companies. Viable life science companies are in this context defined as new companies that have reached the Series A funding stage or have been around for at least three years.

Source: Ministry of Industry, Business, and Financial Affairs based on Amsterdam Data Collective, extracted from the Crunchbase database and World Bank Group 2023.



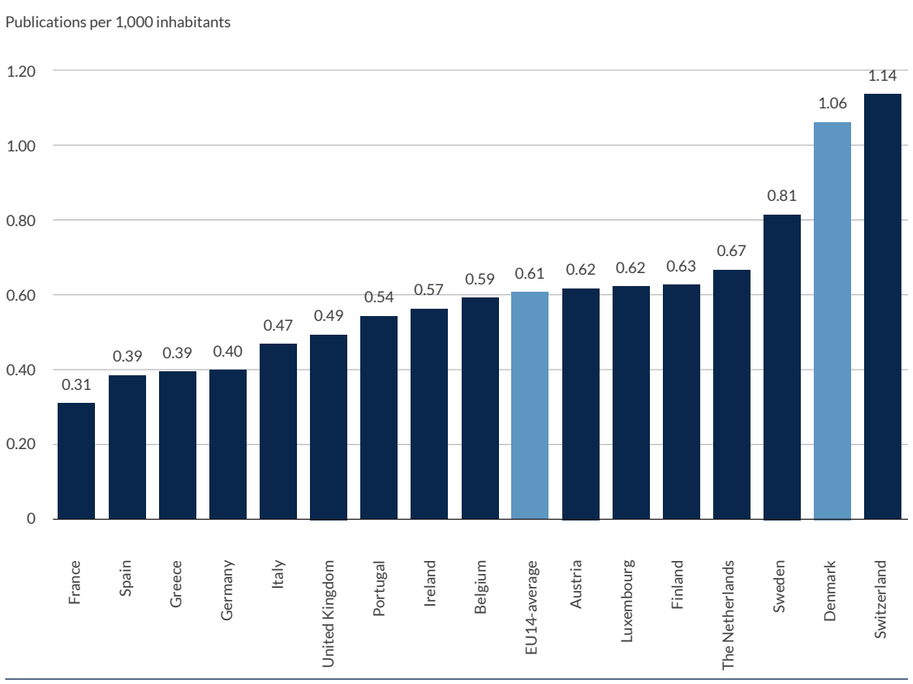
Closer collaboration between research environments, the healthcare system and companies

Today, Denmark is one of the leading life science nations when it comes to the number of life science publications published per thousand inhabitants, but we are not able to translate that research into new viable companies or products that can make a difference for our healthcare system and patients.

An important key to translating more research into successful companies is to bring our life science ecosystem even closer together. By uniting the efforts from universities, the healthcare system and companies, we can pave the way for even more innovation. We know that close physical proximity between research institutions, healthcare facilities and companies makes a difference. The close proximity supports the free flow of important knowledge, allows people with the same expertise to meet easily and fundamentally it just becomes easier to create interdisciplinary collaborations.

Figure 1.2

Life science publications per 1,000 inhabitants, 2022



Note: The figure includes life science related publications in the EU14 countries, the UK and Switzerland.

Source: Ministry of Industry, Business, and Financial Affairs based on Amsterdam Data Collective, extracted from Scopus database and World Bank Group, 2023.

The Danish Life Science Cluster

The Danish Life Science Cluster is a Danish national cluster that builds bridges, drives innovation and creates networks between companies, knowledge environments, the healthcare system, municipalities and organisations in the life science and welfare technology sectors. The cluster works to translate the unique Danish research and knowledge in the life science sector into new and better commercial solutions. The Danish Life Science Cluster was established in 2020 with hubs in Copenhagen, Aarhus, Odense and Aalborg and has a number of partners, including regions, knowledge institutions, business organisations, etc.

Nowhere in the world is the value of this interaction more evident than in Kendall Square in Cambridge, Massachusetts. Here, the Massachusetts Institute of Technology (MIT), government agencies and life science and tech companies (for example, pharmaceutical and biotech companies as well as Google, Microsoft and IBM) have created a world-leading innovation district that has been the starting point for world-changing innovations such as the internet, satellite navigation, nuclear and renewable energy solutions, medical and pharmaceutical technologies, robotics, artificial intelligence, etc. In recent years, there has been a positive development in the interaction between universities, hospitals and companies in Denmark. A good example is the burgeoning innovation environment that has emerged around the University of Copenhagen's faculties of health sciences and natural and life sciences, Rigshospitalet, University College Copenhagen's health campus and the BioInnovation Institute. At the same time, the national cluster programme, which includes the Danish Life Science Cluster, aims to promote innovation collaboration between companies, research and knowledge environments and other actors in the ecosystem.

However, there are still barriers and challenges when it comes to translating even more research into innovation and entrepreneurship. Therefore, there is a need to accelerate efforts to ensure that future healthcare solutions are developed in Denmark.

The Government wants to create a closer collaboration between research environments, the healthcare system and companies to strengthen the development of innovative solutions within the life science sector. With the Agreement on the Entrepreneurship Package, a number of initiatives will be launched to further strengthen this collaboration in order to create even better conditions for the life science sector in Denmark.

Business lighthouse Life Science

In the 2023-2026 period, the Government has prioritised funding for DKK 72.8 million for Business lighthouse: Life Science, which is a business promotion initiative to strengthen public-private partnerships in the healthcare sector. For example, a wide range of public and private actors have come together to develop new solutions through the 'lighthouse' partnership model. With Novo Nordisk and Lundbeck as well as Erhvervshus Hovedstaden and the Danish Life Science Cluster as frontrunners, the lighthouse initiative creates public-private partnerships and collaborative projects between the healthcare sector, knowledge institutions, municipalities and innovative small and medium-sized enterprises.

With the Agreement on the Entrepreneurship Package, it has been agreed to:

- **Establish a world-leading innovation centre for life science and quantum technology** called 'Innovation District Copenhagen' in close collaboration with the University of Copenhagen and the City of Copenhagen as well as other private and public actors.
- **Create a uniform and efficient system for knowledge and technology transfer** from universities to companies to make this process easier. A task force will be established and tasked with preparing a proposal for a concrete model for knowledge and technology transfer across Danish universities.
- **Create a better framework for interaction between universities and companies** by amending the Danish Campus Act to improve opportunities for physical proximity on campuses and a better framework for collaboration on research and innovation between universities and companies, including entrepreneurs, on campuses.
- **Strengthen incentives for researchers to collaborate with the business community** to create a credit structure that, to a greater extent, rewards knowledge dissemination, including business collaborations, innovation, entrepreneurship, etc.
- **Increase the cap on tax credits for research and development (R&D) expenditure** from DKK 25 million to DKK 35 million, allowing companies to claim the tax value of losses arising from R&D expenditures of up to DKK 35 million annually. At a corporate tax rate of 22 pct., this means that up to DKK 7.7 million can be paid out annually. This reinforces the incentive to invest in research and development for research-intensive companies. The initiative will take effect from the 2027 income year. In addition, a study will be launched to determine whether the current delimitation of research and development activities is still contemporary.
- **The patent voucher scheme**, which provides subsidies to SMEs for the costs associated with a patenting process, will also be strengthened.
- **Establish a new intellectual property fast track for entrepreneurs** to provide entrepreneurs and small businesses with guidance on how to begin using and protecting their intellectual property.
- **Continue the Open Entrepreneurship project**, which is a collaboration across all Danish universities to support startups. The project has proven to be an effective way to create a stronger entrepreneurial culture among researchers and students at Danish universities and to specifically support the establishment of more new research-based startups from universities.
- **Strengthen universities' innovation efforts and collaborations with companies** by targeting funds to universities' innovation initiatives to support the implementation and commercialisation of research. At the same time, universities must specify goals and describe concrete initiatives in the multi-year strategic framework contracts and provide better and more robust data for university innovation and entrepreneurship activities.

Better access to venture capital

Denmark has developed several large life science companies in the past. For example, eight of the companies in the Danish C25 stock market index are life science companies. However, access to venture capital is important for the creation of more life science companies and for good ideas to be turned into startups and, eventually, viable businesses. This is not least due to the long development time and the high degree of technological uncertainty and market uncertainty associated with the development of new treatments and solutions in the life science sector.

Limited access to venture capital could lead to some healthcare solutions never making it out of the lab and into the hands of individual patients where they could save lives, create wealth and new jobs and strengthen the healthcare system by, for example, freeing up resources. At the same time, there is the risk that Danish startups instead move to the United States, the UK or other European countries with better access to venture capital - especially when the growth journey really begins taking off and the need for capital increases significantly.

EIFO's investments in life science

In 2023, EIFO ('Export and Investment Fund of Denmark') made direct investments in life science of DKK 283 million (excluding fund investments) out of a total invested amount of DKK 914 million, corresponding to around one third of the total investments.

An essential prerequisite for more entrepreneurs being able to successfully grow their business in Denmark is that they can invest in the development of their business. Therefore, with the Agreement on the Entrepreneurship Package, it has been decided - among other things - that access to capital will be strengthened by repealing the taxation of companies' dividends from unlisted portfolio shares and increasing the progression limit for taxation of personal share income. The agreement includes an end to what some refer to as the "phantom tax" and it allows for the possibility of deferring the tax payment with the sales price being paid in instalments. There needs to be an option to select capital gains taxation of companies' newly listed portfolio shares

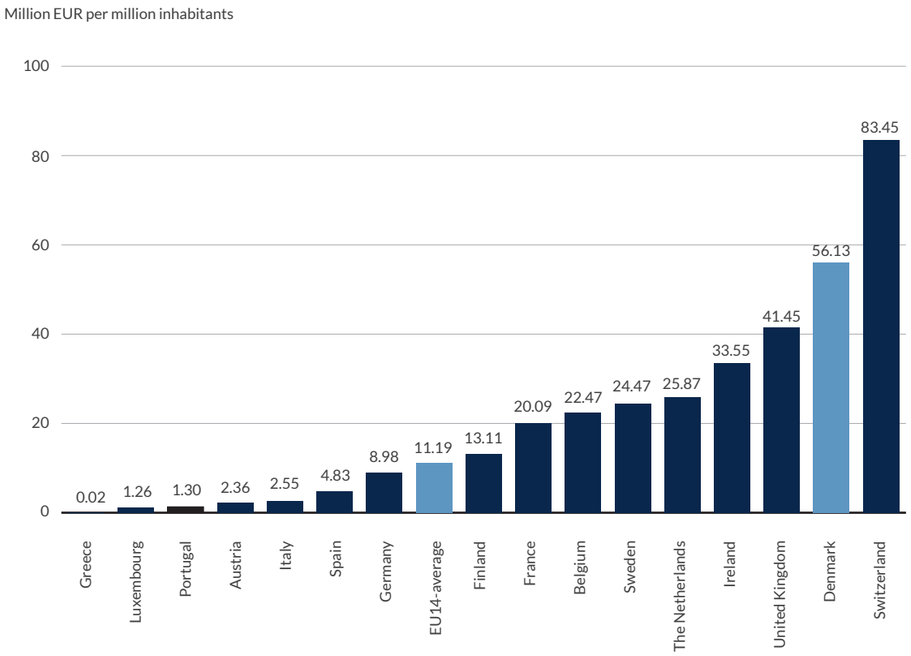
for a period of seven years after listing. At the same time, the Export and Investment Fund of Denmark's (EIFO) capacity to support companies' access to capital where private investors are unable to finance it on their own is to be strengthened.

In addition, the Government wants to initiate work to investigate the possibilities of improving access to venture capital. The goal is to support the private capital market through market-based efforts and collaborations with private investors, for example through the Export and Investment Fund of Denmark (EIFO) and/or under the auspices of the European Investment Bank (EIB), ensuring that more research can be translated into innovation, startups and, subsequently, viable businesses that can deliver healthcare solutions for the benefit of society, the healthcare system and patients.

> "Access to venture capital is an important factor for the creation of more life science companies and for good ideas to be turned into startups and eventually viable businesses.

Figure 1.3

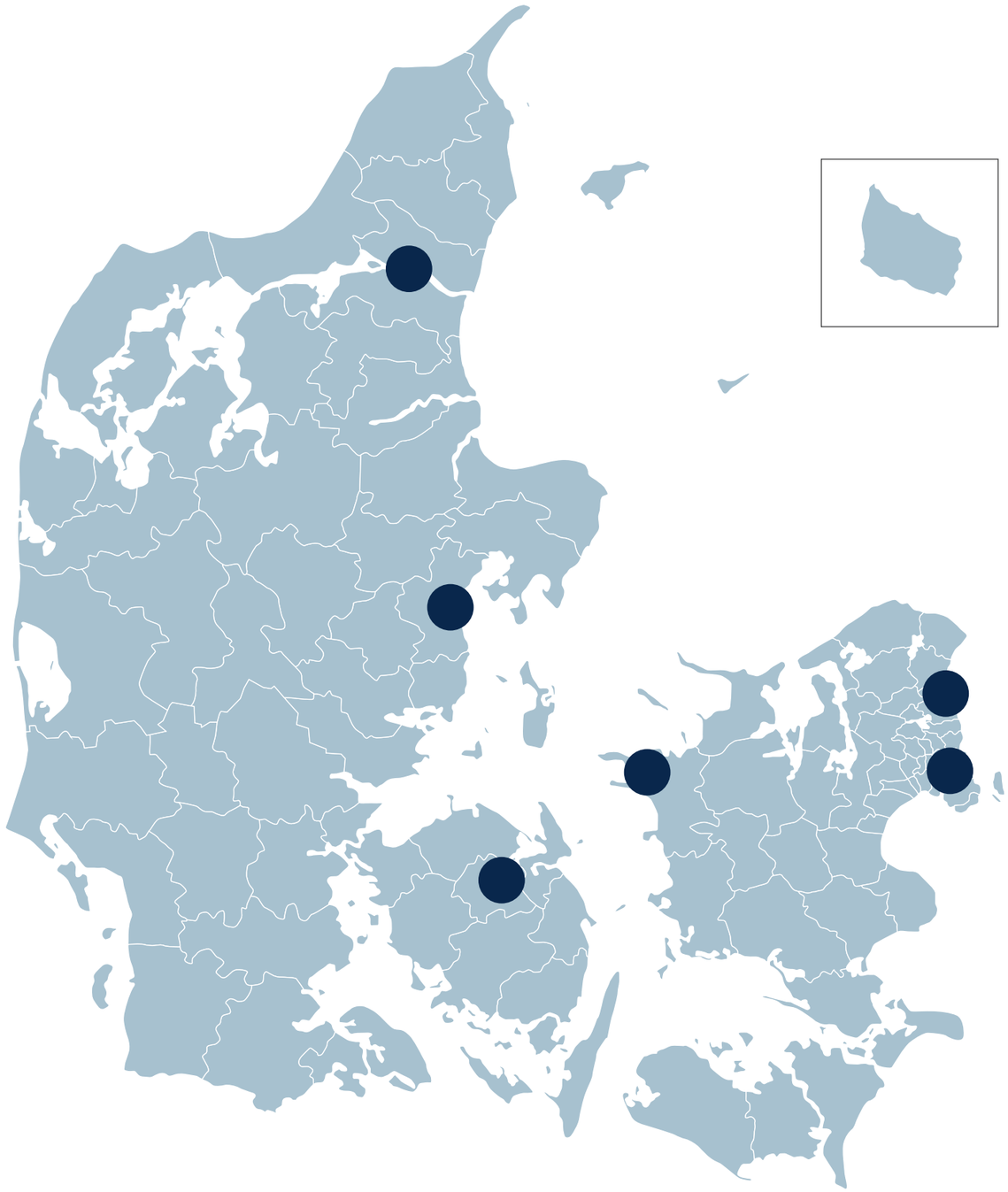
Venture investments in life science companies per million inhabitants, 2023



Note: The figure includes funding in the pre-seed, seed, Series A, Series B and Series C+ stages in the EU14 countries, UK and Switzerland. Venture investments in life science companies are calculated as a 3-year average due to large annual fluctuations. The 2023 value thus reflects the average for the 2021-2023 period.

Source: Ministry of Industry, Business, and Financial Affairs based on Amsterdam Data Collective, extracted from Crunchbase database and World Bank Group, 2023.

World-class research and innovation environments in the life science sector



Aalborg

Aalborg has a strong position in MedTech due to a close collaboration between Aalborg University, Aalborg University Hospital and a number of other life science actors and companies where technical and health science competencies converge in the development of innovative solutions.

The ecosystem will be further strengthened when the new business area, Novi Medi Park, near the new Aalborg University Hospital is completed.

Aarhus

With Aarhus University, Aarhus University Hospital and the business environment

INCUBA Skejby, Aarhus is one of Denmark's most knowledge-intensive areas in the life science sector and particularly the biotech sector.

A solid foundation for the commercialisation of bio-tech research has been created through a number of successful spinouts. For example, 8 of the 10 largest investments in spin-outs from Aarhus University in the 2020-2023 period were in life science companies.

Odense

An innovative life science network has been established across public and private actors around Odense. Odense also has a strong foundation in health technology and welfare technology.

This is partly due to Odense's regional stronghold in robotics and the strong public-private partnership in the healthcare sector between the robotics cluster Odense Robotics, Health Innovatoin Centre of Southern Denmark, Odense University Hospital, University of Southern Denmark and many more companies and institutions.

Kalundborg

A unique ecosystem in an international context has been created centred on life science and biosolutions in the Kalundborg area.

Here, a number of knowledge and educational institutions collaborate with Kalundborg Municipality and large manufacturing companies to create a research and education environment focusing on sustainable, circular production and process technology within life science and biosolutions. The ecosystem is also supported by Knowledge Hub Zealand, which is working to create an educational and business beacon for bio-solutions and bio-manufacturing.

Lyngby and Hørsholm

Around Lyngby and Hørsholm, the Technical University of Denmark (DTU) has created a strong innovation environment with DTU Skylab and DTU Science Park, focusing on entrepreneurship within areas such as life science.

DTU has also partnered with the Capital Region of Denmark to create a joint research and innovation environment called Technical University Hospital of Greater Copenhagen.

DTU and several of the region's hospitals will, among other things, develop innovative healthcare solutions and technologies - for example, using AI.

Copenhagen

Together with the City of Copenhagen and the University of Copenhagen, the Government will create a world-leading life science and quantum technology innovation district called 'Innovation District Copenhagen'.

The area will build upon the strong university environment in fields such as health, science and quantum technology, internationally recognised research environments at Rigshospitalet and University College Copenhagen, a strong accelerator and incubation environment including BioInnovation Institute as well as many startups and established companies.

With the Agreement on the Entrepreneurship Package, it has been agreed to:

- **Provide the option to defer the tax payment where the sales price is paid in instalments**, for example in the form of milestone payments ("the phantom tax"). This removes the current liquidity challenges that the seller faces due to being taxed on uncertain payments that have not yet been received. The initiative will take effect for transfers as of 1 January 2026.
- **Establish a permanent bridge for entrepreneurs to market-based financing** by strengthening the existing match funding scheme where funding from private investors is "matched" by loans from the Export and Investment Fund of Denmark (EIFO) and to make the scheme permanent. The match funding scheme will also be reviewed.
- **Repeal the taxation of corporate dividends from unlisted portfolio shares ("the Entrepreneurship Tax")**. The tax relief will make it more attractive for Danish and foreign investors to make portfolio investments in unlisted companies and thus potentially contribute to increasing access to capital for unlisted companies. The initiative also covers Danish companies' investments in foreign unlisted companies. The initiative will be effective for dividends distributed on or after 1 January 2025.
- **Introduce a seven-year period of capital gains tax on companies' newly listed portfolio shares**. Companies with less than a 10 pct. ownership stake in newly listed companies will thus be able to choose capital gains taxation for a period of seven years after the first listing of the company. This makes it possible to avoid stock taxation (paying taxes on unrealised gains) for a period of time, which in certain situations can cause major liquidity burdens for the company. At the end of the period, the company will switch to stock taxation, whereby the unrealised profits earned during the period of capital gains taxation will be taxed. The initiative will take effect for shares listed on 1 January, 2025 or later.
- **Increase the possibility to fully deduct losses carried forward from DKK 9.5 million to DKK 20 million.** For example, this improves the possibilities of offsetting losses carried forward for companies with high investment costs. The initiative will take effect from the income year 2025..
- **Launch initiatives to enable ATP to further increase its focus on investments in entrepreneurial companies as part of ATP's investment strategy**. The Export and Investment Fund of Denmark (EIFO) is encouraged to continuously contribute to the development of attractive co-investment opportunities for larger institutional investors such as ATP and private pension companies. Furthermore, the prospectus rules and their application must be looked at in relation to potential initiatives, so that the prospectus rules can better support investors' investment decisions.
- **Strengthen companies' access to, among other things, green venture financing, etc.** by adding a capital injection of DKK 2 billion to the Export and Investment Fund of Denmark (EIFO).

The Government will:

- Explore opportunities to promote access to venture capital. The goal is to support the private capital market through market-based efforts and collaborations with private investors, for example, through the Export and Investment Fund of Denmark (EIFO) and/or the European Investment Bank (EIB).

Chapter 2

Enhanced research and better use of health data

Denmark has a strong research tradition in the healthcare sector with world-class research output, which is crucial for developing and future-proofing the healthcare system and offering patients the best treatments. Our strong research tradition also helps strengthen the Danish life science industry and attract foreign investment.

Today, we have a number of leading university hospitals with access to advanced medical equipment, laboratories and expertise. Denmark also has a long tradition of collecting health data. This means that we have some of the world's best and most complete healthcare data, which is crucial for Denmark's international competitiveness and for the development of a better and more efficient healthcare system for the benefit of both patients and employees. In addition, there is a great untapped potential for the life science and healthcare sectors when it comes to new data-driven solutions, including solutions that utilize artificial intelligence.

Denmark's position is supported by its high level of digitalisation and the close cooperation and trust between public and private actors. Danes generally have a high level of trust that public institutions use health data safely and responsibly for high-quality research and development. We want to preserve that trust. Data must continue to be handled ethically, also when we adopt new solutions. Our authorities are stable, transparent and seeking dialogue. We have a strong education system and an attractive labour market. Our workforce is flexible and our employees are skilled and highly qualified. Among other things, this has helped ensure that Denmark is now one of the countries in Europe that hosts the most clinical trials relative to its population.

However, global competition for research activities is increasing and it is crucial that we ensure the best possible framework conditions for research and development in Denmark. Therefore, the Agreement on A Stronger Business Sector includes a permanent R&D deduction of 120 pct. DKK 788.1 million has also been set aside in the research reserve for 2024 for research within health and life science, including DKK 210 million to strengthen clinical and independent research and DKK 100 million to research on improving the framework for research in the psychiatry.

Strategic benchmark

Through a strengthened research and IT infrastructure, Denmark must translate our unique health data into groundbreaking research, the spreading of artificial intelligence solutions and increased innovation for better patient care.

Indicator towards 2030

In the years leading up to 2030, Denmark should be among the countries in Europe that conduct the most clinical trials per million inhabitants.

At the same time, it is broadly recognized by researchers, healthcare authorities and life science companies that there is a need to improve access to health data. If we are to maintain the high level of research and development in our healthcare system, we need to strengthen the entire infrastructure around research activities.

With the strategy for life science, we must ensure that Denmark - through a strengthened research and IT infrastructure, a focus on high data security, ethics and transparency about the use of data - translates our unique health data into groundbreaking research, the spread of artificial intelligence and increased innovation for the benefit of patient treatments.

We can achieve this by:

- Strengthening the framework for clinical research
- Unlocking the potential of health data and artificial intelligence

Increasing deductions for research and development expenses

The framework for research and development activities is an important framework for strengthening the life science industry in Denmark.

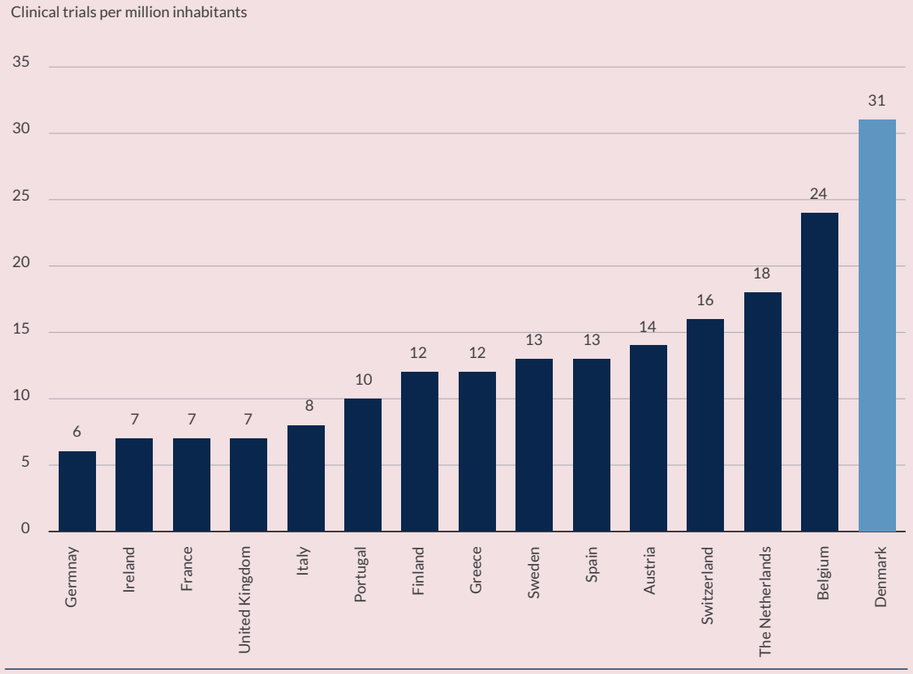
That is why the Agreement on a Stronger Business Sector specifies an increase in the deduction for research and development (R&D) expenses.

Specifically, the R&D deduction will be increased to a rate of 120 pct. up to a ceiling of DKK 1 billion from 2028 onwards.

Figure 2.1

Indicator 2:

Clinical trials per million inhabitants, 2023



Note: The figure includes clinical trials in the EU14 countries, the UK and Switzerland.

Source: Ministry of Industry, Business, and Financial Affairs based on Clinicaltrials.gov and World Bank Group, 2024.

Enhanced framework for clinical research

The framework conditions for conducting clinical research in Denmark have been good for a number of years. Danish and foreign companies' funding of clinical research has increased from approximately DKK 247 million in 2010 to approximately DKK 495 million in 2019.

In addition, a more flexible framework for health research has been established through amendments to the Act on the Ethical Treatment of Health Research Projects and Health Data Research Projects and the Health Act, which, among other things, provides more information and allows for more self-determination for patients and subjects in clinical research.

Furthermore, since 2018, Trial Nation has worked actively to make it easy and attractive for life science companies to conduct clinical trials in Denmark.

When clinical trials are conducted in Denmark, it also means better treatment options for Danish patients. This is because there is a greater chance that the results of the trials will also benefit Danish patients. At the same time, the completion of clinical trials and testing helps to attract investment to Denmark and create jobs and growth.

However, global competition for clinical research and efforts to attract clinical research is also increasing. Today, several countries have established the knowledge and infrastructure to conduct high-quality clinical research. At the same time, there has been a significant decrease in the number of patients who are offered participation in clinical trials. This is mainly due to developments in personalised medicine, where new innovative medicines, including advanced therapy medicinal products (ATMPs), are being tried by far fewer patients on average than before.

Trial Nation

Trial Nation is a public-private partnership that works to attract more investment in clinical trials for medicines and medical device testing to Denmark.

Trial Nation aims to make it easier and more attractive for life science companies to conduct clinical trials and tests in Denmark by acting as a one-stop shop for companies and researchers looking to find suitable sites and patients.

Trial Nation was established with the Growth Plan for Life Science from 2018. The members of Trial Nation are Ministry of Industry, Business, and Financial Affairs, the Ministry of the Interior and Health, the five regions, Danish Patients, Organisation of Danish Medical Societies and more than 20 Danish and foreign life science companies.

The Government will launch new initiatives to ensure that Denmark remains a home for the development of new treatments, prevention options and new medical devices. This is based on recommendations from October 2023 from a cross-sectoral working group on how to strengthen the framework for clinical research in Denmark.

The Government will:

- Establish a fourth Medical Research Ethics Committee so that phase 1 trials can be processed in 14 days, making Denmark a more attractive country to conduct clinical research in and initiate an analysis to investigate the possibilities of supporting efficient and future-proof casework procedures and organisation in the field of research ethics in Denmark.
- Further develop Trial Nation as a bridge builder within clinical research to attract more clinical trials to Denmark.
- Continue to strengthen clinical research in the context of the negotiations on the allocation of the research reserve as stated in the Government platform.

Unlocking the potential of health data and artificial intelligence

Denmark boasts of some of the best health data in the world. At the same time, Denmark has a long tradition of collecting very high-quality data in the healthcare system. Danes generally have a high level of trust in public institutions and in the collection and use of health data for quality improvements and research purposes.

Health data is the key to a better and more efficient healthcare system for the benefit of both patients and healthcare professionals. At the same time, high-quality health data is an important competition parameter for the Danish life science industry, and Danish health data has the potential to attract more clinical trials, develop new medicines and medical devices and promote the use of artificial intelligence in the healthcare system. Access to data and the ability to conduct data research is therefore crucial in the context of global competition. In addition, health data can help unlock the potential for the ethical use of artificial intelligence, which has attracted significant attention in recent years. Artificial intelligence can be used to support medical decisions, predict complications, perform diagnostics, monitor side effects and automate clinical tasks and research. The area therefore has the potential to bring major health benefits, free up labour and cut costs.

Despite the uniqueness of health data in Denmark, it is widely recognised among researchers, health authorities and life science companies that a number of challenges are standing in the way of realising the full potential. Getting access to health data is often perceived as a long and cumbersome process. A lack of overview, administratively cumbersome approval processes, variations in legal interpretations among data controllers, difficulties in linking data across data controllers and insufficient analytical capacities are some of the known barriers. At the same time, the application of artificial intelligence-based technologies also faces challenges that hinder the realisation of the benefits of innovative solutions.

Previously, work has been initiated to improve the basis for research using health data by creating a more flexible framework for health research.

75 pct.

of Danes think that research in genetic studies is important or very important.

72 pct.

of Danes trust researchers and the healthcare system to handle data responsibly.

Source: Advice for the Danish National Genome Centre, 2019.

Shorter case processing times

The Government's ambition is to reduce case processing times for the release of data and increase the share of research in artificial intelligence solutions for clinical use towards 2030.

In addition, with the Digitalisation Strategy, the Government has decided to establish a committee to assess whether health apps can be recommended to citizens and healthcare professionals. Furthermore, the European Parliament is expected to adopt the European Health Data Space Regulation later this year. This will initiate the work to create an IT infrastructure for sharing data across EU countries, thereby strengthening data use in research and innovation. However, this alone will not get us to the finish line.

The Government will now take the decisive step to realise the potential and establish and implement a technical infrastructure and governance for better use of health data in research and innovation to benefit users from 2025. With a new health data infrastructure, we will enable researchers and the life science industry to analyse unique Danish health data. This will mean that Danish patients will benefit from the latest knowledge and innovative treatments and technologies.

The Government will ensure that concrete steps are taken towards establishing and implementing the technical infrastructure and governance for better use of health data in research and innovation towards 2030.

The Government will explore the possibilities of doing this in a public-private partnership. The ambition is to see noticeable, step-by-step positive effects for users of health data as we move forward during the strategy period up to 2028.

The Government will develop and gradually establish an effective "point of contact" for applying for the use of health data for research and innovation, benefitting all health data users and patients. At the same time, citizens must be given better insight into how their data is used in research projects and better opportunities to register opt-outs.

The vision for a better use of health data

Denmark will be an international leader in the use of health data by ensuring simpler and more flexible access to data, enabling advanced data analytics across data sources and ensuring a high level of data security and transparency about the use of data. The vision contains four objectives:

- Easy and fast access to applications and approvals
- Secure and flexible access to data through a common national analytics platform
- Better and shared data services
- High level of data security and transparency

The Government has already started working on:

- **Amending the Act on the Ethical Treatment of Health Science Research Projects and Health Data Science Research Projects as well as the Health Care Act** to improve the framework for research in new technologies such as artificial intelligence and big data research.
- **Establishing a Digital Taskforce** for Artificial Intelligence to, among other things, address the legal barriers to the utilisation of artificial intelligence etc.
- **Establishing a National Health App Committee** to recommend health apps and provide citizens and healthcare professionals a better overview and guidance on high-quality professional healthcare apps.

The Government also wants to ensure that current data sources and analytical environments, through a national analysis platform, provide coordinated, fast and secure access to data in an analytical environment of the user's choice.

Furthermore, with a proposal to amend the Health Care Act, the Government will strengthen the framework to ensure that health data is available to researchers, healthcare professionals, authorities and companies in the life science sector in a smooth and secure way. Under the auspices of the Digital Taskforce for Artificial Intelligence, the Government will also address legal barriers to the use of artificial intelligence, for example in relation to GDPR and the AI Regulation and, if necessary, propose adjustments to rules, legislation and the current organisation.

Once implemented, these initiatives are expected to make Denmark an international leader in the use of health data by creating a simpler and more flexible access to data, enabling advanced data analytics across data sources and ensuring a high level of data security and transparency around data use. This will mean that the latest knowledge and innovative treatments and technologies will benefit Danish patients.

Broad inter-public sector and public-private collaboration is needed to unlock the potential for a better use of health data for research and innovation. The Government will therefore organise the work on the better use of health data under the National Board for Digitalisation and Data for the Healthcare and Senior Citizen Area. The Government will also reach out to private foundations to ensure a broad social partnership for the better use of health data.

The Government also wants to realise the untapped potential of artificial intelligence in healthcare to reap benefits for patients, healthcare professionals, the life science industry, the economy and research. The Government has already decided to set up a digital task force to make the public sector a world leader in the use of artificial intelligence. The task force will, among other things, deal with legal barriers to the use and spread of new technologies. With the strategy, a strategic effort will also be launched to accelerate the use of artificial intelligence in healthcare for the benefit of patients and healthcare professionals.

The Government will:

- Develop and gradually establish a single point of contact for health data and develop a national analytics platform in an inter-public sector and public-private partnership so that users can apply for access to health data from all relevant data sources and data controller authorities in one place. A single point of contact for health data is expected to benefit users gradually from 2025, while a national analytics platform can be developed towards 2027.
- Initiate a strategic work to increase the use of artificial intelligence in the healthcare system.

Chapter 3:

Better uptake of innovation in the healthcare system

Compared to most other countries, Denmark has a strong and robust healthcare system. This is partly due to strong, trusting and mutually dependent public-private partnership between the healthcare system, research environments and life science companies. The partnership helps provide citizens and patients with effective and innovative healthcare solutions that contribute to citizens living long and healthy lives with a high quality of life. This applies to everything from pharmaceuticals, specialised medical equipment and digital health solutions that contribute to prevention, diagnostics and new forms of treatment.

However, despite a strong foundation, the healthcare system is beginning to show cracks. Both in Denmark and in many other countries, the healthcare system is facing major challenges. The increasing pressure is growing as Denmark faces an aging population with more conditions requiring treatment and more chronic diseases, while at the same time, there will be fewer people of working age to carry out healthcare tasks in the future. This calls for more innovation in the healthcare system.

Fortunately, there is already a lot of innovation thanks to our strong life science ecosystem where companies, research environments and initiative-taking healthcare professionals are working hard to develop and test new solutions and technologies as well as automate tasks where it makes sense. These are solutions that can improve patient care and free up time for the core tasks. However, there are a number of challenges and barriers that inhibit the spread of new solutions and data-driven technologies. For example, the current organisation and governance structure for procurement and implementation of new technologies is characterised by a lack of decision-making and execution power as well as a lack of cross-cutting and systematic prioritisation. In addition, the healthcare sector is characterised by insufficient structures and incentives for the dissemination of new solutions. Therefore, it is crucial that we act now. We need to ensure a faster uptake and deployment of effective healthcare solutions to future-proof the healthcare system. Solutions that, on the one hand, contribute to better patient care and higher quality of life for the individual while at the same time relieving the burden on the healthcare system and supporting local, coherent healthcare solutions closer to the citizen's home.

Strategic benchmark

Denmark must promote access to innovative, effective and labour-saving healthcare solutions and innovative medicines to create better health for citizens and to future-proof the healthcare system.

Indicator towards 2030

Denmark must be among the fastest countries in Europe to provide patients with access to new, effective healthcare solutions (medicines and medical devices) with documented and cost-effective added value.

Example: The VIRTU Research Group develops groundbreaking and effective non-medical treatment for psychiatry

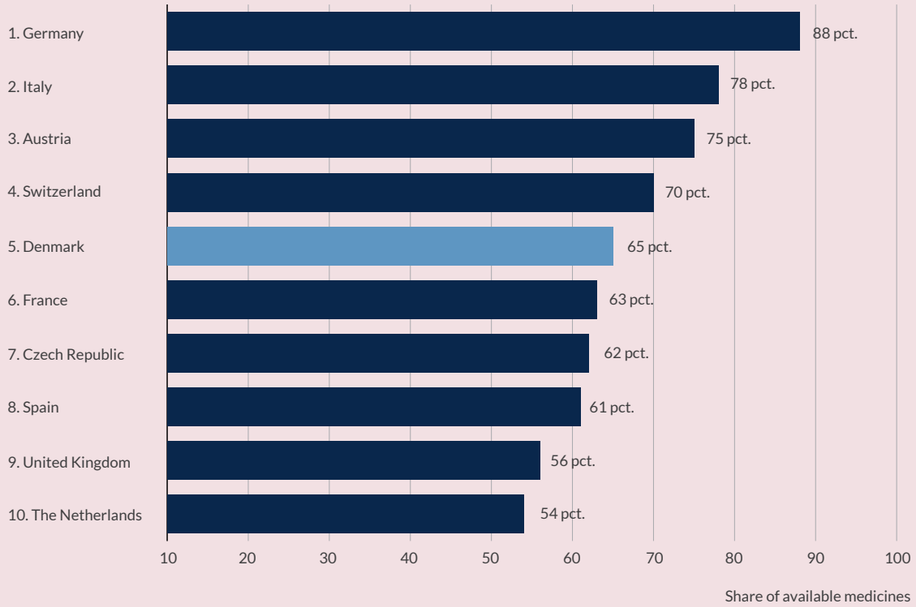
The VIRTU Research Group is a leading research unit developing virtual reality-based treatments for psychiatry. Using the technology, patients with psychiatric disorders can activate real-life emotions, thoughts and physiological responses in a controlled and customised environment.

This individualised treatment form simulates situations that are difficult to create in the real world and makes it possible to expose patients to feared situations in a safe environment. Results from short-term virtual reality treatments have so far shown rapid treatment responses without the side effects typically associated with medical treatment.

Figure 3.1

Indicator 3:

Top 10 European countries with access to the most new, innovative medicines, 2023



Note: The figure shows the proportion of fully or partially accessible medicines in the countries in 2023 based on the number of new medicines that have received a European marketing authorisation from 2019-2022. The figures were compiled on January 5, 2024.

Source: IQVIA for EFPIA, Patients W.A.I.T. Indicator 2023 Survey, 2024.

New National Centre for Health Innovation

In the Health Initiative, the Government plans to establish a new National Centre for Health Innovation to strengthen the development and dissemination of innovative healthcare solutions that can improve patient care and free up time for healthcare professionals. With the centre, the Government wants to break down barriers to the dissemination of good healthcare solutions. This will support citizens and healthcare professionals in gaining better access to innovative solutions that have already been implemented elsewhere in the country, thereby contributing to more coherent patient experiences and better treatments. The centre will also support healthcare organisations and companies in their work to develop and test innovative solutions and initiate strategic innovation efforts across the area.

The centre is proposed to be anchored as an independent centre in Digital Sundhed Danmark ('Digital Health Denmark'), the healthcare system's new national operations and development organisation jointly owned by municipalities, regions and the state. The Government proposes to allocate DKK 2 billion over the next 10 years to investments in the dissemination of new digital solutions under Digital Sundhed Danmark and the National Centre for Health Innovation.

However, it is also about utilising the innovative and often labour-saving solutions we already have and harnessing the potential of public-private partnerships to find new answers to healthcare challenges. With the Health Initiative, the Government wants to boost innovation and the implementation of new healthcare solutions. Therefore, a new National Centre for Health Innovation will be established to strengthen the dissemination of innovative healthcare solutions and support local innovation efforts across the healthcare system. The centre will contribute to ensuring more coherent patient experiences and better treatments.

In addition, following the agreement on the regions' finances for 2025, it has been agreed that there is a need for a strengthened national, cross-cutting innovation effort and a need to ensure stronger support for the dissemination and implementation of labour-saving solutions in the Danish healthcare system.

Danish patients have relatively good and fast access to new, effective medicines. The presence of a strong pharmaceutical industry and good research environments contributes to making Denmark an attractive country to test and market innovative treatments in, even though the Danish market is small. In 2023, it took an average of 169 days for a new medicine to become available in Denmark from the time the medicine was approved. Denmark was at the top of the list of countries in Europe with the shortest time to availability. In the future, Denmark must also be at the top of the list. This must of course be achieved with patient safety in mind and in a way that ensures the best possible healthcare for the money.

The Government wants more innovative and effective healthcare solutions, medicines and medical devices to be scaled up and deployed across the healthcare system so that they can make a difference for patients and free up hands in the healthcare system. Innovation and scaling up must therefore be a core task that the healthcare system is measured and assessed on - on a par with the three core tasks that we have currently: Treatment, education and research. Therefore, we need frameworks that help ensure that the scaling up and implementation of both new and existing healthcare solutions is prioritised.

With the strategy for life science, we are therefore improving the framework for Denmark to increase the implementation of labour-saving healthcare solutions and to promote access to cost-effective and innovative medicines to create better health for citizens and a future-proof healthcare system.

We achieve this by:

- Strengthening the implementation and scaling up of cost-effective and innovative healthcare solutions across the healthcare system
- Promoting the rapid deployment of new and cost-effective medicines

Improving the implementation and scaling of innovative, efficient and labour-saving healthcare solutions

In Denmark, we are skilled at developing innovative healthcare solutions in close public-private partnerships between companies and healthcare professionals. The solutions contribute to giving patients and citizens better options for prevention, diagnostics and treatment and can simultaneously free up resources in the healthcare system. In addition, the close public-private partnership and market access in the domestic market is a crucial stepping stone for companies to market their products on international markets.

The good public-private partnerships and our tradition for novel thinking and innovative solutions must be even better utilised. Today, too many healthcare solutions end up mostly as offshoots that are not used or scaled up widely, even though they have proven effective and value-adding. The lack of systematic deployment of new solutions is unfortunate, especially when there has never been a greater need to implement solutions that can improve patient care and free up labour to focus on core tasks. This means that there is an unrealised potential in technologies that patients, healthcare professionals and industry are missing out on.

For the healthcare sector to realise the labour-saving and quality-improving potential of new technologies, innovation must be a core task in the healthcare system. Therefore, it is crucial that we strengthen the implementation and scaling up of innovative and effective healthcare solutions. The innovative healthcare solutions must benefit patients and the healthcare system, for example, by improving the individual's quality of life, ensuring treatment close to

A new authorised body focusing on innovative medical devices to ensure efficient access to future treatments

In April 2024, TÜV SÜD was approved as an authorised body in Denmark for the certification of medical devices. In recent years, there has been no authorised body in Denmark to certify medical devices in accordance with the new Medical Device Regulation (MDR).

The authorised body in Denmark will be a key player in the Danish life science ecosystem by ensuring faster market access for pharmaceutical companies. At the same time, it will increase the overall capacity of authorised bodies in the EU which have been under great pressure due to increased certification requirements for medical devices and a low number of authorised bodies.

TÜV SÜD will have a special focus on innovative solutions such as software, cardiological, neurological and orthopedic-related equipment and much more, which will benefit the Danish medical industry, the healthcare system and not least the patients.

Initiatives that the Government has already launched:

- **Strengthening research and development of virtual reality treatments** for patients with serious psychiatric diagnoses under the auspices of the agreement Better Framework for Psychiatry.
- **Strengthening the national digital treatment offer Internetpsykiatrien.dk**, a platform facilitating evidence-based digital therapy for mild to moderate depression or anxiety.
- **An allocation of DKK 500 million for more at-home treatment**, including equipment for citizens with COPD and diabetes, digital rehabilitation offers and video consultations in the municipal nursing care. The agreement aims to prevent unnecessary hospitalisations and reduce the number of physical check-ups.
- **Initiated work to establish a national framework for the systematic scaling up and implementation of labour-saving solutions in the Danish healthcare system** (Agreement on the regions' finances, 2025).
- **The establishment of a new National Centre for Health Innovation.**

home and at the same time freeing up resources and manpower. We must also create a better and more structured market access within the Danish healthcare system.

It must be easy to enter into public-private collaborations and partnerships, for example, for the development of new products. We must create a better framework for clinical innovation where life science companies and healthcare professionals join forces to develop solutions that address real-world challenges in the healthcare system. New healthcare solutions must be fully implemented so that they become a natural part of the operations and daily life of the healthcare system. We need to get better at scaling up and disseminating good, existing solutions that have already demonstrated an effect - both in hospitals and in municipalities.

This will also require that we, as a society, take a more holistic and value-based approach to investments in health which supports a focus on life cycle costs, cross-sectoral benefits and secondary effects of innovative healthcare solutions. In other words, there is a need for a multi-pronged approach where innovation is at the very heart of the healthcare system.

The Government will therefore initiate a strategic effort that will contribute to following up on the Life Science Council's recommendation for a coherent structure for the systematic development, testing, implementation and scaling up of labour-saving solutions in close collaboration with private companies.

The Government will:

- Establish a health innovation index to provide an overview of which new treatments and technologies are being used, how quickly they are being adopted and where there may be potential for further efforts. Where possible, the index will benchmark the Danish healthcare system's ability to absorb innovation compared to similar countries.
- Prepare an analysis to identify the possibility of establishing a national framework for impact assessments of digital innovative health solutions with a view to ensuring a more structured process in this area for both healthcare and life science companies than is currently the case.
- Further develop the data-driven model for value-based procurement initiated and funded by the Strategy for Life Science 2021 and ensure a consistent interpretation of procurement and state aid rules through increased knowledge of best practices.
- Investigate the possibilities for establishing a National Centre for User Collaboration as a professional platform to support collaboration between users and health sector actors. For example, this could be a platform that unites user representatives, which is in demand by the healthcare sector, and provides stakeholders with access to concrete guidance, facilitation and recruitment when an organization wants to collaborate with representatives from the user perspective.
- Following the agreement on the regions' finances for 2025 and the healthcare reform proposal, initiate a strategic effort in the Ministry of the Interior and Health to establish national frameworks for a systematic scaling up and implementation of labour-saving solutions in the Danish healthcare system.

Promote access and rapid deployment of innovative medicines

It is crucial that patients have quick access to the most effective and safe treatments while at the same time ensuring the best possible health for the money spent. Today, there is rapid technological and scientific development of many new and innovative therapies and technologies that hold great potential. These include advanced therapy medicinal products (ATMPs) such as gene therapy, cell therapy and tissue engineering that can offer potentially curative treatments for serious and rare diseases where conventional drugs have had limited efficacy and required continuous treatment, often with many side effects for patients.

It is estimated that there are approximately 250 ongoing clinical trials of unique ATMPs that could potentially reach the market within the next decade, and the European Medicines Agency (EMA) expects 10-20 marketing authorisation applications per year for new ATMPs over the next five years.

Denmark is well-positioned to become a pioneer in the research, development and deployment of ATMPs due to a strong life science industry and strong professional environments in hospitals and universities working with clinical research and personalised medicine. The first ATMPs have already been implemented in the Danish healthcare system, but there are a number of challenges that make it difficult to realise the full potential, including regulatory complexity, limited national organisation and coordination in the area and the need for investments in infrastructure and new collaboration models between the healthcare system and companies.

These challenges mean, among other things, that some companies move to our neighbouring countries that have already implemented national initiatives to create good framework conditions. This could potentially mean that Danish patients' access to these medicines could be delayed.

At the same time, the cost of medicines is rising, especially pharmacy medicines. Measures are needed to ensure patient access to effective medicines. One measure could be to introduce alternative pricing models for pharmacy medicine as is already being done for some hospital medicine. For example, this could involve agreements that handle financial uncertainties for society when a medicine is put into use or agreements where the final payment depends on whether the medicine has the expected effect.

It is important for the Government to create a future-proof regulatory framework for the development and approval of new, effective medicines that meets the needs of patients, increases the security of supply of medicines and at the same time ensures competitive conditions to attract investment in the research, development and production of medicines in the EU. Therefore, the Government is also working at the EU level to promote Danish priorities in connection with negotiations on the revision of the EU pharmaceutical legislation.

ATMPs

Advanced therapy medicinal products (ATMPs) are gene therapies, cell therapies and tissue engineering technologies that are highly targeted and customised to the individual patient.

To support the development and make Denmark one of the leading nations in the development and deployment of innovative and effective medicines, the Government will initiate a multi-pronged strategic effort. The Government will develop and deploy ATMPs through a strengthened national effort and support public-private partnerships. In addition, the Government will investigate whether there may be benefits in introducing alternative pricing models for pharmacy medicines and introduce the possibility of negotiating confidential price agreements for selected pharmacy medicines as part of the reimbursement assessment. This initiative will help patients to access reimbursement for more innovative medicines while achieving better health for the money that is spent.

Overall, the initiative will strengthen the development of innovative medicines in Denmark.

The Government will:

- Conduct an analysis to clarify whether alternative pricing models can be used to address some of the uncertainties that limit patients' access to pharmacy medicines in order to give patients better and faster access to new cost-effective medicines.
- Implement a multi-pronged strategic effort to promote the development and adoption of effective advanced therapy medicinal products (ATMPs) by supporting a national collaborative structure across the healthcare system, research environments and the pharmaceutical industry, conducting analyses and pilot projects and establishing strengthened early regulatory advisory services at the Danish Medicines Agency on the development and approval of innovative medicines.

The Government will additionally:

- Introduce a legislative proposal that allows Amgros, for a limited period of 3 years, to negotiate confidential discounts on selected medicines in the reimbursement system, provided that the discounts are assessed to lead to lower overall regional costs for reimbursed medicines.
- Present an ambitious new strategy for personalised medicine to support patients' rapid access to cost-effective treatments with new forms of personalised medicine.

Chapter 4:

Attractive framework conditions for production and more foreign investments

Geopolitical developments have created a need for a stronger focus on Europe maintaining an industrial base in the production of products and technologies where we have competitive advantages to ensure a long-term security of supply. Life science is one of Denmark's absolutely strongest cards to play in this regard.

In a time of economic uncertainty, life science is a recession-resistant sector that supports the Danish economy when parts of the rest of the industry are in recession. In recent years, Denmark has experienced positive growth in industrial production - also compared to other countries. This growth is mainly driven by the massive growth in the life science industry. In recent years, several life science companies have made significant investments in production facilities in Denmark. This applies to both Danish and foreign companies. In 2023, general foreign investment in Danish life science was approximately DKK 70.4 billion.

However, international competition for life science investments and manufacturing companies has intensified. Other countries are making their mark on the life science area with targeted industrial policy initiatives to promote their position and attractiveness. Conversely, the location and attraction of manufacturing jobs in a Danish context has received limited attention in recent decades. And despite the massive growth of the life science industry, Denmark is still one of the countries in the EU with the lowest industrial production as a share of GDP. Thus, there is a significant potential to expand and develop Denmark as a green life science production nation.

With the strategy for life science, we are therefore taking the next steps to support attractive framework conditions to attract more life science production and more foreign investments.

We can achieve this by:

- Making it easier and faster to set up production in Denmark
- Strengthening access to skilled labour

Strategic benchmark

Denmark must support attractive framework conditions in order to attract more life science production and more foreign investments.

Indicator towards 2030

By 2030, the life science industry's production activities and foreign investments in Danish life science must be above the 2024 level, measured by the pharmaceutical industry production index and foreign investments in Danish life science.

DKK 70.4 billion

In 2023, general foreign investment in Danish life science amounted to DKK 70.4 billion.

Source: Danmarks Nationalbank

Figure 4.1

Indicator 4:

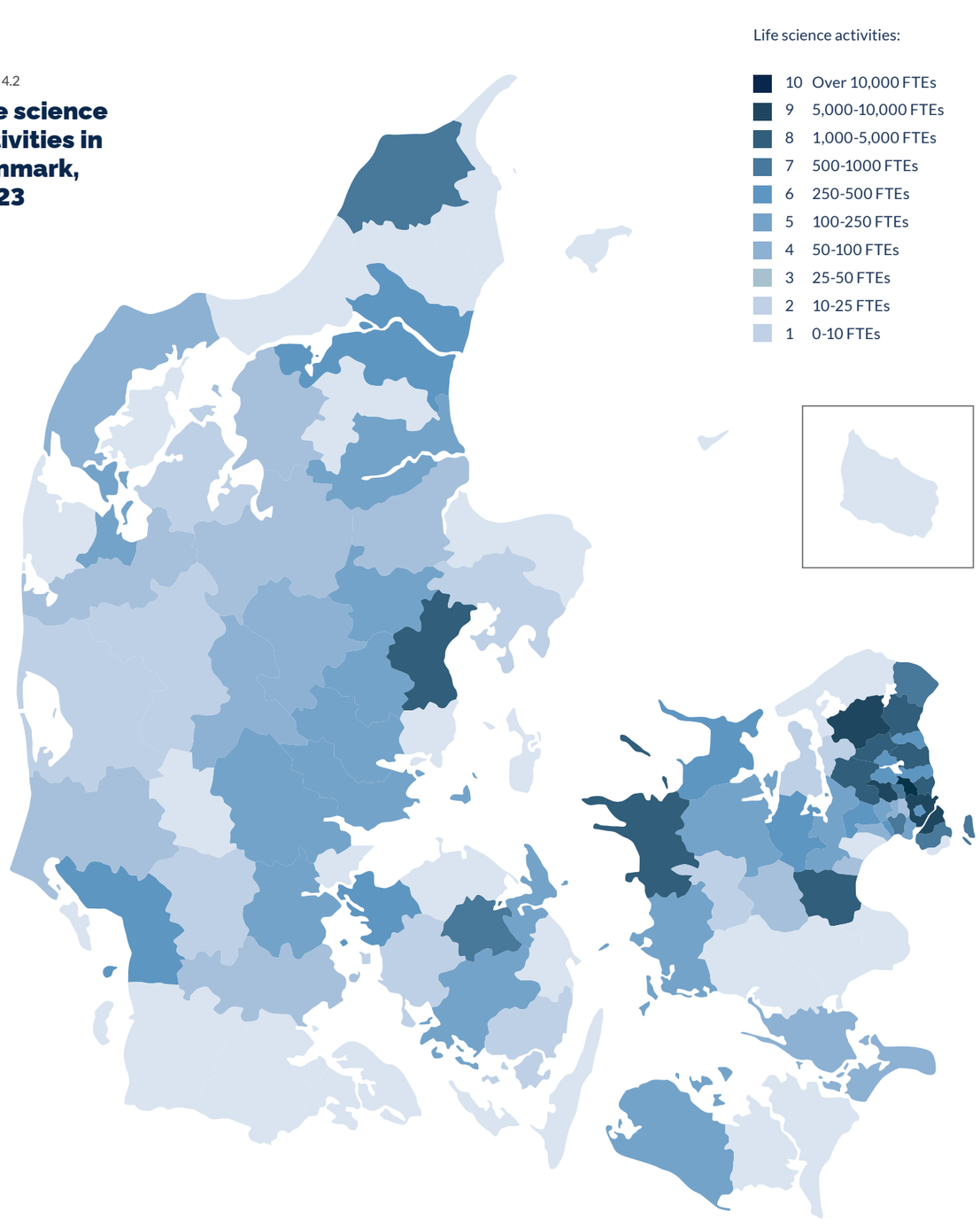
Pharmaceutical industry production, 2021-2024

Note: The figures in the figure are seasonally adjusted. The figures are calculated as an index with production in 2021 as the baseline figure 100.

Source: Statistics Denmark, 2024.

Figure 4.2

Life science activities in Denmark, 2023



Source: The Danish Business Authority.

Easier and faster establishment of production in Denmark

Denmark has a long tradition of close and trusting partnerships between public and private actors. Our authorities are stable, transparent and dialogue-seeking. We have a well-functioning infrastructure, a strong education system and an attractive labour market. Our workforce is flexible and our employees are skilled and highly qualified.

Denmark is a frontrunner when it comes to industrial symbioses, where a circular approach to production creates green synergies across companies that utilise each other's surplus resources. For example, public-private collaboration projects on the utilisation of surplus heat which creates value locally and regionally to benefit individual citizens. The close collaboration between public and private companies, municipalities, regions, educational institutions, local utility companies, etc. is an important competitive parameter where Denmark is a frontrunner.

All of this makes Denmark an attractive place for companies to place research and production investments in life science. We must build on and develop this momentum. To unlock this potential, there is a need to address the challenges that manufacturing companies face today.

Several countries are actively working to create good framework conditions for life science production. However, in this context, several manufacturing companies are hindered by the fact that our current framework is not geared to keep up with developments in the life science sector. In

> Companies face an inflexible and bureaucratic system with long processing times, where it can currently require up to 20 different permits from both state and municipal authorities to expand or establish production.

practical terms, this means quickly ensuring that there is a sufficiently contiguous area where new or expanded production facilities can be built and that the surrounding infrastructure, including energy, water and transportation, is suitable for life science production.

At the same time, companies face an inflexible and bureaucratic system with long case processing times, where it can currently require up to 20 different permits from both state and municipal authorities to expand or establish production. This hinders the fast and efficient establishment of production facilities in Denmark and weakens our competitiveness on the international stage in terms of attracting production investments from both Danish and foreign companies. Therefore, in close cooperation with interested municipalities, the Government will designate new industrial parks for manufacturing businesses and create a one-stop shop for manufacturing companies at the Danish Business Authority. The Government wants to roll out the red carpet for manufacturing companies in Denmark.

The Government has already issued amendments to the Executive Order on drinking water and a new Executive Order on desalination of seawater to turn it into drinking water, which will help production companies to gain better access to water for pharmaceutical production. The Government will explore whether further measures are needed, as access to water is a crucial parameter for the location of life science production.

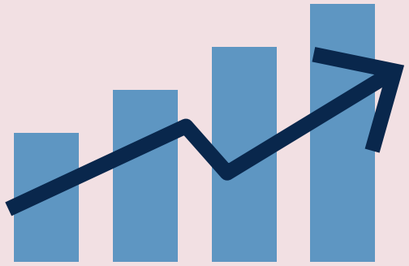
The Government will:

- Designate new industrial parks for manufacturing industries, including life science companies, to ensure suitable areas with access to necessary business infrastructure, including electricity, water, transportation, wastewater disposal, etc.
- Create a one-stop shop for manufacturing companies to help ensure a faster and smoother regulatory process when establishing and expanding production facilities.
- Work to attract more foreign investments in areas such as research and development, clinical trials and production through strengthened efforts abroad, including through the marketing of a one-stop shop for permits for production companies and industrial parks.
- Explore the possibilities for better use of water, including, for example, the reuse of water in pharmaceutical production with the aim of reducing the pressure on groundwater and ensuring good and competitive framework conditions for attracting and retaining pharmaceutical production in Denmark.

Skilled labour is a prerequisite for growth and development

In light of the industry's strong growth and the significant investments in life science production in Denmark, demand for employees is expected to continue to increase in the coming years. The lack of access to sufficiently skilled labour can therefore pose a significant barrier to harnessing the industry's significant growth potential. Life science companies face major challenges in accessing labour in Denmark. However, employment in the life science industry has grown significantly in recent years, increasing by 43 pct. from 2010 to 2021.

Access to skilled labour requires a sustained focus on ensuring that there are educational programmes that meet the demands of the life science industry. This means, among other things, that there needs to be a sufficient capacity to take in students in relevant programmes and that there needs to be a development of Danish talent within life science and good opportunities for re-skilling and upskilling of employees through further education and training. Another approach to recruiting employees can be to attract talent from outside Denmark in a targeted and balanced manner. In June 2023, the Government signed a broadly backed agreement on the framework for the reform of university education in Denmark. The upcoming reform will establish a new educational landscape for universities, including the introduction of new types of master's degree programmes with a clearer labour market focus, providing students with good opportunities to test their academic and theoretical knowledge in practice.



43 pct.

Employment in the life science industry has increased 43 pct. from 2010 to 2021.

Source: Statistics Denmark.

Initiatives that the Government has already launched:

- **Strengthening access to skilled labour** under the Agreement on the Framework for the Reform of University Education in Denmark.
- **Exemption from the Danish bank account requirement** for foreign workers with residence permits under the researcher scheme and the fast track scheme's general amount track, researcher track, education track and short-term track and an extension of the deadline from 90 days to 180 days for fulfilling the bank account requirement for foreign workers covered by professional schemes where the requirement still applies.
- **Amendment of the rules so that certain expatriate Danes living abroad can bring their families to Denmark** on the same relaxed terms as foreign workers.
- **Extending the job change rule** to include changes in work schemes during an ongoing employment relationship as well as creating the possibility to extend short-term stays under the fast track scheme.
- **A continuation of the effort to ensure faster and more efficient case processing** at the Danish Agency for International Recruitment and Integration (SIRI), which has reduced the average case processing time for first-time applications for several work schemes.

With the Agreement on the Entrepreneurship Package, it has been agreed to:

- **Expand the employee equity scheme for new, smaller companies** to include more SMEs and remove the cap on the proportion of salary that companies can offer as income tax-free employee equity and replace it with a requirement for a base salary for employees. In addition, it must be examined whether it is possible to give non-listed companies a legal claim to use a schematic valuation for employee equity when applying the other rules for the allocation of income tax-free employee equity. The initiative must be approved by the EU Commission in order for it to take effect for the allocation of employee equity as of 1 January 2026.
- **Reduce the salary requirement for key employees in the gross tax scheme by DKK 15,000** from DKK 75,100 (2024 level) to approximately DKK 60,000 per month. This will make it easier for Danish companies, including start-ups, to attract prominent international key employees (highly paid employees) because they can obtain favourable tax conditions. The initiative will take effect from the income year 2026.

With the agreement, universities can create an additional 1,100 English-taught study places in master's programmes annually in 2024-2028 and 2,500 study places annually from 2029 in areas where there is a high demand for labour. Furthermore, there is an ambition that 20 pct. of master's students in the future will complete their education as a flexible business master's programme and that international students will make up half of the business master's students.

As part of the spread of new flexible business master's programs where students study while at the same time holding relevant jobs, there are also plans to establish concrete collaborations targeted at different sectors, including, for example, life science, where companies and universities join forces to develop and offer flexible business master's programmes based on the needs of students and companies.

Furthermore, the Government has already launched a wide range of initiatives to help facilitate companies' access to foreign labour while unemployment is low and to make it easier for foreign workers to take advantage of business schemes. At the same time, less bureaucracy and greater flexibility must contribute to companies in Denmark being able to attract the qualified workforce they need. This is a key component of success in Danish life science and for the ambition to develop and expand Denmark as a hub for green life science production.

With the strategy for life science, the Government wants to create an even better framework for Danish companies' access to qualified labour in the future. Therefore, the Government intends to support and create an even better framework for the development of research talent and entrepreneurial talent within life science. Denmark must be at the forefront when it comes to translating good ideas from the research world into growth, businesses and new solutions to national and global challenges.

The Government will:

- Introduce a model for industry differentiation of the requirement for a separate work permit for accompanying family members working in the same group, so that accompanying family members of foreign employees in the life science industry are allowed to work a minimum of 20 hours per week. Today, a minimum working week of 30 hours is required across all industries.
- Establish an international elite summer school within selected life science research areas to develop Danish talent and foster international networks.

Chapter 5:

International cooperation and health diplomacy

The life science industry finds itself in a new geopolitical reality. Openness, stability and free trade are giving way to global tensions, uncertainty and increased regionalisation. Market access is becoming more complex, global supply chains are coming under pressure and international competition for framework conditions and investments is intensifying.

Geopolitical shifts challenge European competitiveness and put a renewed focus on industrial and health policy. At the same time, there is an increasing amount of regulation and legislation at the EU level, and the EU is taking on an increasingly larger role in the health sector - which also has implications for business policy.

Global trends also have a major impact on the Danish domestic market and the life science industry's ability to support solutions to global health challenges, such as chronic diseases, mental illnesses, infectious diseases and antibiotic resistance. Therefore, strong international relations and framework conditions are more important than ever. Given Denmark's small, open economy, it is crucial to focus on Denmark's critical dependencies while maintaining a high level of competitiveness and safeguarding free trade and open markets. In

Strategic milestones

Through a focused health diplomacy and cooperation between authorities, Denmark must continue to play an active role internationally to solve global health challenges and support the export of Danish health solutions.

Denmark must be a strong player in the EU to support Europe as an attractive life science region and ensure that Denmark's life science sector has competitive regulatory framework conditions.

Indicators towards 2030

Strengthened export conditions in the Denmark's key markets (Germany, the UK, the US, France, Japan, South Korea, Norway and Canada) must contribute to increased exports, thereby helping Danish life science exports reach DKK 350 billion in 2030.

The joint European framework conditions must contribute even more to supporting companies' investments in research and development in the European life science industry, as is the case in the US.

Figure 5.1

Indicator 5:

Export of Danish life science products, 2023

Note: The export calculation is based on the border crossing principle, i.e. the exports that cross the Danish border. Statistics Denmark has revised the export figures for 2024. The figures do not directly correspond with the export figures in the Ministry of Industry, Business, and Financial Affairs' publication 'Life science industriens økonomiske fodaftryk' ('The life science industry's economic footprint') from 2023.

Source: Ministry of Industry, Business, and Financial Affairs based on Statistics Denmark, 2024.

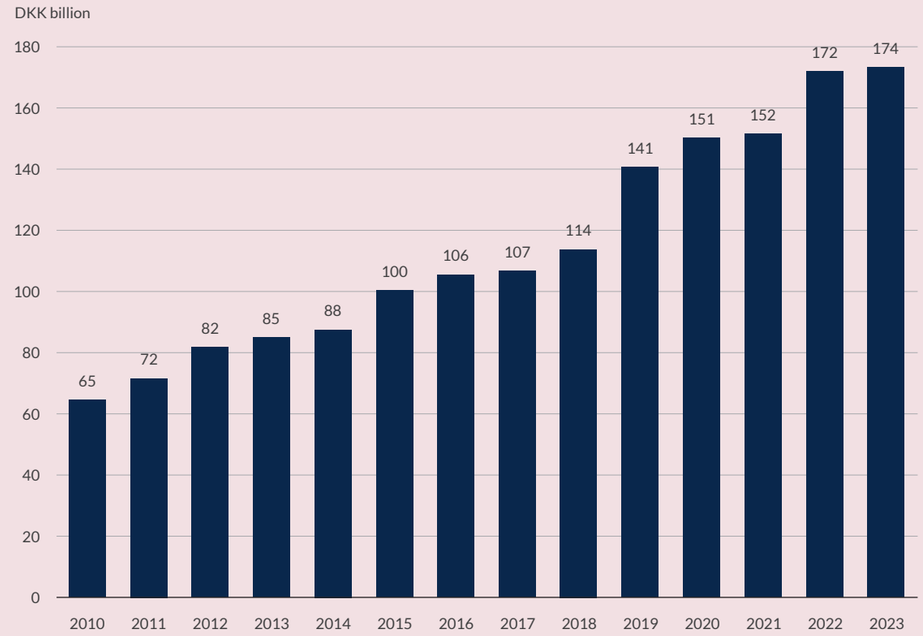
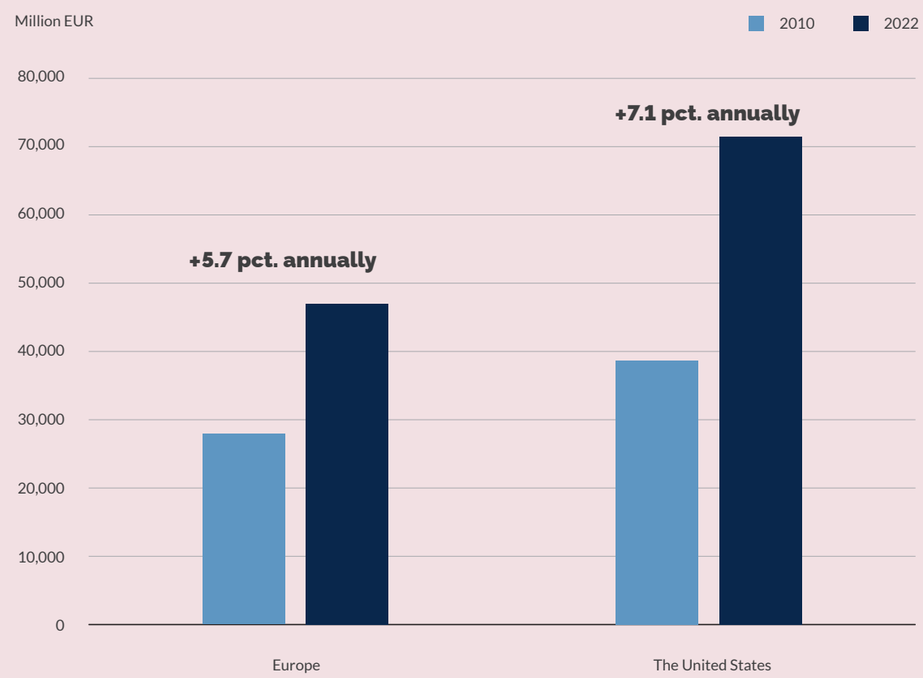


Figure 5.2

Indicator 6:

Development of R&D investments in the pharmaceutical sector in Europe and the United States, 2010 and 2022

Source: Efpia, The Pharmaceutical Industry in Figures, 2024.



addition, life science has become a strategically important industry globally, with a number of nations and regions making significant investments.

The export of Danish life science products amounted to approximately DKK 174 billion in 2023. In addition, there are exports that do not cross the Danish border, i.e. sales of goods produced by Danish companies abroad and sold abroad. For the life science industry, these exports are estimated to have grown from DKK 55.7 billion in 2022 to a whopping DKK 107.7 billion in 2023. Access to international markets is crucial for growth in the life science industry. For Denmark to fulfill its ambition of becoming a leading life science nation in Europe and realise the export potential, it is important that the overall international effort is targeted, strengthened and coordinated so that Denmark is a strong player both in the EU and in the world.

With the Agreement on Strategy for Life Science of May 2021, Denmark has established health diplomacy and cooperation between authorities by posting advisors to the focus markets: Germany, UK, USA, France, Japan, South Korea, Norway and Canada.

In addition, there is an effort in the countries where Denmark has deployed sector advisors from the foreign aid-funded cooperation between the authorities: Vietnam, China, India, Mexico and Brazil. The purpose of foreign aid-funded cooperation between the authorities is to build capacity and framework conditions that counteract climate change and promote sustainable growth, social development and good governance, establish networks and ultimately open doors for Danish companies. The Danish innovation centres - Innovation Centre Denmark - ensure knowledge transfers and access to international innovation hubs and world-leading research environments, while Invest in Denmark attracts foreign investments in Denmark and thereby creates growth and Danish jobs.

With the strategy for life science, we are taking new steps to ensure that Denmark, through focused health diplomacy and authority cooperation, will continue to play an active role internationally in solving global health challenges and supporting the export of Danish health solutions. Denmark must also be a strong player in the EU to support Europe as an attractive life science region through competitive regulatory framework conditions.

We can achieve this by:

- Strengthening international regulatory cooperation, health diplomacy and export promotion initiatives
- Strengthening Danish advocacy in the EU and internationally

Strengthen the international authority cooperation, health diplomacy and export promotion initiatives

Although the export of innovative Danish healthcare solutions has never been greater, many companies experience barriers that can complicate access to global markets. At the same time, Denmark's most important export markets are increasingly characterised by strong competition and increasingly unpredictable and complex conditions.

The Ministry of the Interior and Health and the Ministry of Foreign Affairs have established bilateral cooperations with authorities in high-income countries like Germany, UK, USA, France, Japan, South Korea, Norway and Canada in order to promote Danish exports by lifting market barriers and establishing collaborations with local authorities in these eight markets.

When it comes to increasing Danish exports, it is crucial that Denmark's bilateral authority cooperations and health diplomacy is strengthened and targeted so that it even more strongly supports the areas where the Danish life science industry has competitive advantages and so that these efforts contribute to improved framework conditions for Danish companies and increased demand for Danish solutions. This requires a focused and coordinated effort from the posted health diplomats and their colleagues in the Danish embassies and from relevant Danish health authorities.

Health diplomacy paves the way for better patient care and improved access to new markets for Danish companies

A strong Danish health diplomacy and international authority cooperation are important prerequisites for promoting Danish exports and ensuring that Danish healthcare solutions contribute to making a difference for patients worldwide. Since the last strategy for life science from 2021, health diplomacy has paved the way for, among other things:

1. A targeted public-private effort to prioritise depression and suicide prevention in South Korea, which has contributed to concrete changes in Korean legislation. The legislative changes mean that more Koreans now have access to medical treatment for depression and Danish pharmaceutical companies can increase exports to Korea.
2. With the implementation of the previous strategy for life science, the Ministry of Foreign Affairs has had a stronger focus on attracting vaccine activities to Denmark. As a result, a collaboration between Trial Nation, Innovation Centre Denmark in Boston and Invest in Denmark has led to Moderna investing in Denmark by conducting two vaccine studies for RSV and influenza.
3. The Danish authority cooperation in the United Kingdom has helped establish the UK-DK Medtech Innovation Collaborative, a clinically oriented and innovative accelerator programme working with health policy priorities. This authority cooperation has given Danish companies the opportunity to showcase their innovative technologies, leading to concrete SME export orders and the promotion of innovative solutions for British patients.

This also requires a strengthened dialogue with the life science industry. A strategic and transparent alignment of the authority cooperation in the individual countries, combined with strengthened public-private dialogue, will help ensure a coherent effort that addresses key challenges and unlocks the potentials in each market.

It is also key to focus on retaining and attracting foreign companies and investments, as they make an important contribution to the Danish economy. Furthermore, foreign companies bring new knowledge, innovation and technology to the life science sector. Foreign companies are therefore helping to ensure that Denmark remains a leader in the development of future life science technologies and solutions.

In parallel, the strategic marketing effort of Danish healthcare solutions must be strengthened. The task of ensuring a stronger showcase for Danish healthcare solutions abroad is a joint public-private task that is currently handled by the public-private marketing consortium Healthcare Denmark in close collaboration with healthcare authorities and the healthcare system.

Healthcare Denmark

The marketing consortium Healthcare Denmark was established in 2012 with the aim of creating an international gateway to expertise and innovation within the Danish healthcare and life science sector. Among other things, Healthcare Denmark organises delegation visits from abroad, and their partners include the Ministry of Industry, Business, and Financial Affairs, the Ministry of Foreign Affairs, the Ministry of the Interior and Health, Danish Regions, companies, business organisations and research institutions.

Objectives and focus areas for health diplomacy and authority cooperation

Health diplomacy and authority cooperation have the following objectives:

- To strengthen the framework conditions for Danish life science
- To increase the uptake of international best practices by Danish authorities
- To increase exports, foreign investments and employment in the Danish life science sector
- To build strong and long-lasting alliances with health authorities in priority countries

The effort is targeted within five focus areas:

1. Regulation of medicines and medical devices
2. Health innovation and data
3. The healthcare system of the future
4. Sustainability and emerging health threats
5. Prevention and treatment of non-communicable diseases

Within each focus area, Danish positions of strength will be brought into play through professional collaborations with relevant authorities in other countries, mutual delegation visits and participation in public-private events involving Danish companies, such as symposia, roundtable discussions, etc. This requires a focused and coordinated effort from the health diplomats and the authorities involved and a close dialogue with the life science industry. This will also ensure coherence between authority cooperation and other Danish efforts, including the Trade Council's export promotion efforts, research and innovation promotion and Invest in Denmark's initiatives to attract life science investments to Denmark.

The Government will:

- Strengthen and target bilateral authority cooperation and health diplomacy through a strategic approach to the cooperation with health authorities and decision-makers in priority countries and in areas with the greatest value for Danish life science and authorities.
- Retain and attract foreign investments in life science, among other things, through the efforts of the authorities in Invest in Denmark.
- Increase company involvement in public-private collaborations on exports and investments, including under the auspices of the 'Partnerskabsforum for international sundhed og life science' ('Partnership Forum for International Health and Life Science') established in early 2023.
- Strengthen the marketing of Danish life science by prioritising the public-private marketing consortium Healthcare Denmark with corresponding private sector co-financing in order to establish a new visitor centre focusing on clinical research and chronic disease in Innovation District Copenhagen and collaboration on an international, annual life science congress in Denmark.

Strengthen the promotion of Danish interests in the EU and internationally

The conditions for life science companies are increasingly determined by regulation from the EU, where an increased legal and regulatory complexity can be a significant challenge for Danish and European life science companies' international competitiveness, innovation, development, production and marketing of medicines and medical devices. Denmark must therefore actively work to ensure that it remains attractive for Danish and European life science companies to locate their activities in the EU.

This means that Denmark's involvement in the EU and international cooperation to strengthen companies' framework conditions and international market access is more important than ever before if the Danish competitive advantage within life science is to be maintained and expanded in the years leading up to 2030. At the same time, it places increased demands on the Danish authorities to ensure the right framework conditions and regulatory processes in the European authority cooperation.

In order to safeguard Danish interests in the best possible way in the cross-cutting business and health policy agendas, an even closer dialogue with relevant stakeholders from the life science industry in Denmark and a strengthened interministerial coordination between the Ministry of Industry, Business and Financial Affairs, the Ministry of Foreign Affairs and the Ministry of the Interior and

Current EU agendas concerning life science, health and industrial policy include:

- Revision of the EU pharmaceutical legislation
- Antimicrobial resistance
- EU Life Science Strategy
- Critical Medicines Act
- Health Emergency Preparedness and Response (HERA)
- The patent package
- Biotech / biomanufacturing
- Health Technology Assessment (HTA), including Joint Clinical Assessments (JCA)
- Implementation and revision of the Medical Device Regulation (MDR) and In Vitro Diagnostic Regulation (IVDR)
- Implementation of the European Health Data Space (EHDS) regulation.

Health will be prioritised. In addition, in connection with the upcoming EU presidency, the Government will work to promote a holistic approach to the life science industry's conditions in the EU based on Danish experiences with a clear link between a robust pharmaceutical industry and access to new and innovative medicines that can help address some of the societal challenges the EU faces when it comes to health and strategic autonomy. On this basis, the Government is, among other things, actively involved in the work on the revision of the EU's pharmaceutical legislation and Denmark will be part of the joint European cooperation on a common life science strategy that will help establish the framework for the development of life science in Europe and globally. In addition, Denmark will also take part in the joint fight against antimicrobial resistance (AMR), which should also be seen in the context of the Government's upcoming AMR action plan.

In parallel with the efforts leading up to and during the presidency, a coordinated effort will be launched in the EU to improve the framework conditions for the life science industry, including in the context of EU industrial, trade and competition policy - partly by strengthening the Danish Business Authority's involvement in the EU-level work to support Danish interests in relation to the life science industry and partly by focusing and strengthening life science initiatives at the Permanent Representation of Denmark to the European Union. Furthermore, the Danish Medicines Agency will continue its involvement in the European cooperation on Heads of Medicines Agencies (HMA) and the European Medicines Agency (EMA) to help promote safe medicines and medical devices.

The Government will:

- Strengthen the political efforts within the EU concerning life science, including working to safeguard Danish interests in European industrial policy and working towards the presentation of a European political strategy for life science that helps establish the framework for life science in Europe and around the world.
- Strengthen Denmark's engagement in European cooperation on HMA and EMA to promote safe medicines and medical devices and promote Denmark as a life science nation.

Together for the development of the life science sector

The strong collaboration between the public and private sector is unique to Denmark. This is also true when it comes to the life science sector. The Life Science Council, which has members from the healthcare system, educational institutions, patient associations, business organisations, life science companies and authorities has played a significant role in the creation of the life science strategy. Through dialogue and professional sparring, the stakeholders in the Council have set ambitious goals and delivered valuable recommendations on how Denmark can realise its full potential as Europe's leading life science nation.

As with much of the life science sector, the Life Science Council is a public-private partnership based on a high degree of trust and interdependence between the public and private sector. In recent years, health policy, business policy as well as education and research policy have become more interconnected. The answers to the challenges facing Denmark, both in the health sector and in the business policy area, must more than ever before be found by working together.

Therefore, there is great potential in maintaining and developing the collaboration that already exists between the sectors. There are many examples of the sectors increasingly establishing collaborative projects - for example, between the healthcare system and educational institutions, between educational institutions and life science companies and between life science companies and the healthcare system. It is relationships like these that create the foundation forthe life science sector to jointly find solutions to the challenges facing both the healthcare system and the industry in Denmark.

The Life Science Council

The Life Science Council is a public-private partnership forum that was established to strengthen the dialogue between public and private parties in the life science sector. The Council's focus areas include a continuous adaptation of the framework conditions for the life science industry and a focus on better patient treatments and more job creation. The Life Science Council has submitted recommendations for the Government's research and innovation efforts (June 2022) and for the life science strategy (December 2023).

The Life Science Council was established under the Agreement on a Life Science Strategy 2021-23 with representatives from companies, industry organisations, patient organisations, healthcare actors, universities, foundations and employee organisations. The Council currently meets 2-4 times per year and is serviced by the Ministry of Industry, Business and Financial Affairs and the Ministry of the Interior and Health.

Going forward, the Government will arrange biannual discussions under the auspices of the Life Science Council on, among other things, the implementation of the strategy and the development of key indicators.

If the life science strategy is to make a real difference for the Danish life science sector, it is crucial that both public and private actors work together to realise the strategy's objectives and initiatives. There is a need for a continuous focus on the Danish life science sector's framework conditions and development. Here, the Life Science Council plays a crucial role in monitoring the implementation of the strategy and the development of the strategy's indicators as well as contributing with new perspectives.

In addition, the geopolitical situation has meant that a high-tech field like life science may be vulnerable to espionage and unwanted knowledge transfer to non-aligned states. A particular problem is associated with the Danish bio and health data, which is the source of both the Danish research excellence in this area and a significant vulnerability. At the same time, some life science technologies have dual-use potential and can therefore be used for military purposes in non-aligned states. The security and protection of Danish critical life science technology is therefore crucial in the global competition characterised by geo-political uncertainty. Proactive support for life science actors is therefore crucial in order to counteract unwanted transfers of Danish life science technology which can have negative consequences for Danish national security and our commercial competitiveness.

The Government will:

- Continue a coordinated effort through the life science units in the Ministry of Industry, Business and Financial Affairs and the Ministry of the Interior and Health.
- Conduct an external evaluation of the strategy, which will also be presented to the Life Science Council in 2027.
- Increase security in the Danish life science environment by strengthening the proactive support of the Danish Security and Intelligence Service (PET) to Danish life science research institutions and companies.

Financial table

The Government's proposal for the distribution of funds for initiatives in the strategy for life science

DKK million (2024 level)	2024	2025	2026	2027
Strengthened research and better use of health data				
Establish a fourth Medical Research Ethics Committee (MREC) and initiate analysis in the field of research ethics	3.5	2.5	2.5	2.5
Further develop Trial Nation	4.7	4.7	4.7	4.7
Realise the *Vision for a better use of health data*	6.1	7.5	-	-
Initiate a strategic work to deply artificial intelligence in the healthcare system	1.0	-	2.5	2.5
Better uptake of innovation in healthcare				
Conduct an analysis regarding impact assessments of digital health solutions	1.0	-	-	-
Further develop the data-driven model for value-based procurement	4.0	-	-	-
Investigate the possibilities for establishing a National Centre for User Collaboration	0.1	-	-	-
Initiate a strategic work on labour-saving solutions in the Danish healthcare system	-	-	2.5	2.5
Conduct an analysis on alternative pricing models	0.8	0.2	-	-
Promote the development and deployment of ATMPs	6.0	5.5	7.0	7.0
Attractive framework conditions for production and more foreign investment				
Designate new industrial parks*	7.3	4.4	3.9	3.9
Create a one-stop shop for manufacturing companies*	3.7	9.6	10.1	10.1
Establish an international elite summer school	0.5	3.5	3.5	3.5
International cooperation and health diplomacy				
Strengthen and target bilateral authority cooperation	16.8	16.8	16.8	16.8
Posted health diplomats and investment promotion work	20.0	20.0	20.0	20.0
Strengthen the marketing of Danish life science via Healthcare Denmark	4.3	7.5	7.5	7.5
Strengthen the political focus in the EU within life science and industrial policy	2.0	2.0	2.0	2.0
Strengthen Denmark's engagement in the European cooperation on Heads of Medicines Agencies (HMA) and the European Medicines Agency (EMA)	3.7	3.7	3.7	3.7
Together for the development of the life science sector				
Continue the work of the life science units	6.0	6.0	6.0	6.5
Reserve for further initiatives	**7.6**	**6.1**	**7.3**	**6.8**
Total	**100****	**100**	**100**	**100**

*Note: *The Government plans to allocate a total of DKK 102.4 million for a 'red carpet treatment' for manufacturing companies from 2024-2027 (includes the initiatives on industrial parks and a one-stop shop). The funding is in addition to the life science framework within the framework of the Government's rural district development initiative.*

***With the 2024 Budget Act, bridge financing of a total of DKK 0.9 million has been implemented in Q1 2024 for initiatives that will not be financed in the future within the life science framework and are therefore not shown in the table.*

Strategy for Life Science

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