

# The Nordics position in the European Life Sciences sector

**In depth analysis of the Nordics life sciences markets within the European landscape**

**Full report**

*March 2026*



# Scope of Study

JLL has been instructed by Region Stockholm to undertake a comprehensive life sciences analysis and benchmark of the Nordics, Sweden and the strengths of Stockholm-Uppsala (also known as ‘Capital of Life’) and the Medicon Valley.

Within this report, we present an assessment of the Nordic’s key strengths within the life sciences market and provide benchmarking analysis comparing Nordic countries to other European countries. We examine Sweden's main two life sciences clusters in relation to leading national pairs across Europe, analysing both R&D and manufacturing capabilities for life sciences sectors.

We then undertake a detailed ranking of these clusters and identify specific strengths and opportunities that can guide Region Stockholm's strategic actions to support growth in the sector. This includes a comparative analysis at regional (Nordics), national and cluster level to position Capital of Life and the Medicon Valley within the wider European landscape.

The study provides Region Stockholm with objective analysis of the life sciences market, demonstrating its strengths and opportunities while also identifying areas of progress needed to enhance competitiveness. We have developed tools and frameworks to support strategic decision-making for innovation ecosystem development within the Nordic and European context.

This report has been prepared to enable Region Stockholm to best deploy its strategic support to the life sciences industry, life science universities and healthcare system and strengthen Sweden's position as a key contributor to the Nordic and European innovation landscape.

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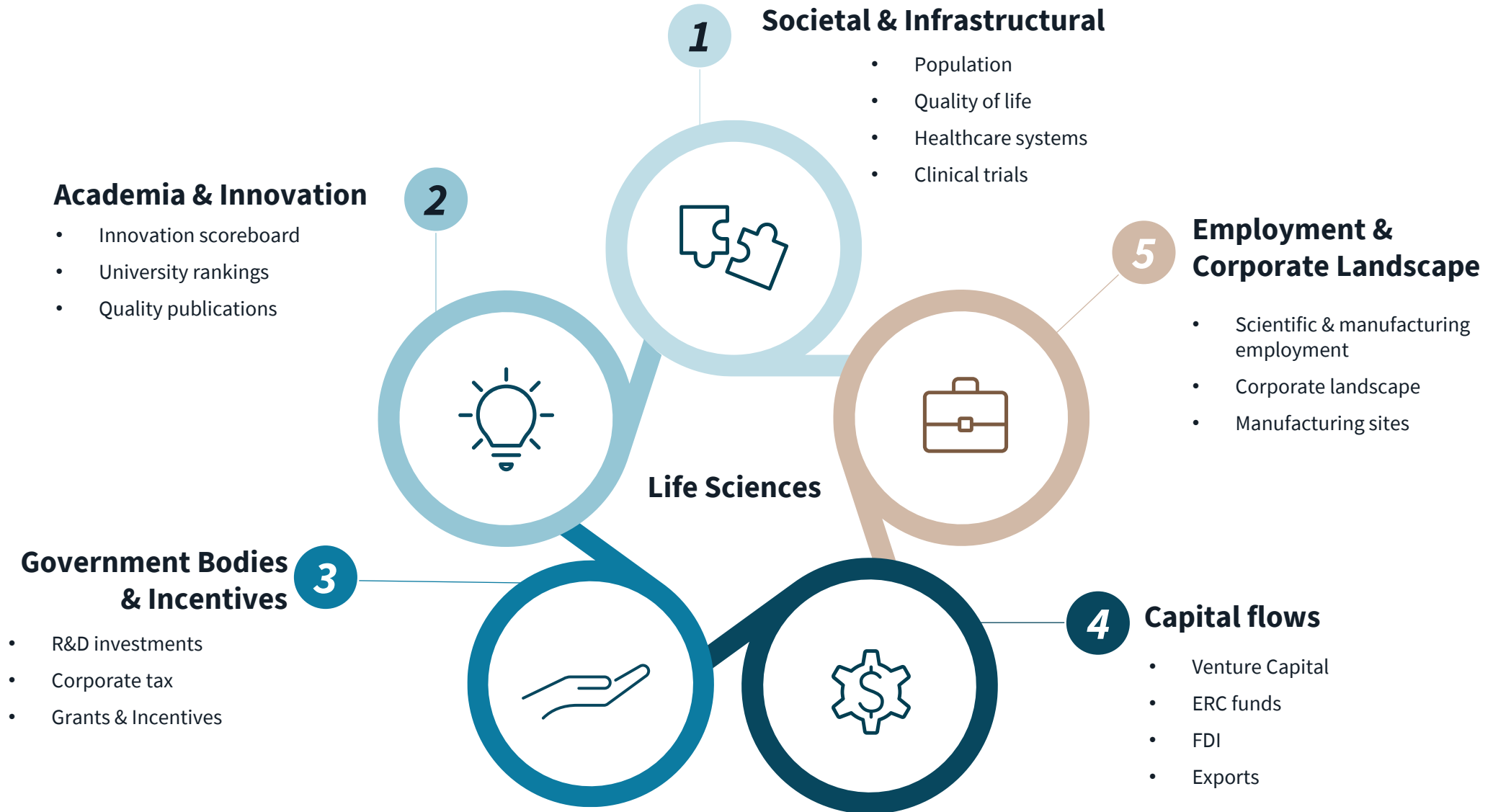
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# Part 1: The Nordics within the European Landscape

# Life Sciences fundamentals Nordics analysis



# Demographic Trends

Nordic aging demographics present significant healthcare and research opportunities with implications for life sciences innovation

## Nordic Demographic Shift

The overall Nordic region comprises approximately 28 million inhabitants by early 2025, which is equivalent to countries like Poland or Ukraine. The data demonstrates an aging trend across Nordic countries, with Sweden leading population growth projections.

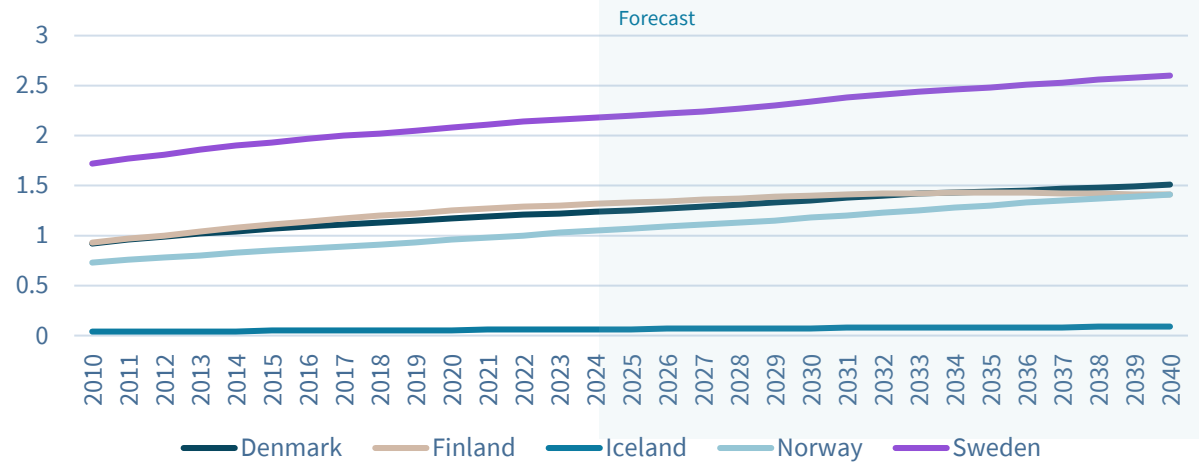
## Accelerated Growth Patterns

Several trends emerge from the demographic analysis:

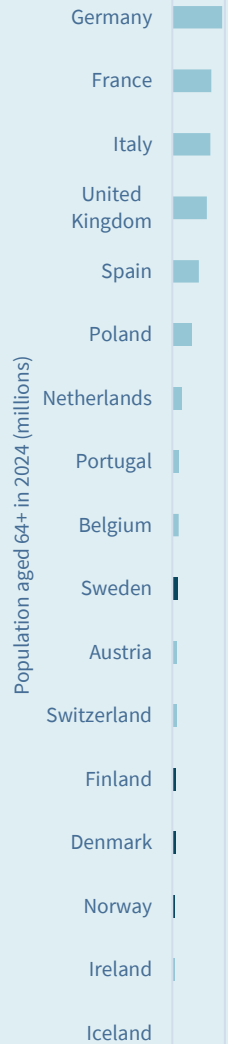
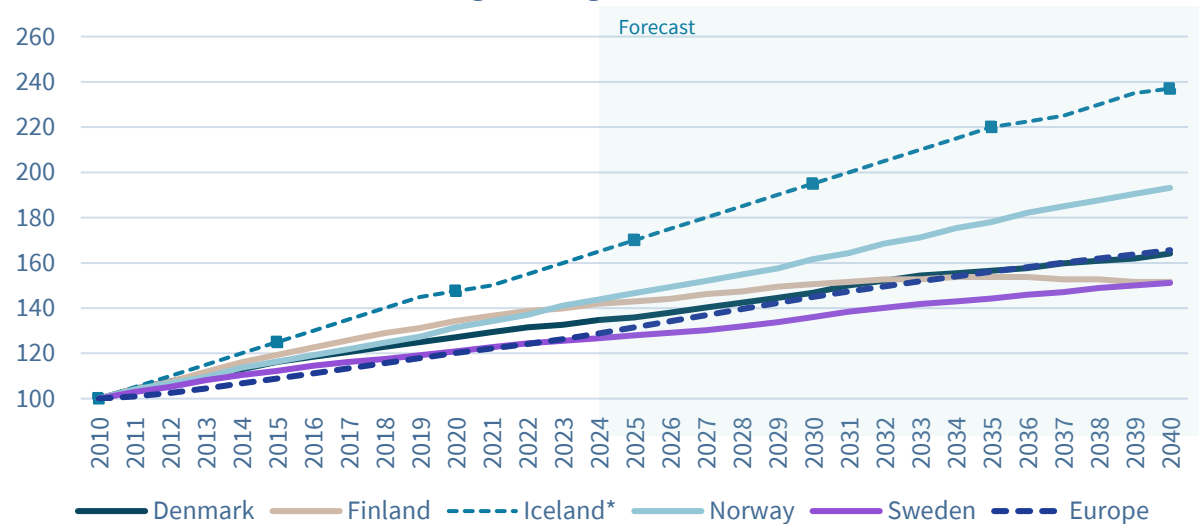
- **Regional expansion** shows Nordic 64+ population growing from 4.4 million in 2010 to 7 million by 2040, representing nearly 50% growth
- **Iceland leads growth** with 64+ population projected to expand over 220% by 2040 compared to 2010 baseline
- **Healthcare investment drivers** indicate aging populations create increased demand for healthcare facilities, medical equipment, and specialized infrastructure
- **Research opportunity expansion** suggests growing demand for age-related research including cancer therapeutics, Alzheimer's treatments, and aging technology solutions

The demographic shift creates significant opportunities for life sciences companies targeting age-related conditions and healthcare innovation.

Population aged 64+ from 2010 to 2040 (in millions)



Population aged 64+ growth (base 100=2010)



\*Iceland: given Iceland's small population and the data being expressed in millions, the 2010 based projections lack precision

# The Nordics: Happy and Productive

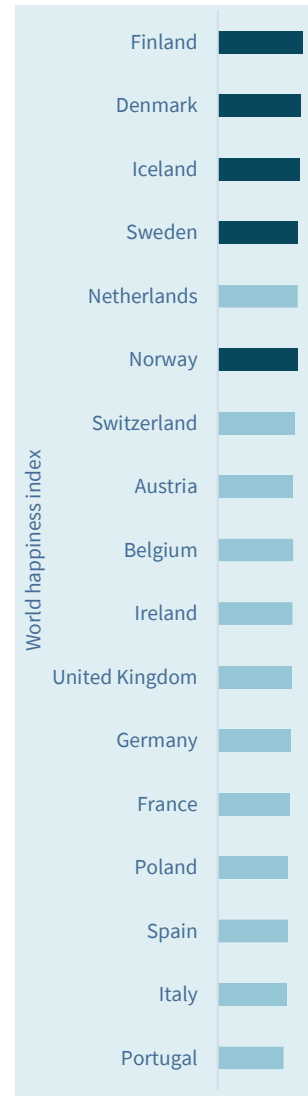
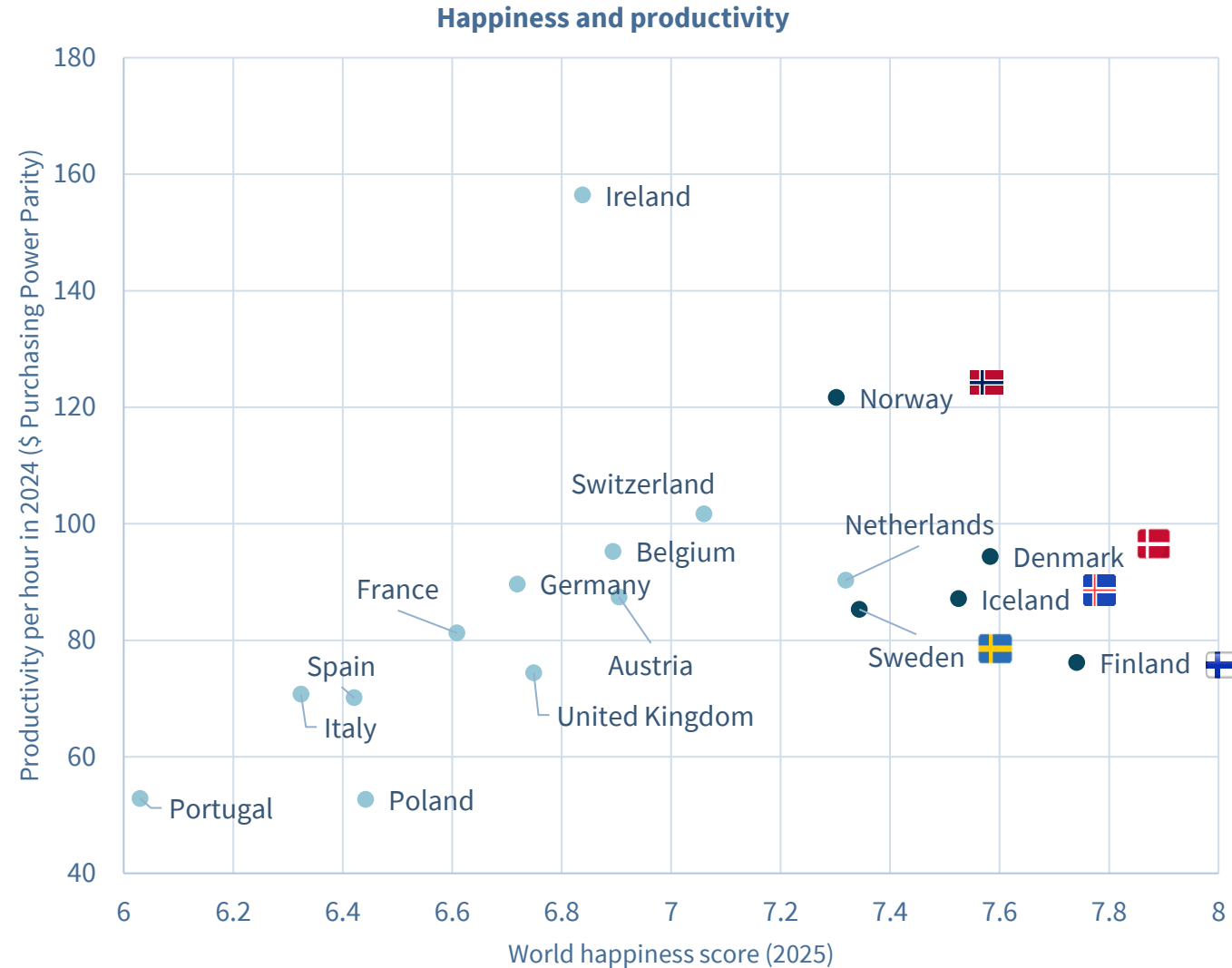
Nordic countries demonstrate exceptional balance of happiness and productivity, creating optimal conditions for talent attraction and business innovation

## Nordic Quality of Life Excellence

The data reveals Nordic countries consistently outperform European peers across key quality of life indicators:

- **Top happiness rankings** show Finland, Denmark, Iceland, and Sweden scoring 7.3-7.7 on world happiness metrics, significantly above European averages
- **Productivity advantage** demonstrates Nordic countries achieving high productivity levels (76-121 per capita) while maintaining superior happiness ratings compared to other European nations
- **Optimal market positioning** places Nordic countries in the upper-right quadrant, uniquely combining both high happiness and high productivity
- **Talent attraction advantage** creates competitive benefits for recruiting international researchers, skilled professionals, and life sciences expertise

The Nordic model delivers sustainable high performance while prioritising citizen wellbeing, creating an attractive environment for life sciences investment and innovation.



# Healthcare Expenditure

Sweden and Norway healthcare systems deliver exceptional quality outcomes through strategic investment, creating robust infrastructure for life sciences collaboration

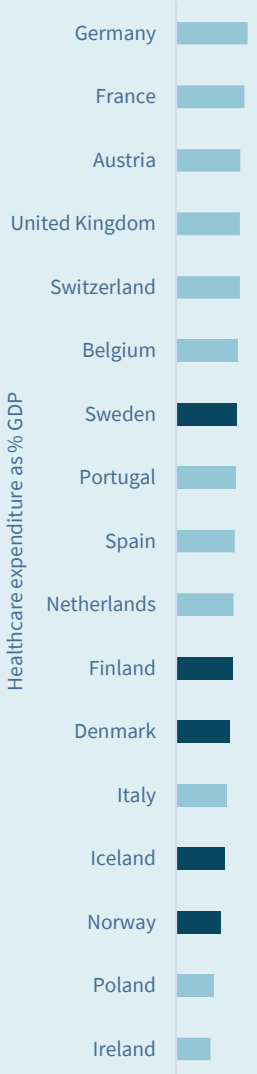
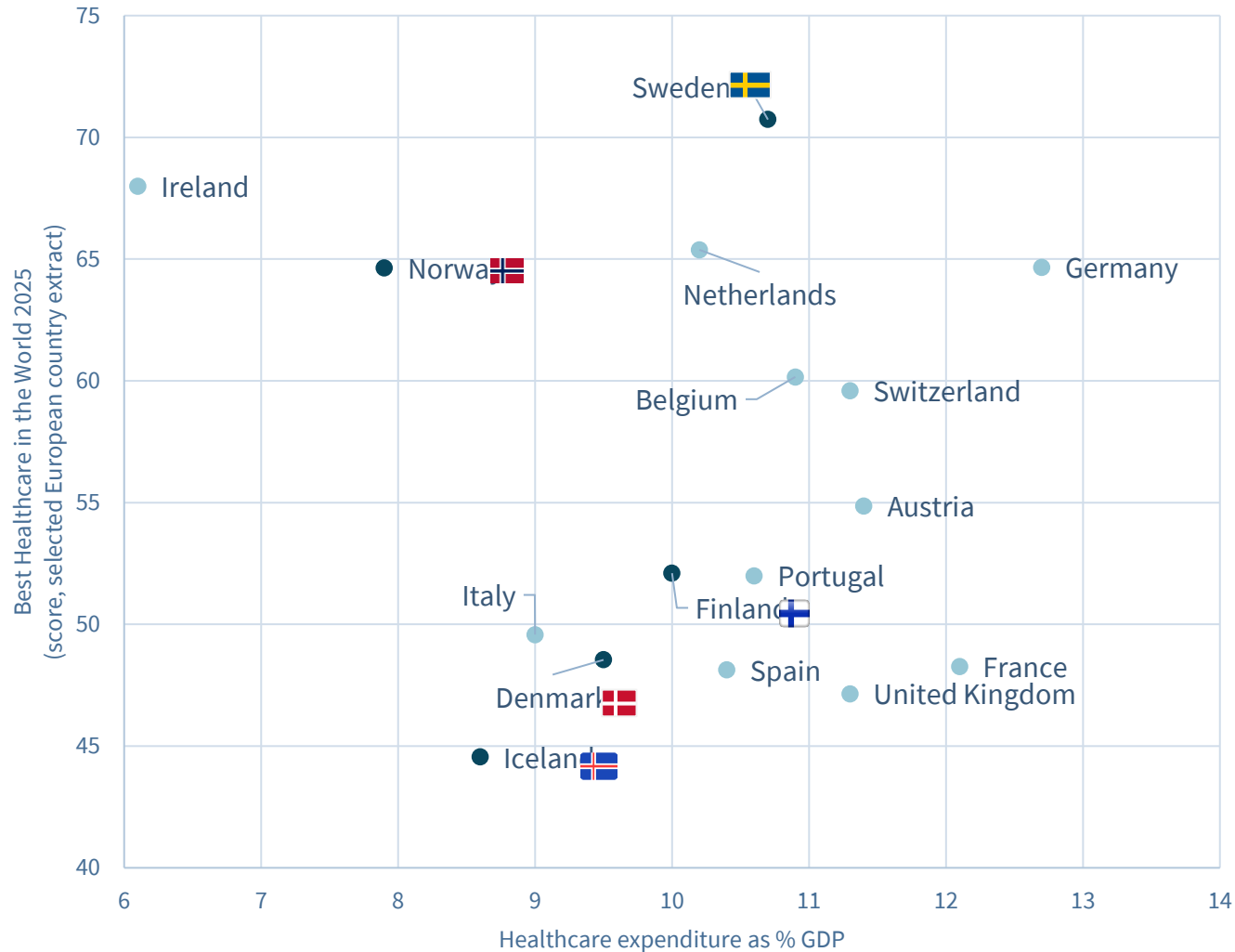
## Healthcare Performance Variation

The data reveals mixed healthcare efficiency across Nordic countries:

- **Sweden leads quality rankings** achieving the highest healthcare quality score amongst European nations whilst maintaining moderate spending levels
- **Norway balances investment** with 8% GDP healthcare expenditure delivering strong quality outcomes, demonstrating efficient resource allocation
- **Improvement opportunities exist** as Denmark, Finland, and Iceland achieve more modest quality scores despite similar spending levels to higher-performing countries

Nordic healthcare systems offer diverse partnership opportunities, with Sweden and Norway demonstrating particularly strong platforms for life sciences collaboration, whilst other markets present potential for system enhancement and modernisation.

Healthcare expenditure as % GDP & healthcare quality score



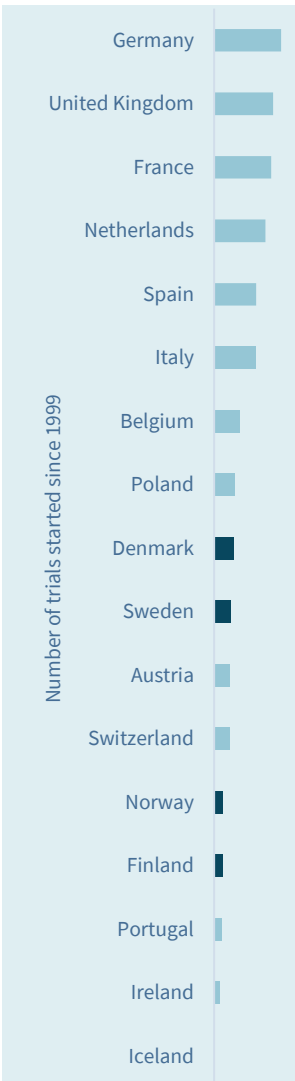
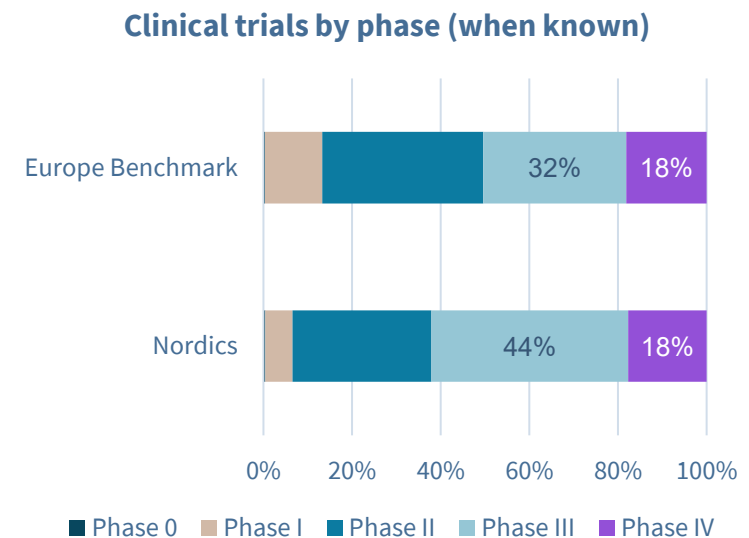
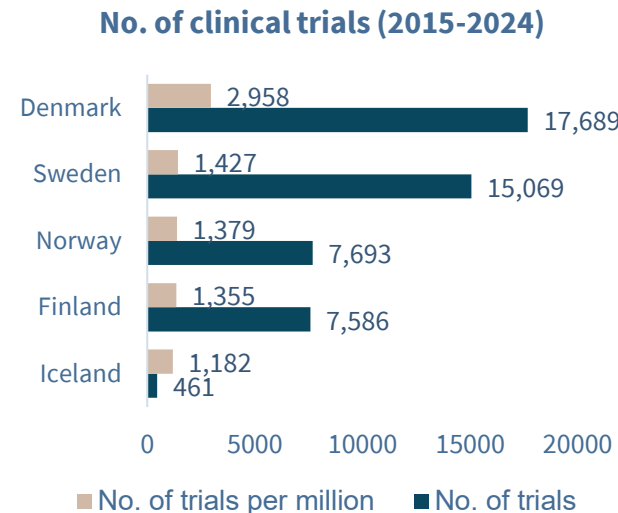
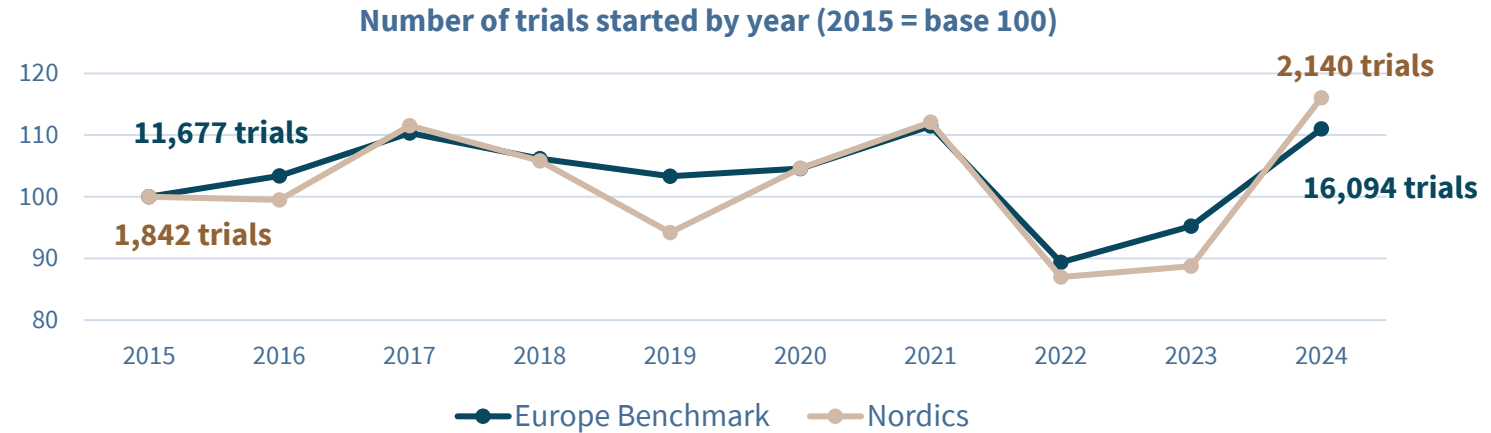
# Clinical trials

Increased clinical trials are an opportunity to bolster research and pharmaceutical attractiveness

Clinical trials serve as a barometer for a country's pharmaceutical and life sciences attractiveness because they reflect multiple critical factors that investors, researchers, and companies evaluate when making strategic decisions.

A high volume of trials indicates the presence of world-class hospitals, research centres, and a skilled workforce capable of conducting complex studies to international standards.

Denmark and Sweden undertake the most clinical trials. There is an opportunity for the Nordics to increase cooperation on clinical trials where the region offers opportunity to leverage a wider population with similar ethnic characteristics as well as harboring a significant part of the population displaying wider ethnic diversity, depending on what is beneficial for the study in question.



# European Innovation Scoreboard 2025

3 of 6 “Innovation leaders” are Nordic countries

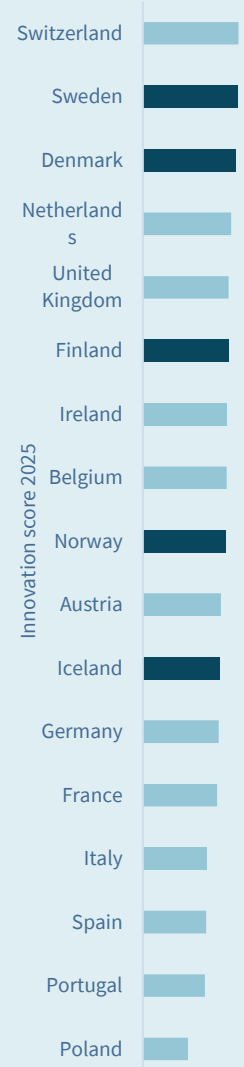
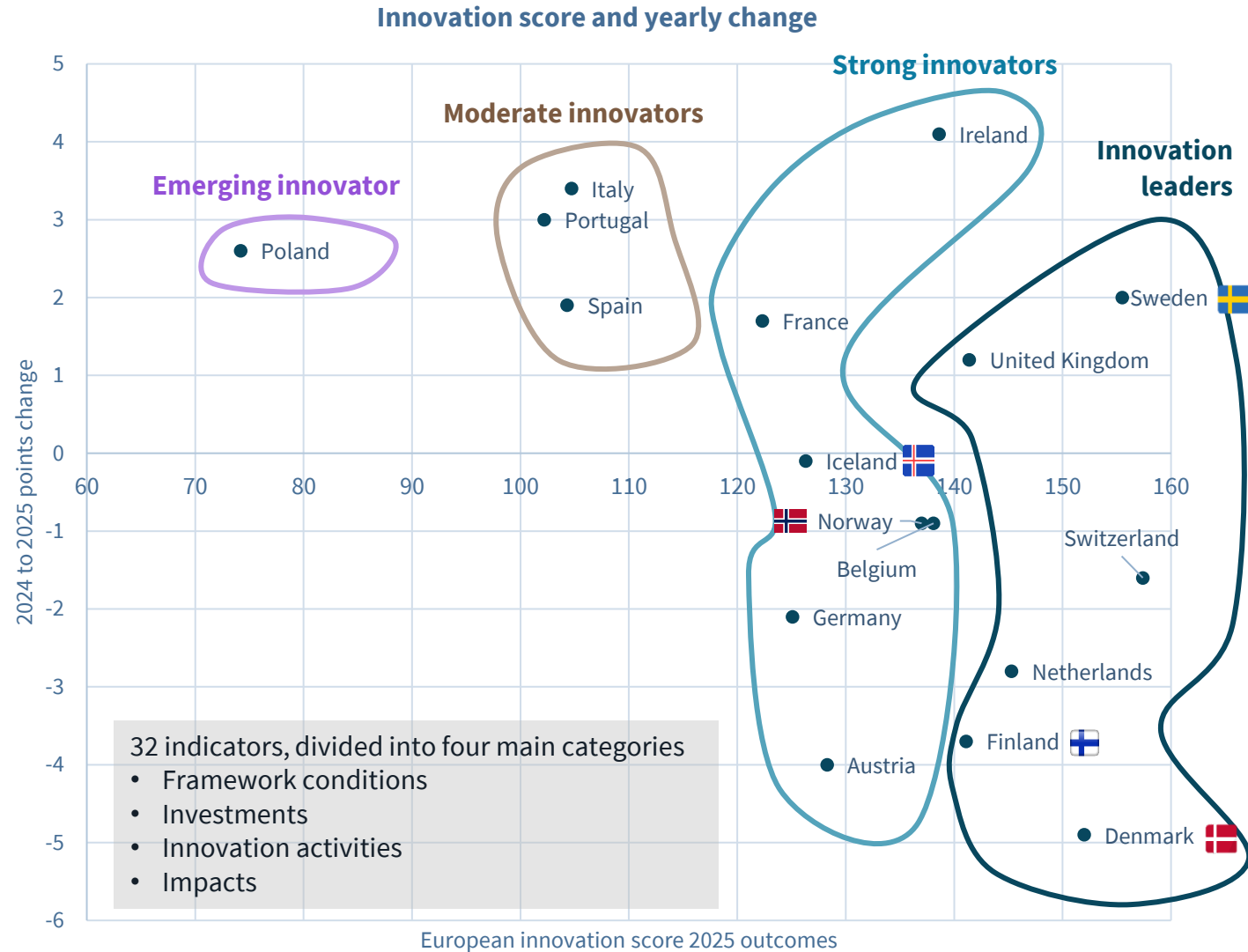
The European Innovation Scoreboard provides a comparative assessment of the Research and Innovation performance of EU Member States, other European countries, and global competitors. It helps countries assess the relative strengths and weaknesses of their national innovation systems and identify challenges that need to be addressed.

**Most Common Strengths:**

- Public-private co-publications (Sweden, Norway, Finland, Denmark, Iceland)
- International scientific co-publications (Sweden, Norway, Finland, Denmark, Iceland)

**Most Common Weaknesses:**

- Resource productivity (Sweden, Finland, Denmark)
- Direct and indirect government support of business R&D (Sweden, Finland, Denmark)



# Nordic Life Sciences university rankings

Nordic academic excellence demonstrates strong global positioning with opportunities for industry collaboration

## Nordic Academic Excellence

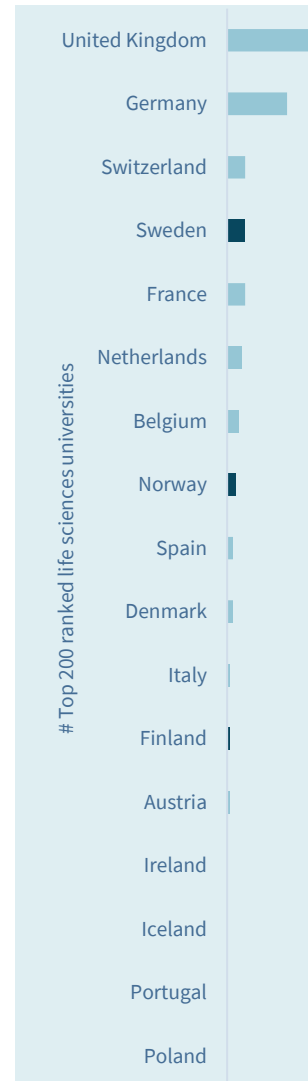
The data demonstrates strong Nordic representation in global life sciences education, with Sweden leading the regional performance. Karolinska Institutet stands out as the flagship institution, ranking 31<sup>st</sup> globally with particularly strong scores in research quality (93.1) and industry collaboration (92.5). Uppsala University follows at 54<sup>th</sup> position, maintaining Sweden's strong academic presence in the top tier.

## Performance Patterns

Several notable patterns emerge from the scoring metrics:

- Research quality scores consistently outperform other metrics across Nordic institutions
- Industry collaboration shows variation, suggesting opportunities for enhanced university-industry partnerships
- International outlook demonstrates room for improvement across most institutions, indicating potential for increased global connectivity

Global Rank	Name	Country	Overall	Research Quality	Industry	International Outlook	Research Environment	Teaching
31	Karolinska Institutet	Sweden	83	93.1	92.5	84.9	84.6	66.3
54	Uppsala University	Sweden	71.9	85.3	99.8	87.6	60.6	57
65	Aarhus University	Denmark	67.9	83.1	99.4	84.4	58.7	47.8
71	University of Helsinki	Finland	66.5	88.5	67.7	64.6	55.4	48.8
75	Lund University	Sweden	66	79	96.3	89	55.1	48.7
91	Stockholm University	Sweden	63.9	91.2	74.9	86.2	39.3	44.4
101-125	Technical University of Denmark	Denmark	59.5-62.0	88.6	99.7	94.3	37.1	32.9
126-150	University of Oslo	Norway	57.1-59.2	84.3	71.9	83	38	38
126-150	Swedish University of Agricultural Sciences	Sweden	57.1-59.2	77.4	67.3	59.7	46.8	43.8
151-175	University of Bergen	Norway	54.3-56.9	80.8	81.7	75.7	34.7	29.8
151-175	University of Gothenburg	Sweden	54.3-56.9	85	81.5	72.2	30.3	34.5
176-200	Norwegian University of Science and Technology	Norway	52.3-54.2	82	76.4	84.9	27.4	28.5
201-250	Chalmers University of Technology	Sweden	49.5-52.2	77.3	83.7	91.1	25.7	28.8
201-250	Umeå University	Sweden	49.5-52.2	71	68.4	89.8	28.3	29
201-250	University of Southern Denmark	Denmark	49.5-52.2	77.7	98.7	71.9	24.2	25.4
251-300	University of Iceland	Iceland	46.6-49.4	80.6	93.7	74.4	22.1	19.8
251-300	Linköping University	Sweden	46.6-49.4	79.8	90.6	72.9	27.2	16.2
251-300	University of Turku	Finland	46.6-49.4	80.4	72	58.5	29.1	22.5
301-400	University of Eastern Finland	Finland	42.0-46.5	73.8	62.6	56.5	22.3	24.7
401-500	Norwegian University of Life Sciences	Norway	37.8-41.8	59.3	42.1	68.7	17.9	27.1
401-500	UiT The Arctic University of Norway	Norway	37.8-41.8	60.4	57.4	78.9	14.7	24.4
401-500	Örebro University	Sweden	37.8-41.8	69.4	27.7	63.6	12.6	21.5
401-500	Åbo Akademi University	Finland	37.8-41.8	59.8	61.2	75.4	22	19.3



Source: JLL Research on Times Higher Education Life Sciences Ranking 2025.

Surprisingly, KTH and the University of Copenhagen don't appear in the THE Life Sciences ranking. However, they are ranked in the Computer Sciences ranking, respectively 69<sup>th</sup> and 126-150<sup>th</sup>.

# Nordic Life Sciences quality publications

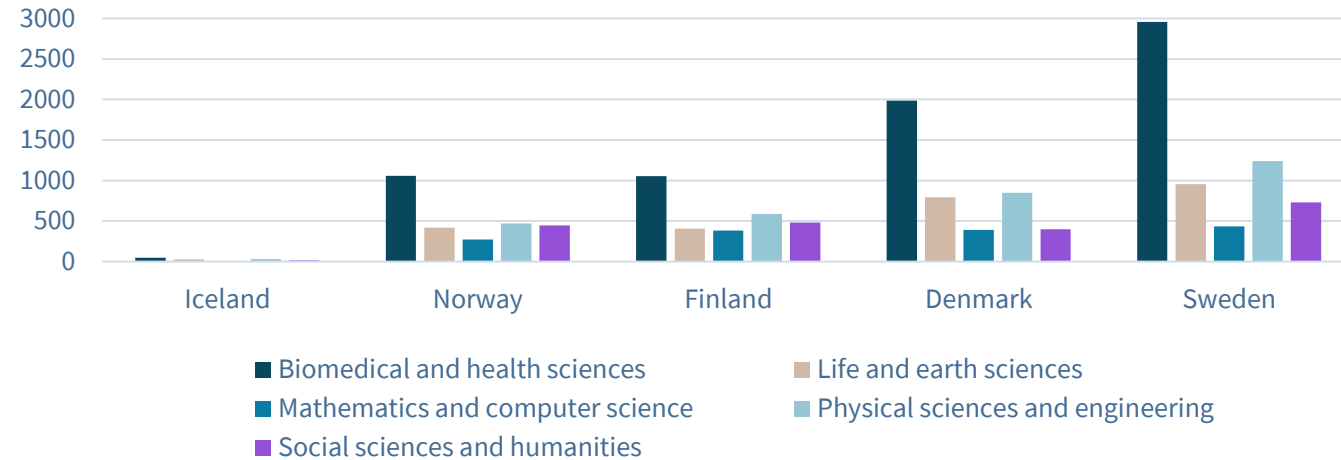
Nordic academic excellence demonstrates strong global positioning with opportunities for industry collaboration

The CWTS Leiden Ranking Traditional Edition offers information about the scientific performance of over 1,500 universities worldwide. We hereafter look at the number of top 10% cited publications.

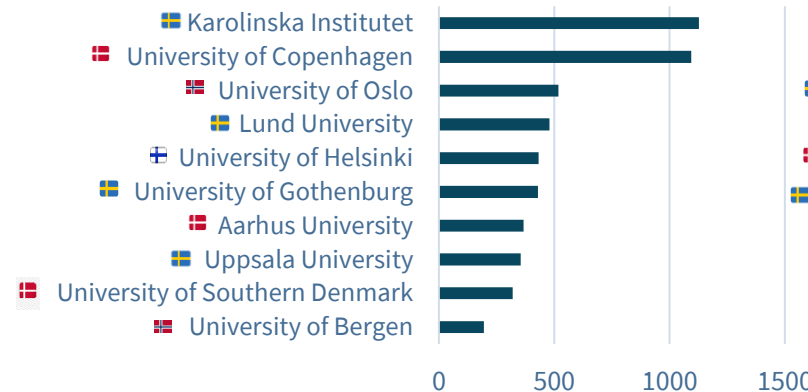
Biomedical & health sciences dominate the Nordics quality publications. Biomedical & health sciences and Life & earth sciences represent 60% of all top publications (vs 29% for the rest of Europe).

The top 3 universities with most publications for Biomedical & health sciences are spread across 3 countries (Sweden, Denmark and Norway).

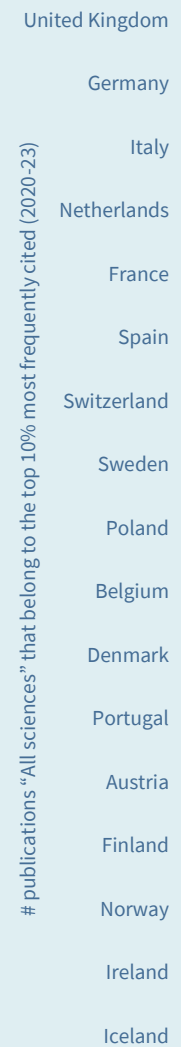
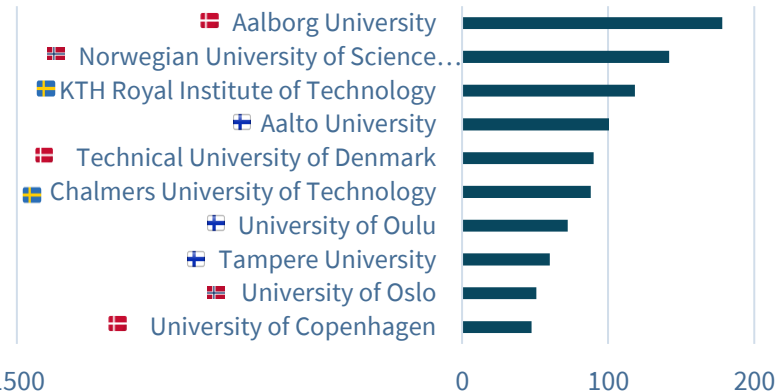
# top 10 cited publications by scientific field (2020-23)



Top publications for biomedical and health sciences



Top publications for Mathematics and computer science



# Patent grants by technology fields

## Sweden and Denmark outperform on number of life sciences related patent grants

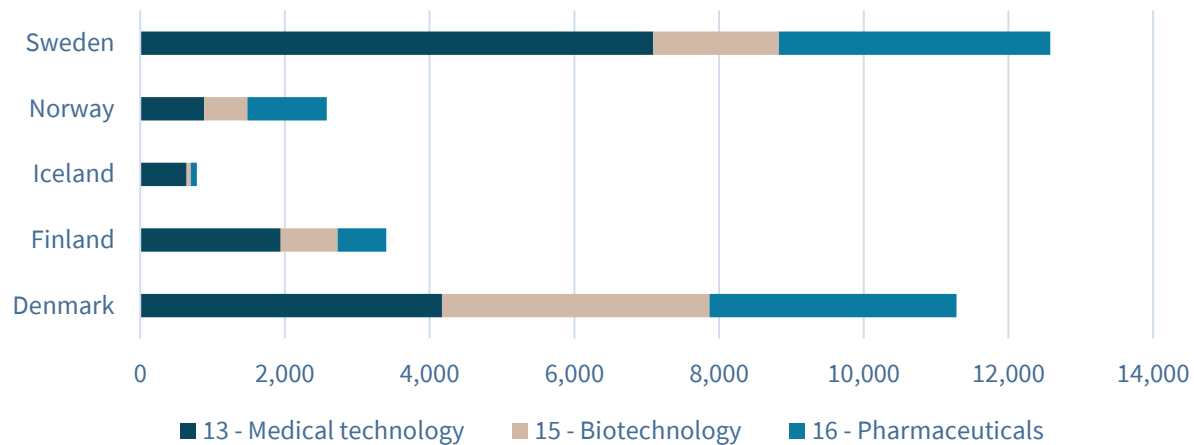
Patents granted by the international Patent Cooperation Treaty (PCT) are a strong measure of one country's capacity to innovate.

With 12,577 and 11,283 respectively, Sweden and Denmark are ranked 5<sup>th</sup> and 6<sup>th</sup> in Europe for life sciences related patents. Far ahead of much larger countries like Spain (7,561) or Poland (3,854).

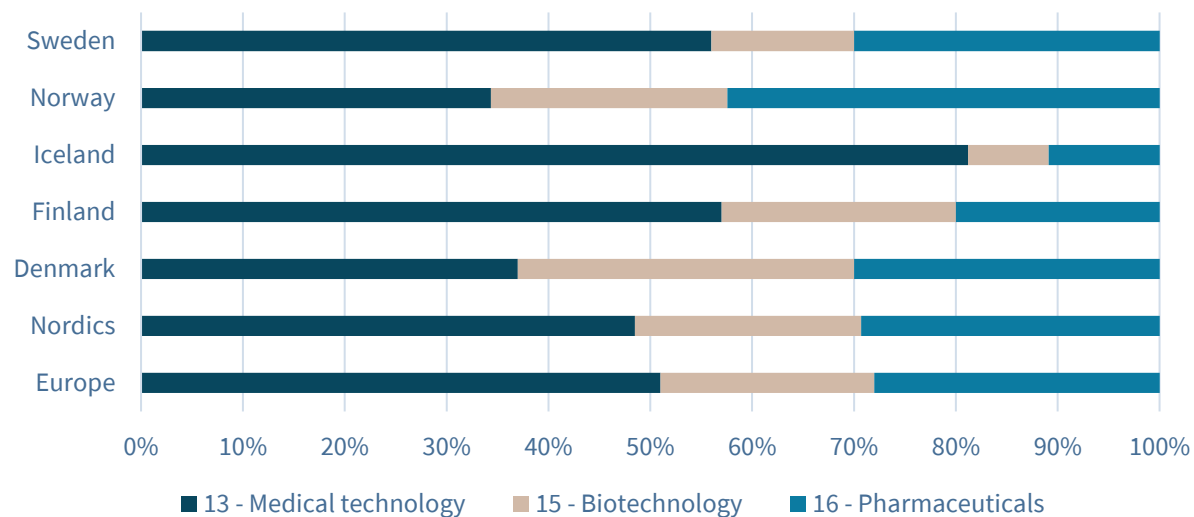
Sweden, Finland and especially Iceland have a strong proportion of patents granted in the Medical technology field.

Denmark stands out for Biotechnology patents when Norway is strongest for Pharmaceuticals.

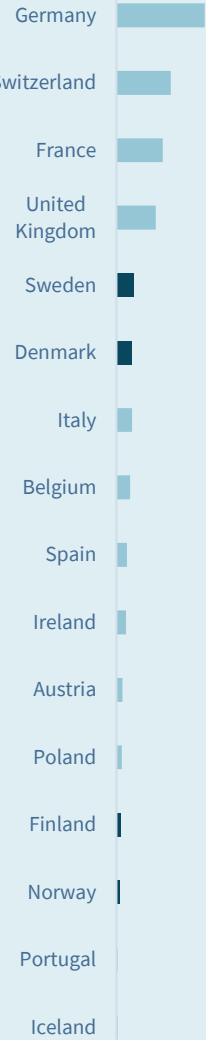
Number of life sciences patent grants by technology (2014-23)



Share of patent grants by field (2014-23)



Number of life sciences patent grants (2014-23)



# Corporate tax & R&D incentives

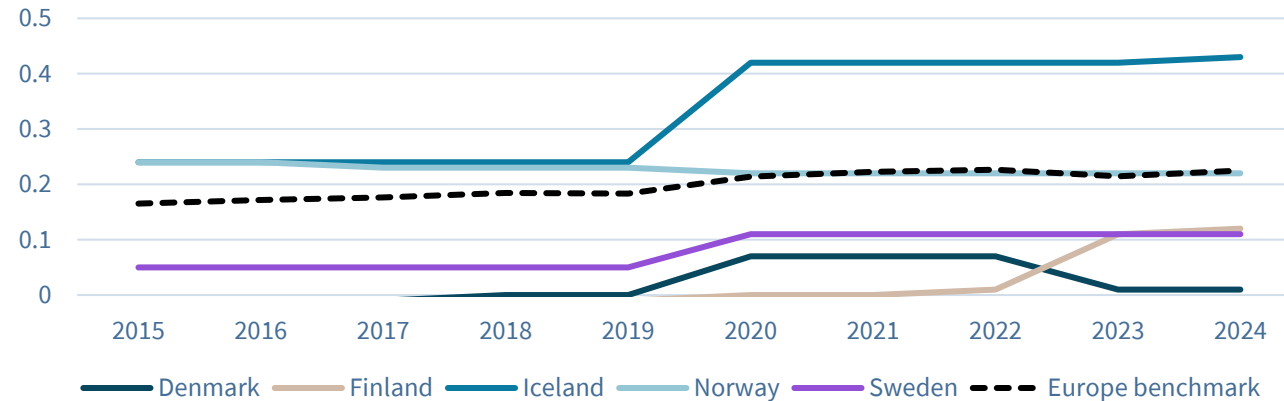
Nordics offer amongst the lowest corporate tax rates in Europe but below average R&D tax subsidies

Corporate tax & R&D incentives are key elements to support the growth of the life sciences sectors.

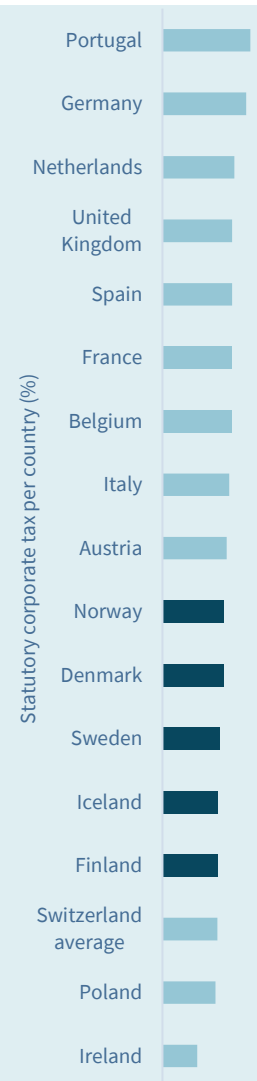
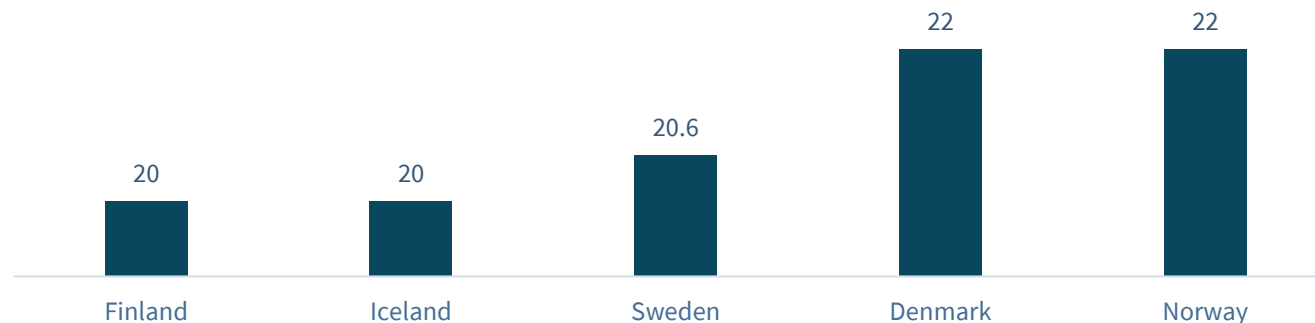
Through low corporate tax rates, Ireland, despite its small size has successfully attracted most of the big pharma companies to establish manufacturing activities on its soil. The Nordics rank from 4<sup>th</sup> to 8<sup>th</sup> for lowest corporate tax.

As previously seen with the European Innovation Scoreboard (slide 9), the Nordics rank lower for direct and indirect government support of business R&D. Only Iceland offers higher tax subsidies to SMEs than the average of 22.5% seen across the 17 European benchmarked locations.

Implied tax subsidy rates on R&D expenditures for SME (%)



Statutory corporate tax per country (%)



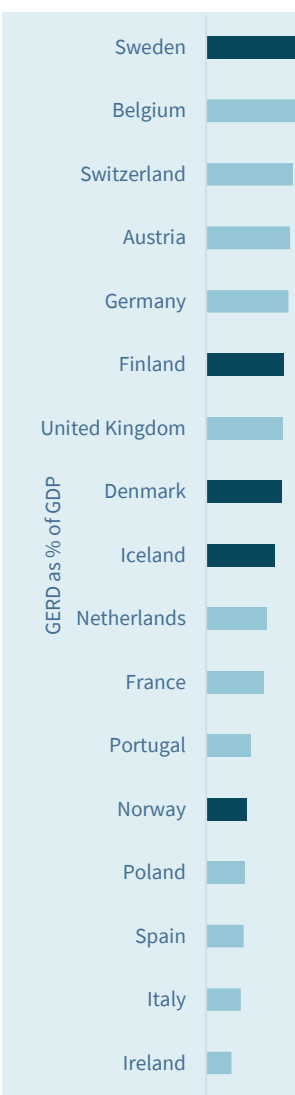
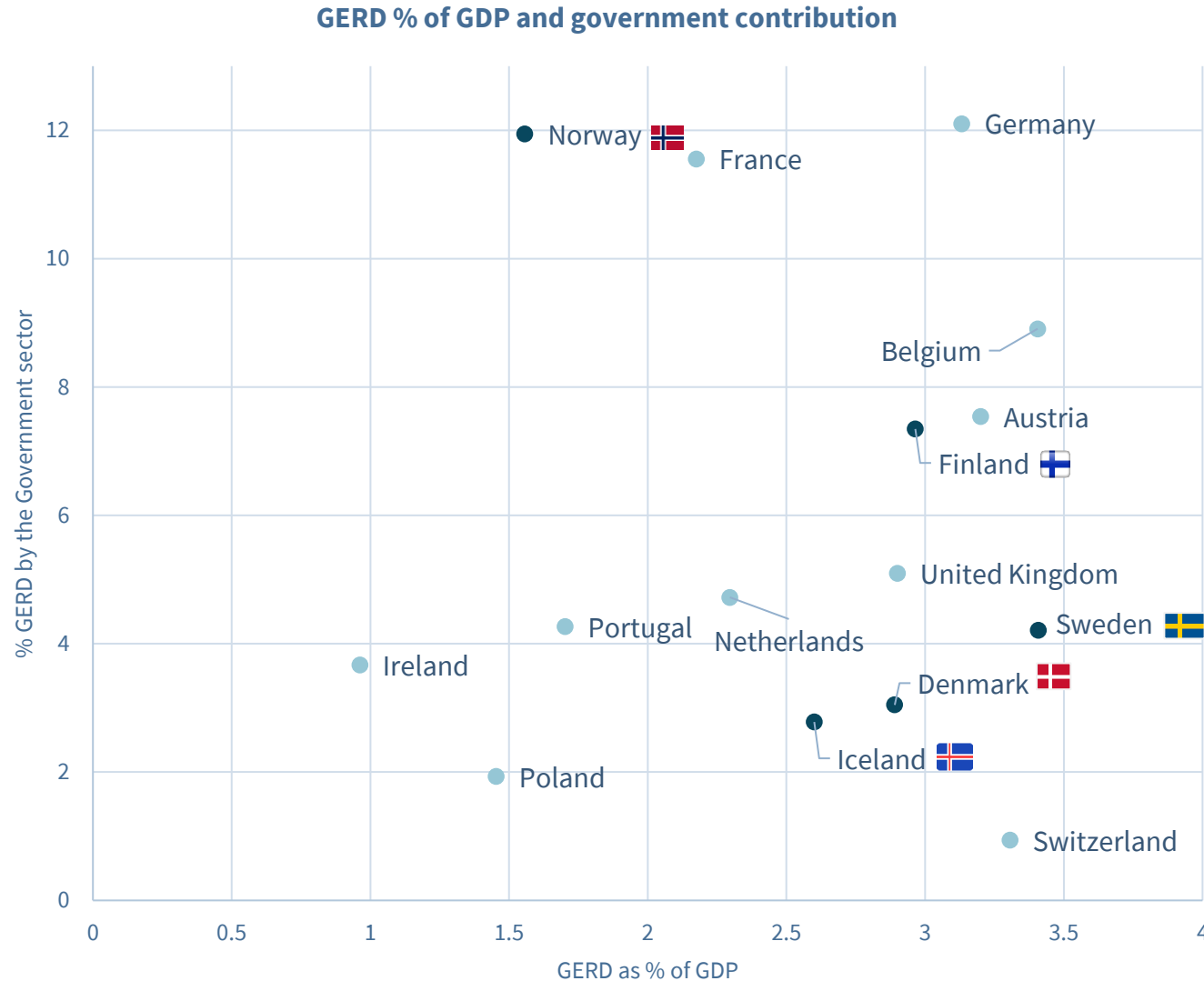
# Gross Expenditure on Research and Development

The Nordics show strong R&D investments with a moderate to low Government sector contribution

While it is larger than the Life Sciences sector alone, Gross Expenditure on Research and Development (GERD) is a strong indicator of the overall willingness of a country to invest in high value R&D.

At 3.4%, Sweden is the European country with the highest GERD as a share of its GDP.

Amongst European countries the Government sector's contribution to GERD varies. In France, Germany and Norway, the Government contributes to more than 11% of GERD. In the UK, the Netherlands, Denmark and Sweden, the Government sector accounts for between 3 and 5% of total GERD. The Swiss Government sector is responsible for less than 1% of GERD despite the country being a life sciences powerhouse.



# Life Sciences venture capital

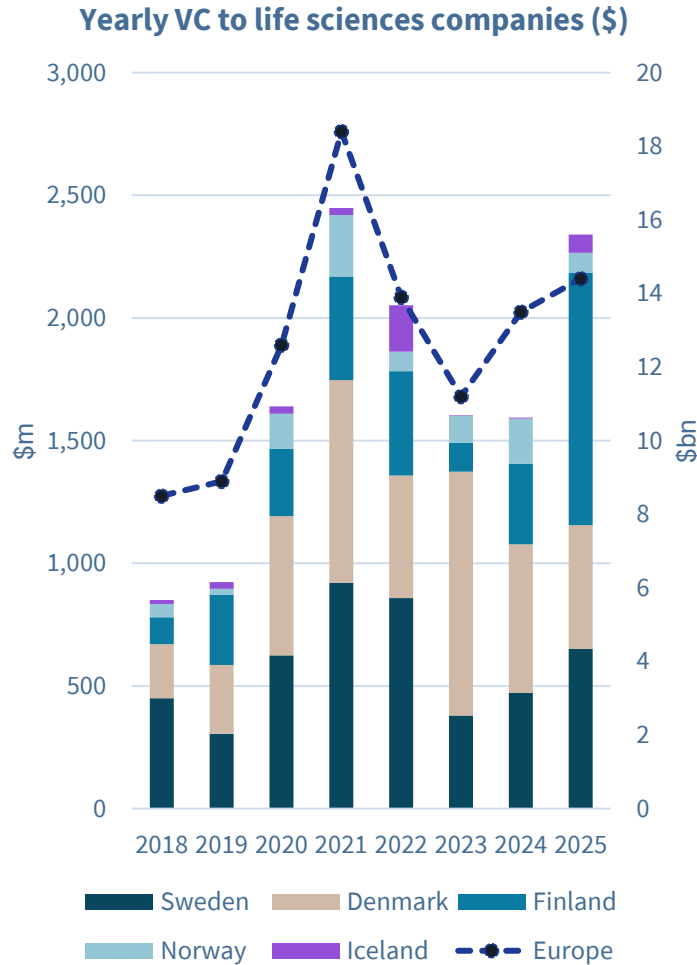
Venture capital investment shows a strong uptick, fueling Nordic life sciences growth with a clear focus on pharmaceuticals and biotechnology

## Venture Capital Investment Trends

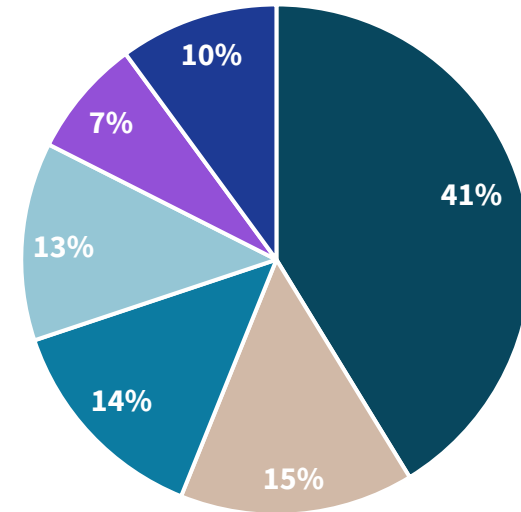
The Nordic region demonstrates a robust and growing venture capital landscape:

- **Strong investment growth** shows yearly VC funding increasing significantly since 2018, with 2025 year-to-date figures already surpassing \$2 billion and indicating sustained momentum.
- **Shifting investment leadership** reveals that while Denmark and Sweden have historically led regional investment, Finland has attracted a major share of funding in 2025 year-to-date, demonstrating the market's evolving dynamics.
- **Pharmaceuticals & Biotechnology dominate** investment, attracting 41% of all Nordic VC funding from 2018-2025, followed by Healthcare Devices and Supplies (15%).

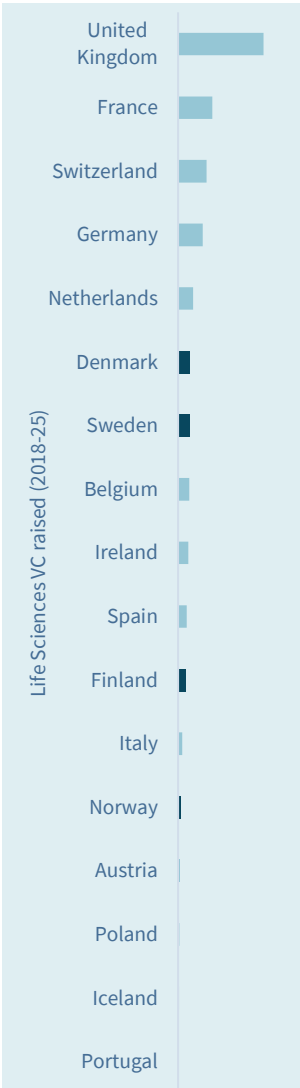
While far from the levels achieved in the UK, the Nordics' strong and increasingly dynamic venture capital environment underscores investor confidence and provides critical funding for innovation across the entire Nordic life sciences ecosystem.



**Nordics VC by primary industry code (2018-25)**



- Pharmaceuticals and Biotechnology
- Healthcare Devices and Supplies
- Healthcare Services
- Consumer Durables
- Healthcare Technology Systems
- Others



# Life Sciences European Research Council grants

Sweden dominates the region in securing prestigious ERC funding, highlighting its world-class research ecosystem and institutional excellence

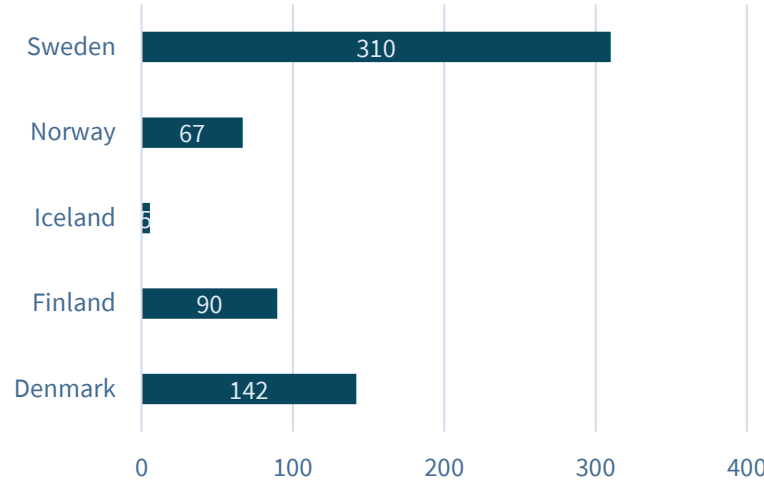
## Regional Grant Performance

The data reveals a significant disparity in attracting competitive research funding:

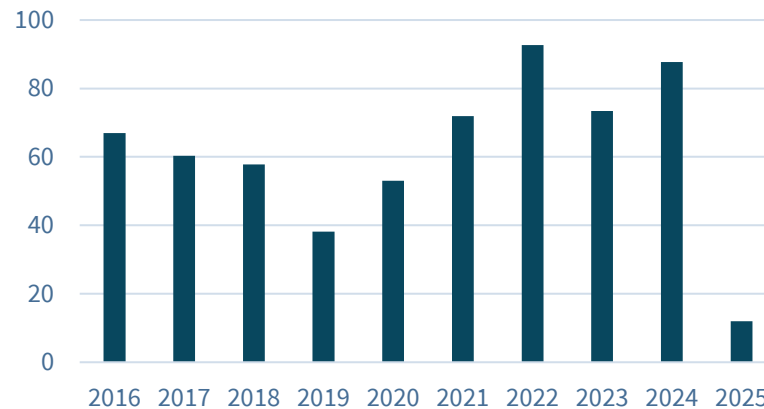
- **Swedish Dominance:** Sweden leads grant acquisition with €310 million (2016-2025), exceeding the combined total of all other Nordic countries.
- **Elite Institutional Concentration:** Grant funding is concentrated in a few elite institutions, led by Sweden's Karolinska Institute (€63.6M), Denmark's University of Copenhagen (€51.4M), and Sweden's Lund University (€39.9M).
- **A Clear Performance Gap:** While Denmark stands out as a strong second with €142 million, Finland (€90 million), Norway (€67 million), and Iceland secure considerably less funding, illustrating a distinct hierarchy in grant acquisition success.
- **Varied European Competitiveness:** In Europe, Sweden and Denmark rank as top-tier nations for grants, while the other Nordic countries hold more modest, mid-tier positions.

While Sweden offers a world-class ecosystem for grant-funded research, the institutional strengths and funding success vary significantly across the broader Nordic region.

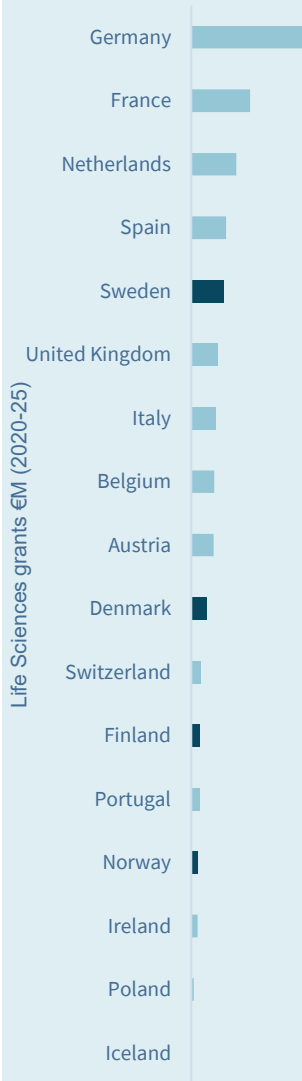
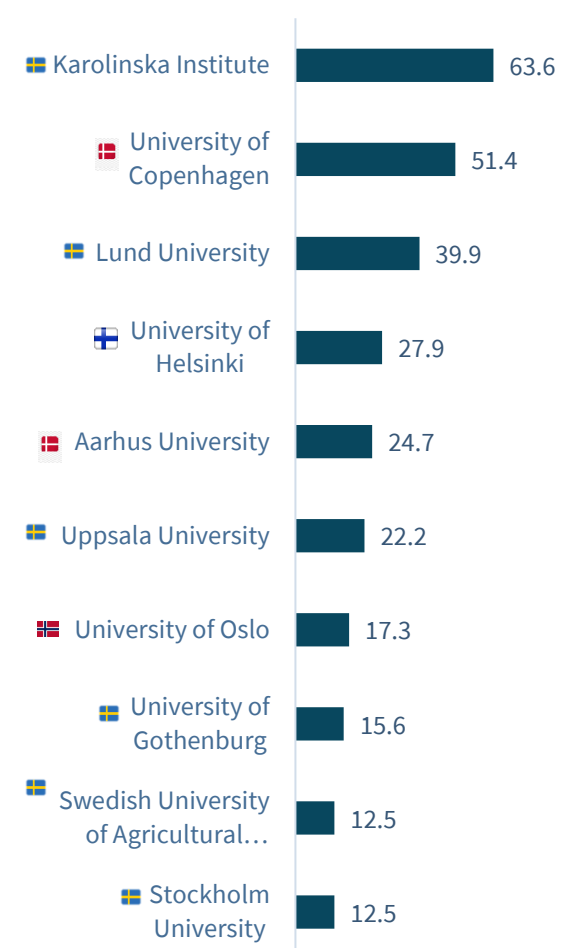
ERC life sciences grants 2016-2025 (€m)



Nordics yearly life sciences grants (€m)



Top 10 institutions (€M)



# Life sciences international trade

Denmark leads Nordic export volume while Sweden drives regional growth.

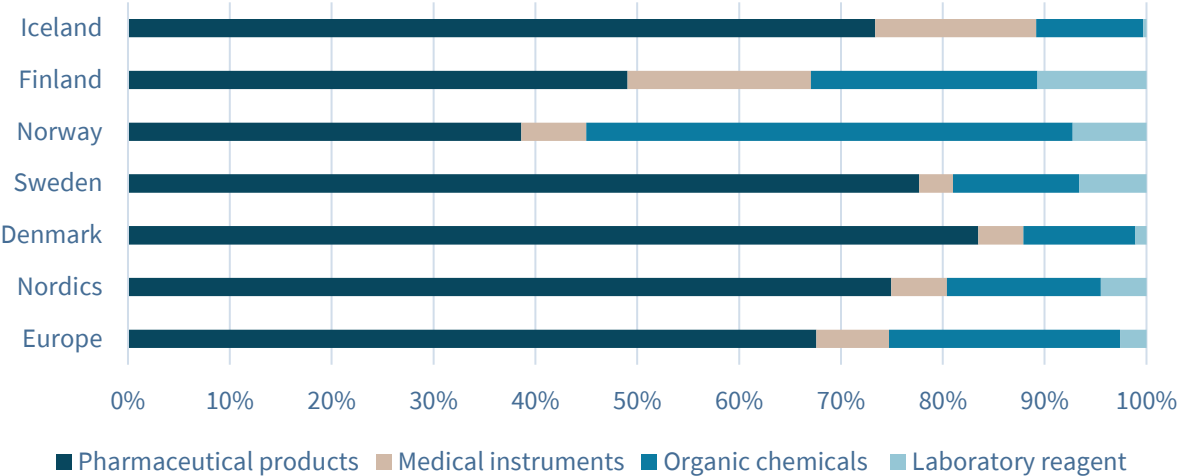
### Nordic Export Dynamics

The region's life sciences export market is defined by distinct volume leaders and high-growth champions:

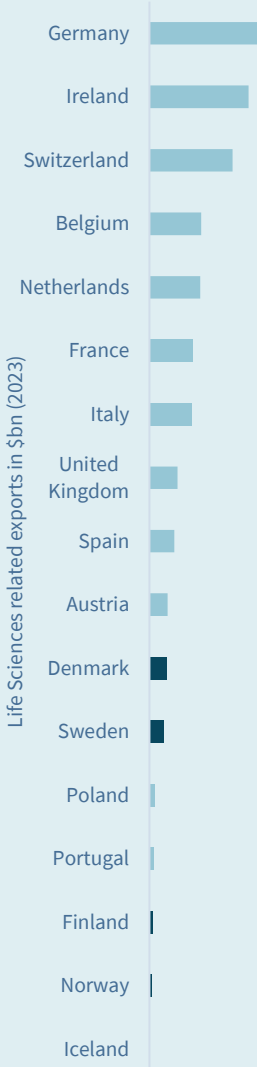
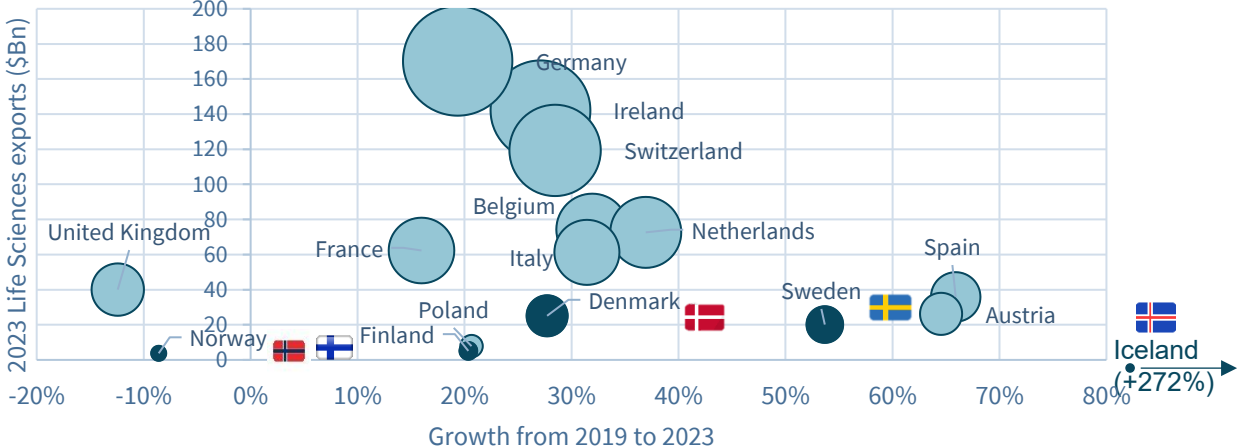
- **Nordic Export Volume:** Denmark (approx. \$25 billion) and Sweden (approx. \$20 billion) were the region's largest exporters in 2023. While significant within the Nordics, their export volumes are modest compared to top European nations like Germany or Ireland.
- **Exceptional Export Growth:** Sweden (approx. +55%) and Iceland (an exceptional +272%) show the highest export growth rates in the region from 2019 to 2023, demonstrating market expansion.
- **Pharmaceutical Dominance:** The export is largely driven by pharmaceutical products, which account for 75% of the Nordic's life sciences export value. Within the Nordics Finland and Norway exhibit a more balanced export profile, with notable contributions from medical instruments and organic chemicals

The region's export performance is driven primarily by Denmark's established volume and Sweden's strong growth, positioning these two nations as the key Nordic contributors to the global life sciences supply chain.

% Split of life sciences export value by product 2025



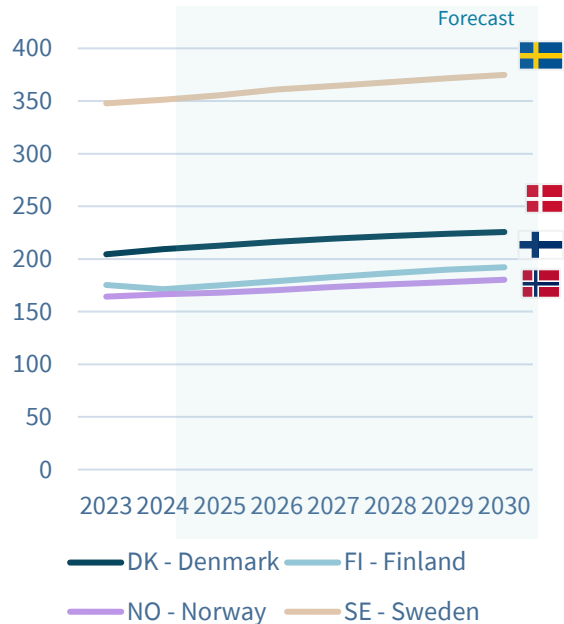
Total life sciences related exports 2023 (\$bn) and 2019-23 growth



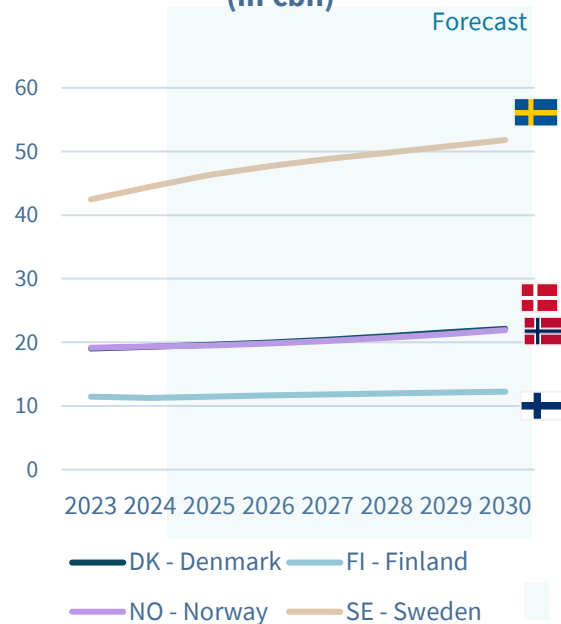
# Scientific Employment

Sweden leads scientific employment & output, with high productivity across the Nordics

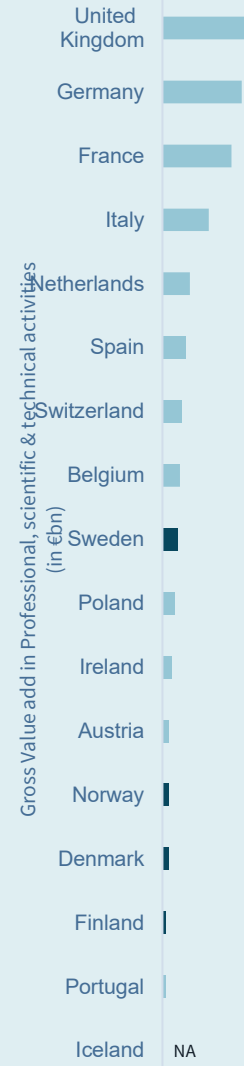
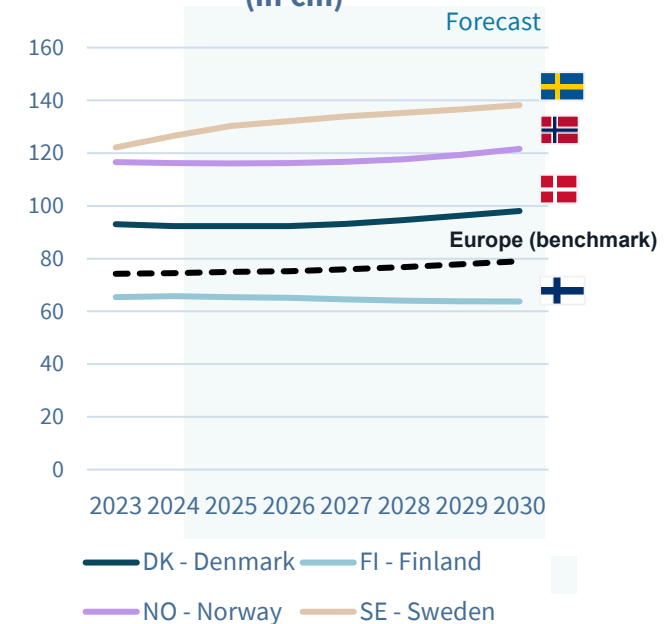
Employment - Professional, scientific & technical activities (in '000)



Gross Value add in Professional, scientific & technical activities (in €bn)



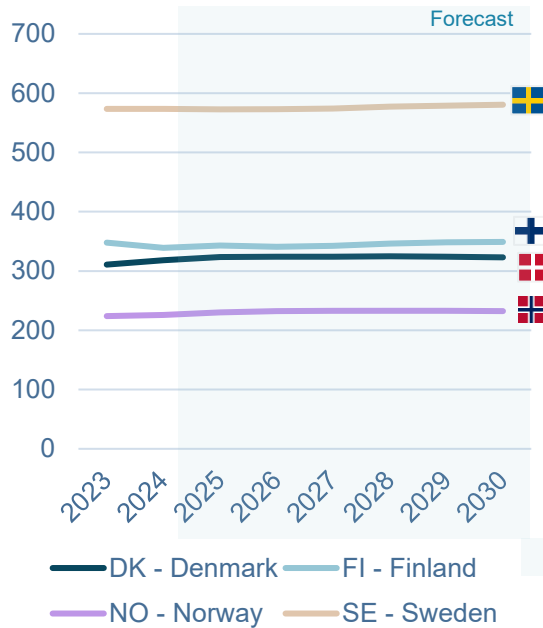
Gross Value add per thousand employee in Professional, scientific & technical activities (in €m)



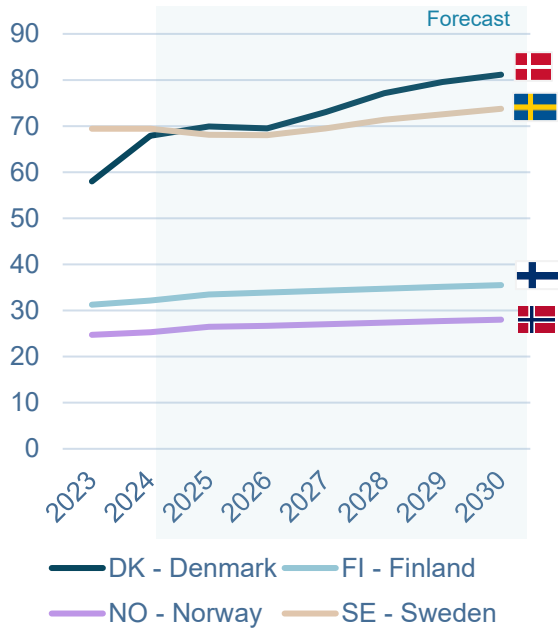
# Manufacturing Employment

Sweden & Denmark dominate manufacturing with a clear productivity outperformance for Denmark

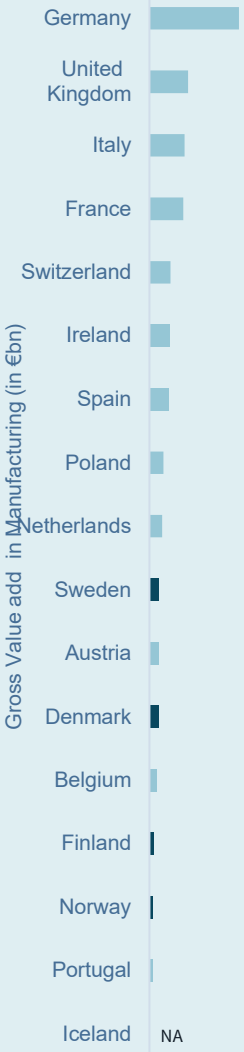
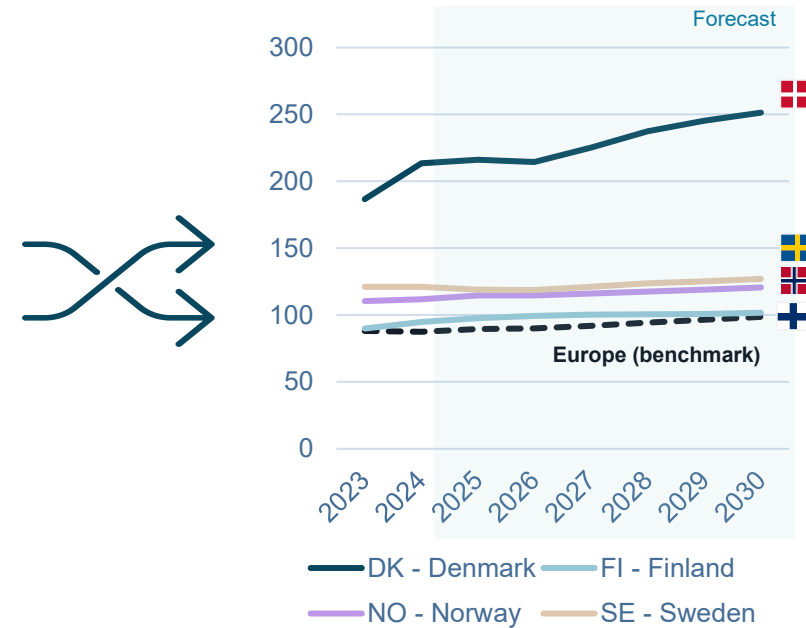
Employment – Manufacturing (in '000)



Gross Value add in Manufacturing (in €bn)



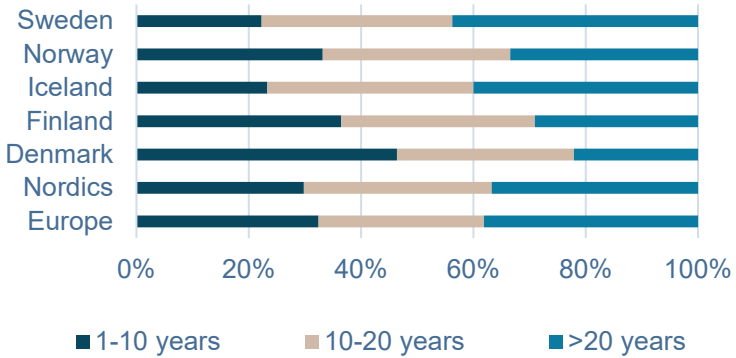
Gross Value add per thousand employee in Manufacturing (in € million)



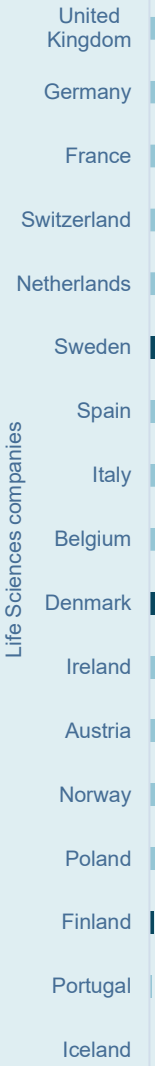
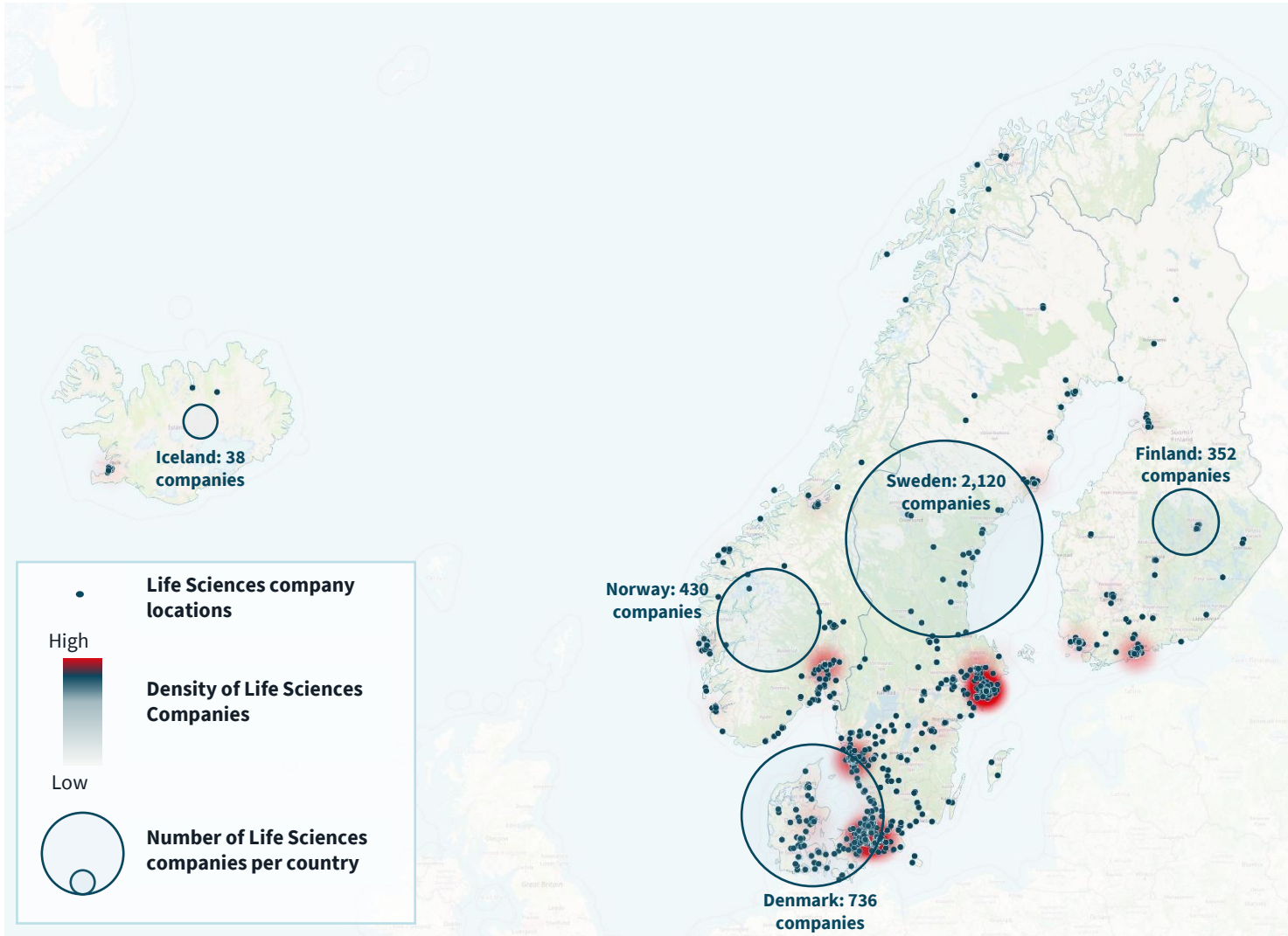
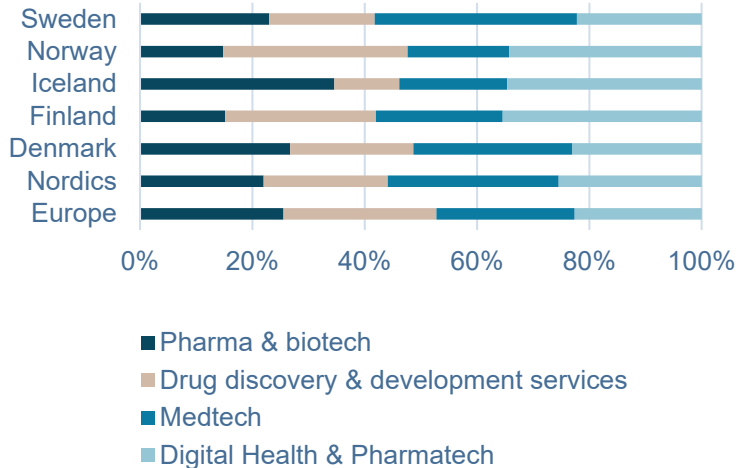
# Life Sciences corporate landscape

Sweden has the strongest life sciences company concentration

Companies split by age



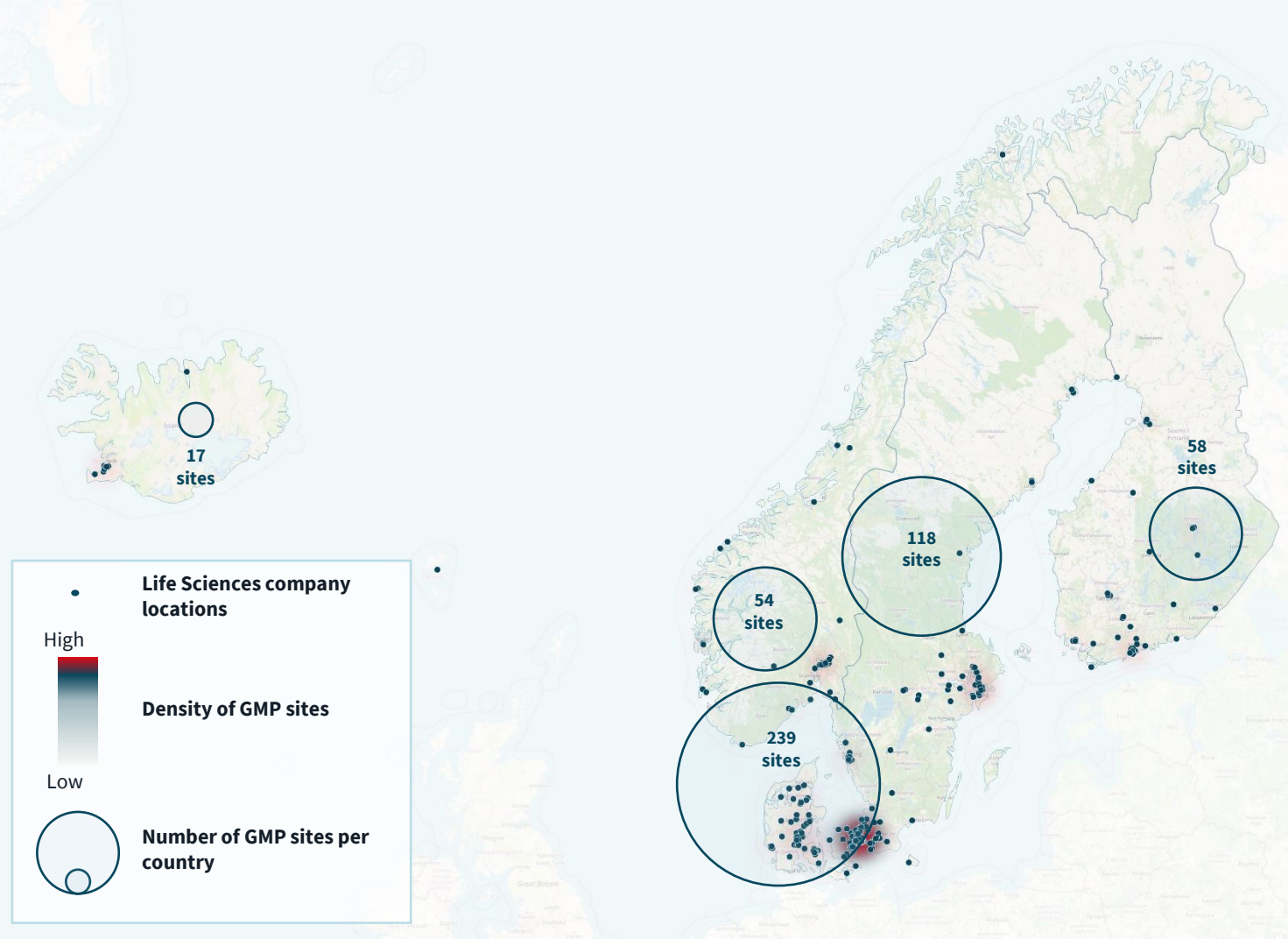
Companies split by sub-sector




# Life Sciences Good Manufacturing Practice sites

## Denmark has the highest number of GMP sites

The Danish pharmaceutical industry is home to global giants like Novo Nordisk, and Lundbeck, alongside a vibrant community of smaller biotech firms and startups. These companies make substantial investments in R&D, contributing to a large and growing pipeline of new drugs. The presence of such a strong industrial base naturally necessitates a large number of GMP-compliant manufacturing facilities to produce these pharmaceuticals for both domestic and international markets.



- Germany
- United Kingdom
- France
- Italy
- Spain
- Poland
- Switzerland
- Netherlands
- Austria
- Belgium
- Denmark
- Ireland
- Sweden
- Portugal
- Finland
- Norway
- Iceland



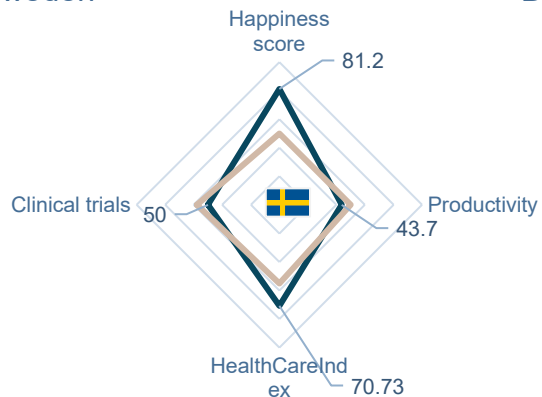
# Part 2: Country benchmarking Exercise

# Intensity score: Societal & infrastructural

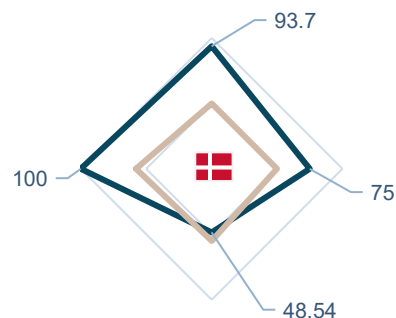
The Nordics lead Europe in happiness and quality of life, setting a benchmark for talent attraction and innovation

## Societal & Infrastructural 1

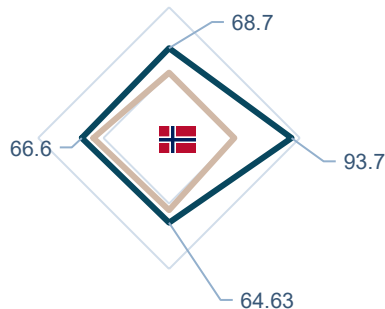
Sweden



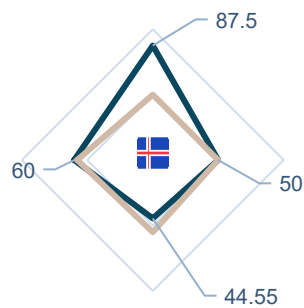
Denmark



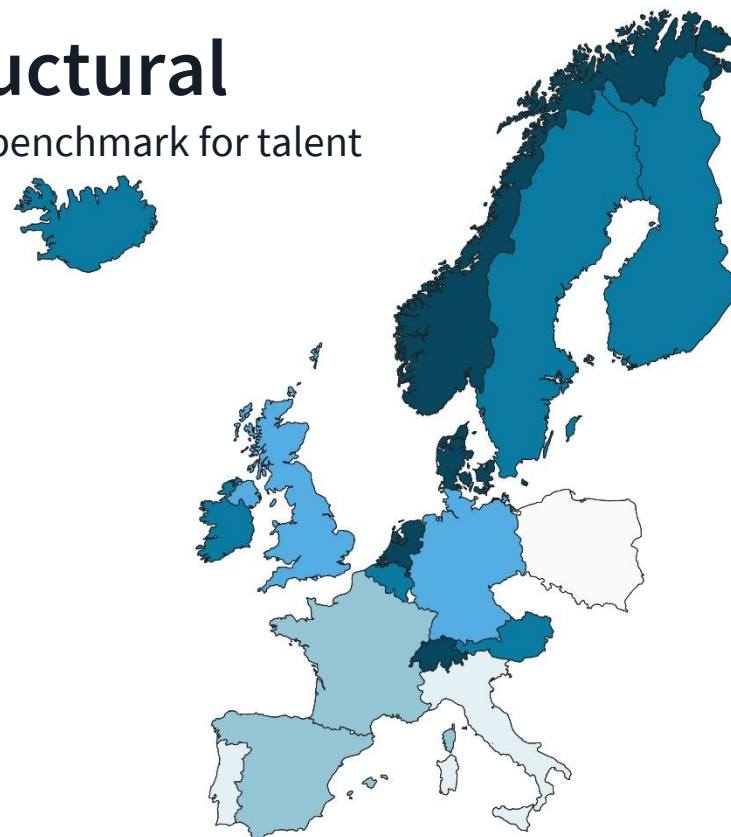
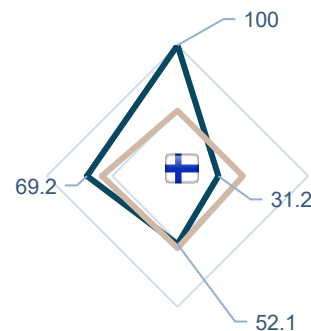
Norway



Iceland



Finland



Rank	Country	Score
1	Denmark	79.3
2	Switzerland	77.4
3	Netherlands	77.3
4	Norway	73.4
5	Belgium	69.5
6	Ireland	66.8
7	Finland	63.1
8	Sweden	61.4
9	Austria	60.6
10	Iceland	60.5
11	United Kingdom	52.4
12	Germany	46.4
13	France	36.0
14	Spain	26.6
15	Italy	24.9
16	Portugal	14.5
17	Poland	14.1

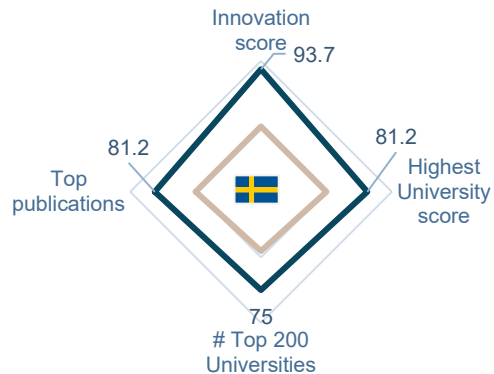
### Notes & Sources

Clinical trials from 1999 to 2025 (WHO)  
 Happiness score 2025 (World Happiness Score)  
 Productivity: Gross value added per hour worked 2024 (OECD)  
 Health Care Index 2025 CEOWORLD  
 Indicators are translated into a score /100, all four have the same weighting.

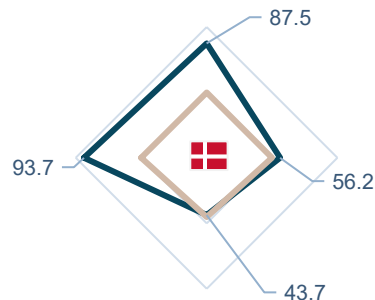
# Intensity score: Academia and innovation

Sweden and Denmark lead Nordic academia and innovation, far surpassing the European benchmark

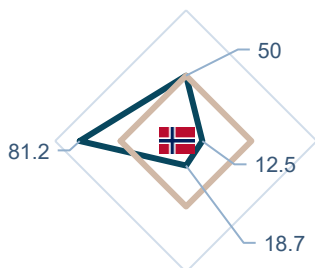
Sweden



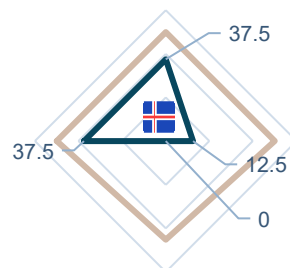
Denmark



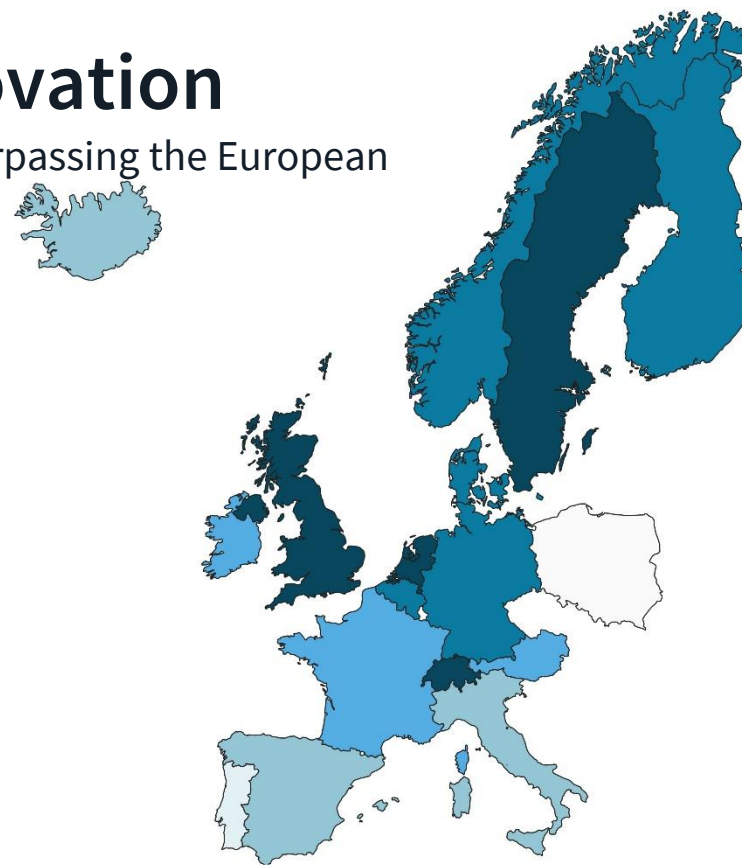
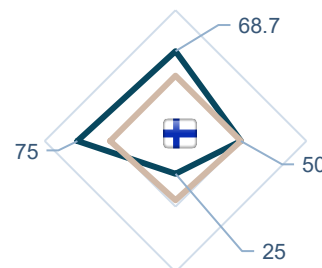
Norway



Iceland



Finland



Rank	Country	Score
1	Switzerland	92.1
2	United Kingdom	85.9
3	Sweden	82.7
4	Netherlands	81.2
5	Denmark	70.2
6	Belgium	59.3
7	Finland	54.7
8	Germany	54.6
9	Norway	49.9
10	France	42.2
11	Austria	39.0
12	Ireland	34.4
13	Spain	26.6
14	Italy	24.9
15	Iceland	21.9
16	Portugal	9.4
17	Poland	0.0

### Notes & Sources

Innovation score: European innovation score (EU)  
 Highest life sciences university score (THE 2025)  
 Number of top 200 life sciences universities (THE 2025)  
 Productivity: Gross value added per hour worked 2024 (OECD)  
 Indicators are translated into a score /100, all four have the same weighting.

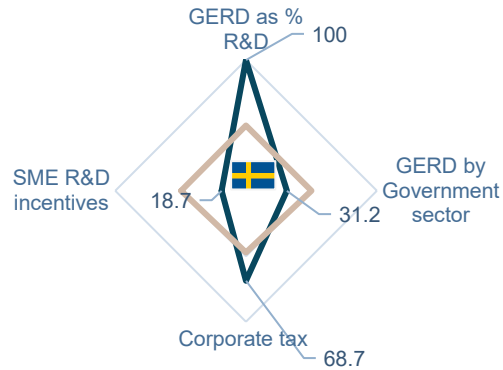
# Intensity score: Government bodies & incentives

A mixed picture for R&D incentives and government support in the Nordics

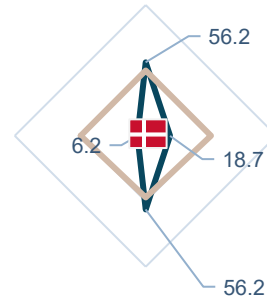
## Government bodies & incentives

3

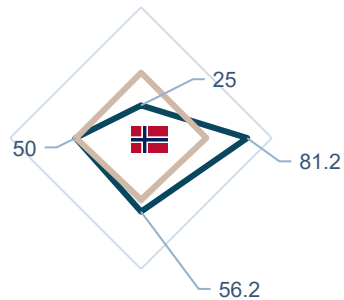
Sweden



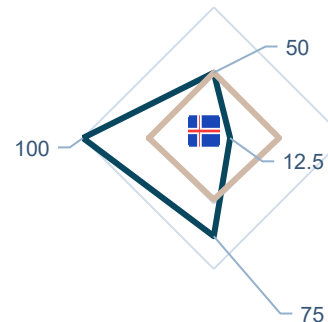
Denmark



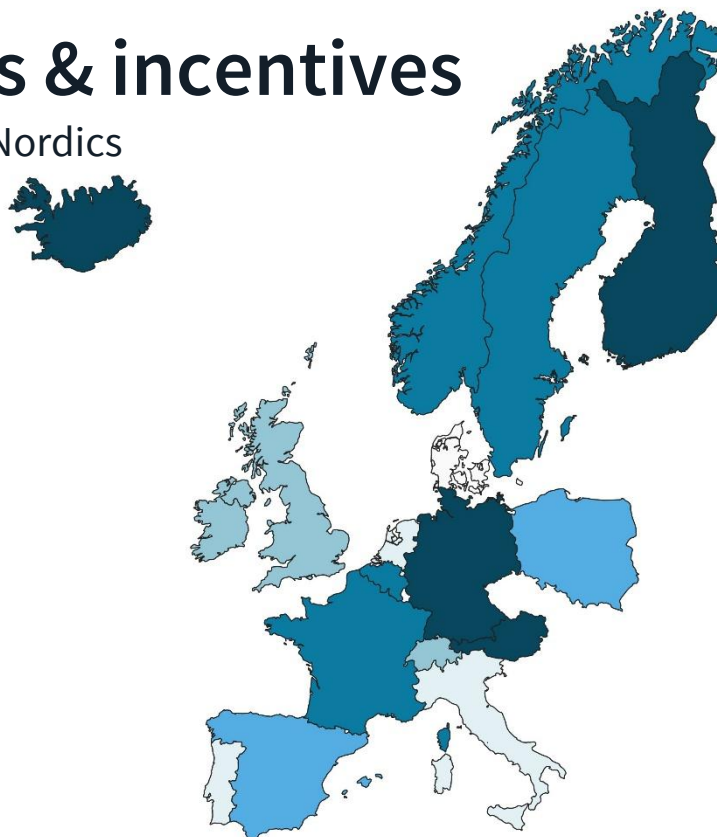
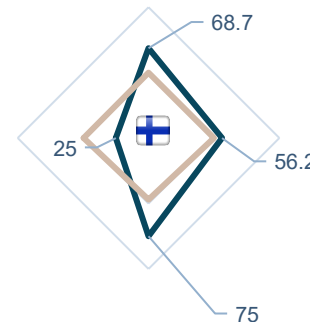
Norway



Iceland



Finland



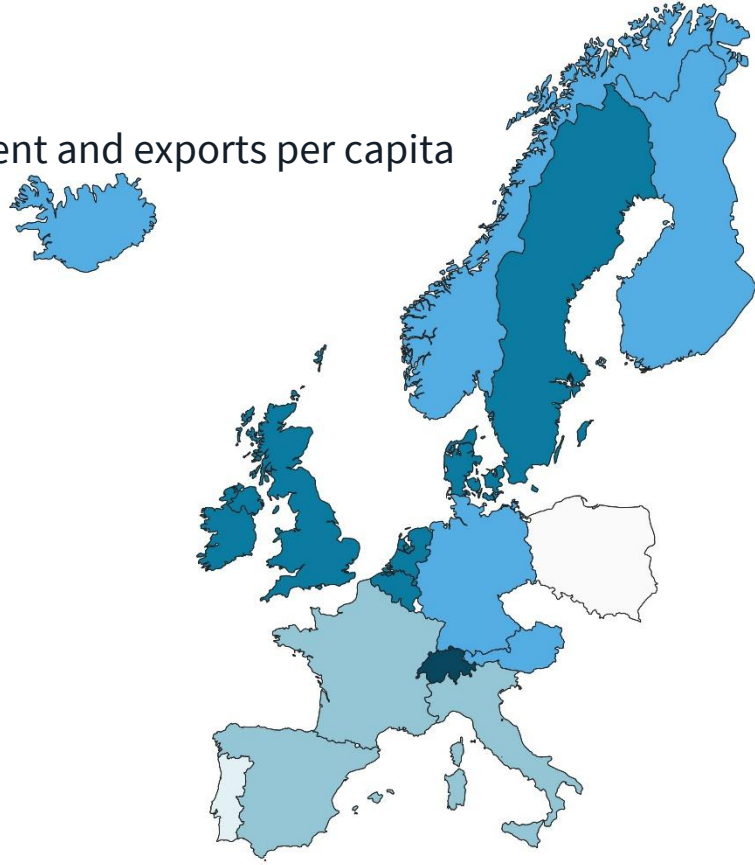
Rank	Country	Total score
1	Iceland	59.4
2	Germany	59.4
3	Austria	57.8
4	Finland	56.2
5	Sweden	54.7
6	Norway	53.1
7	France	53.1
8	Belgium	53.1
9	Spain	51.6
10	Poland	50.0
11	Ireland	45.3
12	Switzerland	43.8
13	United Kingdom	43.7
14	Netherlands	40.6
15	Portugal	40.6
16	Italy	39.0
17	Denmark	34.3

### Notes & Sources

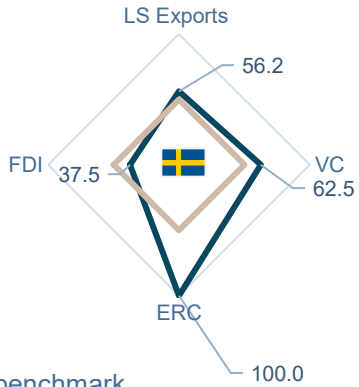
Gross Domestic Expenditure (GERD) as % GDP (OECD 2023)  
 GERD originating from the Government sector (OECD 2023)  
 Statutory corporate tax rate 2023 (OECD)  
 SME R&D incentives 2024 (OECD)  
 Indicators are translated into a score /100, all four have the same weighting.

# Intensity score: Capital Flows

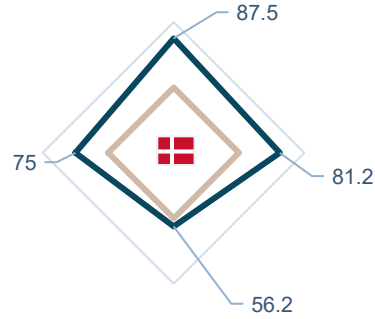
Denmark and Sweden achieve top rankings in life sciences investment and exports per capita among European nations



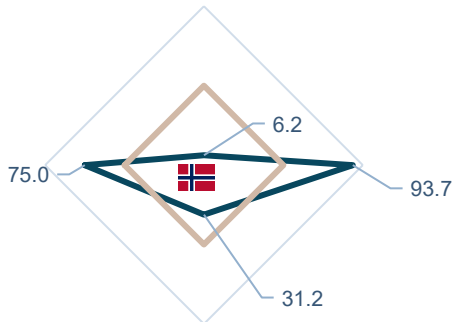
Sweden



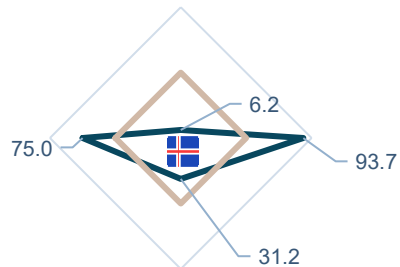
Denmark



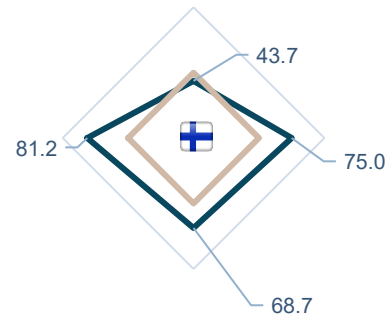
Norway



Iceland



Finland



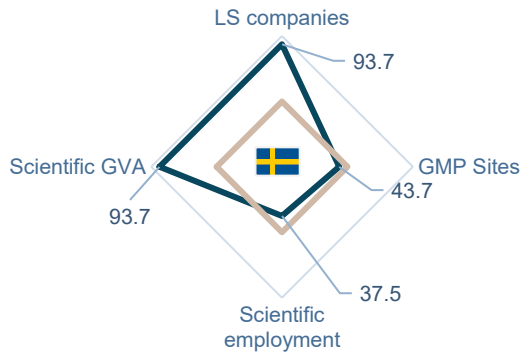
Rank	Country	Total score
1	Switzerland	83.8
2	Netherlands	72.9
3	Denmark	69.3
4	Sweden	67.8
5	United Kingdom	66.4
6	Ireland	62.9
7	Belgium	62.4
8	Norway	51.9
9	Germany	51.6
10	Iceland	48.9
11	Austria	46.8
12	Finland	45.7
13	France	39.6
14	Spain	27.7
15	Italy	27.7
16	Portugal	14.9
17	Poland	12.8

**Notes & Sources**  
 Life Sciences Exports 2023 (OCE)  
 Venture Capital to life sciences 2018-2024 (PitchBook)  
 European Research Council grants to life sciences 2016-25 (ERC)  
 FDI Intelligence from the Economist from 2022 to 2024 across key innovation sectors  
 Indicators are translated into a score /100, all four have the same weighting.

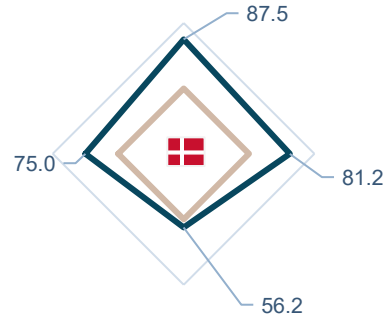
# Intensity score: Employment & Corporate Landscape

Denmark, Iceland, and Sweden lead Europe in life sciences employment and corporate presence per capita

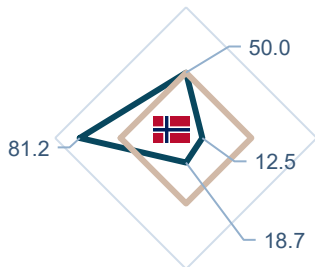
Sweden



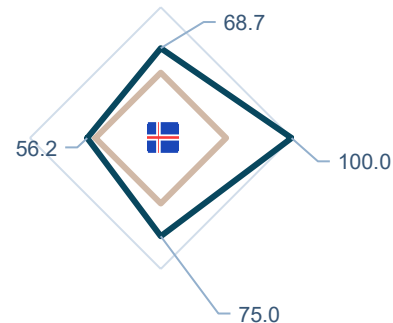
Denmark



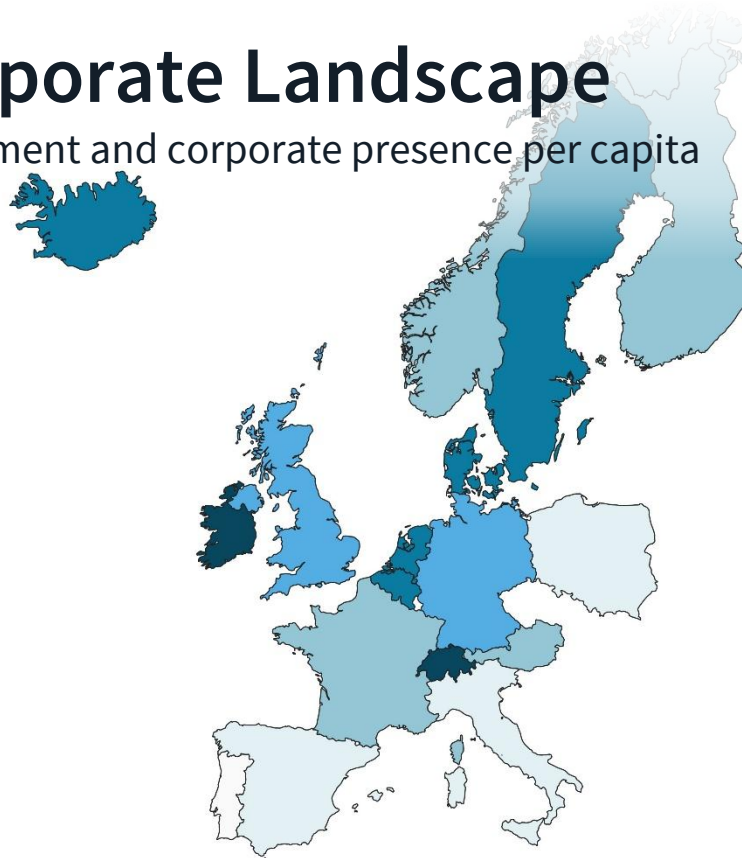
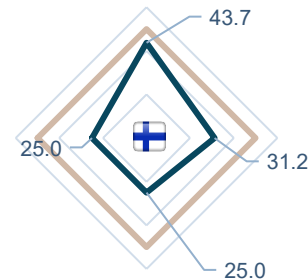
Norway



Iceland



Finland



Rank	Country	Total score
1	Switzerland	92.18
2	Ireland	82.80
3	Denmark	74.98
4	Iceland	74.98
5	Netherlands	71.83
6	Sweden	67.15
7	Belgium	65.60
8	United Kingdom	56.23
9	Germany	53.10
10	Austria	45.30
11	Norway	40.60
12	France	34.35
13	Finland	31.23
14	Italy	20.30
15	Spain	17.18
16	Poland	14.05
17	Portugal	7.78

**Notes & Sources**

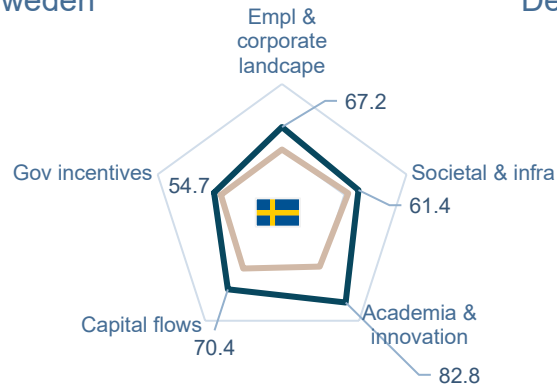
Life Sciences companies (Pitchbook & Biotechgate)  
 Good Manufacturing Practices 2024 (Eudra GMP EMA)  
 Employment - Professional, scientific & technical activities 2024 (Oxford Economics)  
 Gross Value Add of 'Scientific employment' (Oxford Economics)  
 Iceland was attributed the European Benchmark average score since no Oxford Economic data is available for the country  
 Indicators are translated into a score /100, all four have the same weighting.

# Intensity score: overall Life Sciences fundamentals

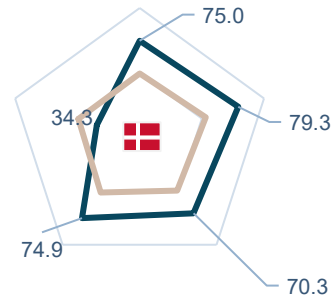
Sweden and Denmark rank among Europe's top life sciences nations, significantly outperforming Nordic peers

Total ranking **T**

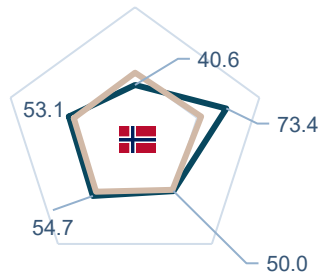
Sweden



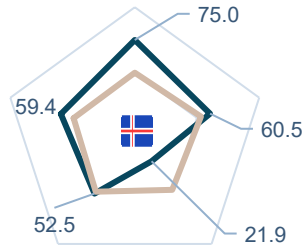
Denmark



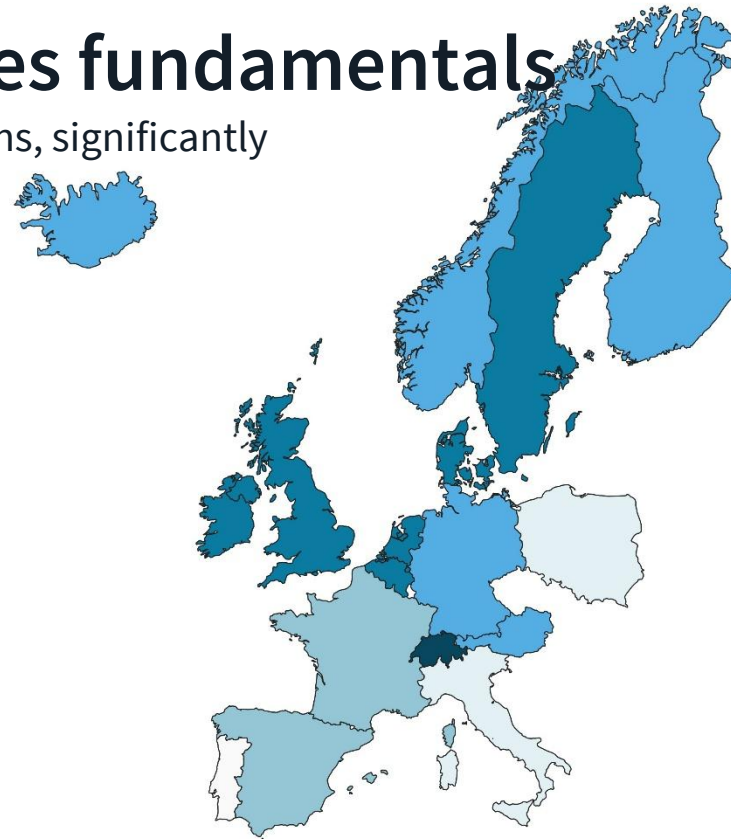
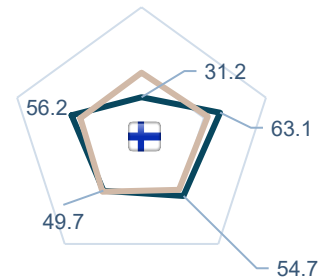
Norway



Iceland



Finland

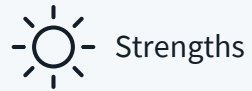


Rank	Country	Total score
1	Switzerland	78.6
2	Netherlands	69.5
3	Sweden	67.3
4	Denmark	66.7
5	Belgium	62.5
6	United Kingdom	60.6
7	Ireland	58.1
8	Norway	54.3
9	Iceland	53.8
10	Germany	53.0
11	Finland	51.0
12	Austria	50.2
13	France	40.6
14	Spain	29.1
15	Italy	26.5
16	Poland	17.5
17	Portugal	16.6

**Notes & Sources**

Each country is ranked for the 5 life sciences fundamentals themes. Indicators are translated into a score /100, all five have the same weighting.

# Nordics life sciences fundamentals



Strengths

S

- Healthcare systems
- Quality of life
- Academic & research foundations
- Innovation leadership
- Scientific & manufacturing productivity
- Big pharma presence
- Equity and investment culture
- Corporate tax



Weaknesses

W

- Scale & specialisation
- Fragmentation on academia and corporate landscape
- Limited export scale
- R&D incentives



Opportunities

O

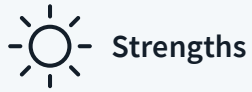
- Continued increase in VC volumes
- Manufacturing best practice
- Stockholm's stock market
- High value manufacturing
- AI opportunities
- ATMP
- Enhance R&D incentives
- European legislation



Threats

T

- China
- US policies
- Pharma pressure on drug pricing
- Brain drain
- Competition from larger European clusters



## Strengths



- Healthcare systems
- Quality of life
- Academic & research foundations
- Innovation leadership
- Scientific & manufacturing productivity
- Big pharma presence
- Equity and investment culture
- Corporate tax

**Efficient and high-performing healthcare systems**  
Sweden leads Europe in healthcare quality, with Norway also demonstrating strong results through efficient resource allocation. These create a solid platform for clinical research and collaboration



Societal & Infrastructural

**Quality of life and talent attractiveness**  
Nordic countries are recognised for their exceptional quality of life and world-leading happiness scores—Finland, Denmark, Iceland, and Sweden consistently rank above the European average. They also combine high productivity with citizen wellbeing, making the region highly attractive to international life sciences talent and investment

**Outstanding Academic and Research Foundations**  
The Nordics feature world-class universities, with Sweden’s Karolinska Institutet ranked 31st globally and Uppsala University at 54th. Nordic institutions consistently achieve high marks in research quality and industry collaboration, particularly in Sweden



Academia & Innovation

**Regional innovation leadership**  
Nordic countries (especially Sweden, Denmark, and Finland) are consistently classed as “Innovation Leaders” in the European Innovation Scoreboard. They excel in public-private co-publications, international scientific collaboration, and high scientific output, especially in biomedical and health sciences

**Scientific & manufacturing productivity**  
The Nordics show strong productivity for both “Scientific” and “Manufacturing” employment. Gross value add per employee for the “Scientific” sector is higher than Europe’s average in Denmark, Norway and especially Sweden. For Manufacturing, the Nordics over perform Europe, with Denmark showing a very high Gross value add per employee, testimony to its high value pharmaceutical manufacturing sector.



Employment & Corporate Landscape

**Strong big pharma presence**  
Whether in Denmark with Novo Nordisk, LEO Pharma, or Lundbeck or in Sweden with AstraZeneca, SOBI, Fresenius Kabi, ThermoFisher, J&J, etc. the big pharma presence in these countries is an advantage on several counts. First it can entice other companies to locate manufacturing activities in the Nordics because of an overall pharmaceutical manufacturing expertise. Secondly, these companies are more likely to acquire promising start-ups offering exit routes that in-turn favour further VC investments in the area.



Government Bodies & Incentives

**Low corporate tax**  
The Nordics offer relatively low corporate tax rates. This is a powerful tool to attract large corporates to locate activities in the area.

**Strong equity and investment culture (Sweden)**  
“Sweden’s deep equity culture and high fund participation rate enable anchor investment for life sciences. The Stockholm market delivers 8.2% long-term average yearly returns, outperforming both the US (5.9%) and UK (5.8%), and supports robust capital flows into the sector.”  
Patrick Jenkins/Financial Times



Capital flows

### Long term average yearly returns



Source: Patrick Jenkins/Financial Times



## Weaknesses



- Scale
- Fragmentation on academia and innovation
- corporate landscape
- Limited export scale
- R&D incentives

**Scale**

The limited population size of the Nordic countries presents a significant challenge for clinical development. It is difficult to achieve the critical mass required for large-scale clinical studies, a factor that can constrain pharmaceutical investment in the region. Furthermore, the small domestic patient base means that strong manufacturing incentives are required.

For Iceland, the extremely small scale of its population poses problems from an academic and research perspective where specialisations are hard to offer.

**Fragmented employment and corporate landscape**

Life sciences employment and corporate presence in the Nordics is unevenly distributed, with Sweden and Denmark hosting the majority of companies and manufacturing sites. This fragmentation—mirrored in the academic sector—limits coordinated growth and reduces cluster impact for smaller countries such as Finland, Norway, and Iceland

**Relatively low R&D incentives**

Although the Nordics offer low corporate tax rates, R&D tax subsidies often fall below the European average. Only Iceland matches or exceeds the benchmark for SME R&D support, limiting attractiveness for early-stage growth companies



Societal & Infrastructural



Academia & Innovation



Employment & Corporate Landscape



Capital flows



Government Bodies & Incentives

### Variable country performance

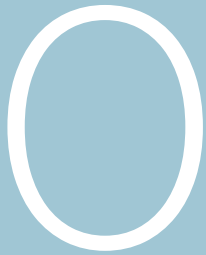
There is considerable disparity within the region: Sweden and Denmark lead on patent output, grant attraction, whereas Finland, Norway, and Iceland lag in most metrics, making the regional competitive landscape uneven. Strong dependence to Sweden and Denmark.

### Limited export scale

While Denmark and Sweden are the region's largest life sciences exporters, reaching approximately \$25 billion and \$20 billion respectively in 2023, total Nordic export volumes remain modest compared to leading markets like Germany and Ireland. Especially Finland and Norway contribute limited volumes and lack scale.



## Opportunities



- Continued increase in VC volumes
- Manufacturing best practice
- Stockholm's stock market
- High value manufacturing
- AI opportunities
- ATMP
- Enhance R&D incentives
- European legislation

### Continued increase in Venture Capital volumes

Yearly venture capital investment in life sciences has grown strongly across the region since 2018, with \$2 billion already raised in 2025 and a clear focus on pharmaceuticals and biotechnology. This momentum can foster more start-up creation and scale-ups.



Capital flows

### Leverage Stockholm's stock market to reignite IPOs

Sweden's robust pensions market provides a ready pool of anchor investors, creating a strong foundation for reigniting initial public offerings (IPOs). While Sweden has historically outpaced most European countries in IPO volume, activity has declined in recent years, reflecting a broader market trend. A successful IPO market is critical because it creates a virtuous cycle. When venture capital funds see clear and profitable exit opportunities, they are encouraged to reinvest in the same ecosystem, fuelling further growth and innovation.

### High value manufacturing

Denmark leads in life sciences manufacturing and exports, providing a model for other Nordics to grow their export capacity.



Employment & Corporate Landscape

### ATMP

The Nordic region is rapidly advancing in the development of gene, cell, and tissue-based therapies, supported by strong research collaboration platforms such as CCRM Nordic, ATMP Sweden, and ATMP Norway. Joint initiatives to address regulatory hurdles and scale manufacturing position the Nordics as a potential leader in bringing advanced therapies and cures for serious diseases to market more quickly.

### AI opportunities

The computer and mathematical academic excellence of the Nordics will be key to developing new AI driven drugs.



Academia & Innovation

### Scope to enhance R&D incentives and retain companies

There is scope to improve public support and R&D tax policies across the Nordics, which would help small innovative companies scale within the region and strengthen its appeal to attract significant investment from large corporates.



Government Bodies & Incentives

### European backing and regulatory reshaping

On Tuesday 16<sup>th</sup> December the European Commission presented its "Biotech Act", a €10bn 2026-27 investment plan to make Europe the world's most attractive place for Biotechs. The aim is also to reduce trial authorisation times from 106 to around 50 days (vs 30 days for FDA).

On Thursday 18<sup>th</sup> December the European Council and European Parliament reached an agreement on a major pharma legislation reshape (maintained 8-year patent protection, incentives for antibiotics, streamlining administrative hurdles, and securing supply of novel medication).



## Threats



- China
- US policies
- Pharma pressure on drug pricing
- Brain drain
- Competition from larger European clusters

### China

Over the past decade, China's pharmaceutical industry has undergone a remarkable transformation, advancing from a producer of generics to a "fast follower" and now an innovator in "first-in-class" drug development. This growth is underscored by the fact that in 2025, Chinese firms were involved in over one-third of out-licensing deals. This trend directly affects the amount of research and development based in Europe and the US, as a significant portion of R&D is now being outsourced to China.



### Employment & Corporate Landscape

### US policies

The year 2025 has underscored the complex relationship between the life sciences sector and politics. The threat of US tariffs has driven major pharmaceutical companies to commit to establishing manufacturing facilities on American soil. While a major exodus of pharmaceutical operations from Europe is unlikely, there will be a clear prioritisation of investments within the United States.



### Government Bodies & Incentives

### Pharma pressure on drug pricing

The pharmaceutical industry will continue to exert pressure on governments regarding the pricing of new medications. For example, the UK government has already consented to a 25% price increase for novel drugs. Through 2026, other nations are expected to face similar pressure to raise the prices paid by their national healthcare systems, potentially accompanied by threats of supply shortages. The pressure will only be greater due to Trump's Most Favoured Nation drug pricing policy.

### Scale Disadvantage and "Brain Drain" Risk


The relatively smaller market size and pipeline of incentives in the Nordics increase the risk of "brain drain" as world-leading talent and companies are drawn to larger, better-incentivised markets abroad



### Academia & Innovation

### Intense Competition from Larger European Clusters

The Nordics face strong competition from more mature clusters in the UK, Switzerland, and the Netherlands, which offer larger, more established commercial real estate markets, deeper pools of talent, and greater access to capital



# Part 3: "Top 2 National Clusters" Benchmarking Exercise

# Cluster overview

# A dual cluster benchmark – Methodology

- Each cluster is attributed a score/100 relative to the strongest benchmarked cluster.
- To capture the scale and the intensity some indicators are absolute and some are relative to the population.
- Each indicator is given a weighting as shown in the tables beneath.



## Life sciences R&D

9 indicators

	Data point	Type of data	Weighting
Academia	Life Sciences university highest score	Score	20%
	# top 200 ranked Life Sciences Universities	Absolute count	20%
	Biomedical and health sciences publications	Absolute count	10%
Companies	Life Sciences Companies	Per million inhabitants	10%
	Share of Life Sciences companies < 5 year-old	Percentage	10%
VC	Life sciences VC 2018-24 (€)	Absolute count	10%
	Life sciences VC 2025 (€)	Absolute count	5%
Employment	Technical & Scientific Employment 2025	Per million inhabitants	10%
	LinkedIn Job titles relative to biopharma research 2024	Per million inhabitants	5%



## Life sciences Manufacturing

9 indicators

	Data point	Type of data	Weighting
GMP	# GMP Sites	Absolute count	10%
	GMP Sites/inhabitants	Per million inhabitants	20%
Employment	Manufacturing Employment 2025	Absolute count	5%
	LinkedIn Job titles relative to Life Sciences Manufacturing	Per million inhabitants	10%
Companies	Large pharma manufacturing presence	Score	20%
	# companies running phase 3 clinical trials	Absolute count	10%
Outputs	Highest university industry link score	Score	10%
	Pharmaceutical exports \$bn	Per million inhabitants (national)	5%
	2025 Drug approvals (FDA &EMA)	Absolute count	10%

# Capital of Life & the Medicon Valley (SE/DN)

## Key life sciences focus

### Capital of Life

- Advanced Therapy Medicinal Products
- Foundational & Translational Research
- Medical Technology & Diagnostics (MedTech)
- **Complementary Sector:** ICT & Software Engineering



### The Medicon Valley

- Biopharmaceutical & Drug Development
- Diabetes & Metabolic Diseases
- Manufacturing
- **Complementary Sector:** Food Science, Green Biotech, AI

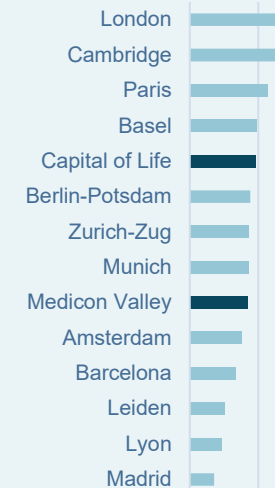


	Stockholm-Uppsala	The Medicon Valley	Total
Population	2,470,200	3,518,500	5,988,700
Total Employment	1,620,000	1,948,000	3,568,000
GDP 2025 (€bn)	197	218	415
Tech/innovation FDI 2022-24 (€bn)	0.5	1.0	1.5

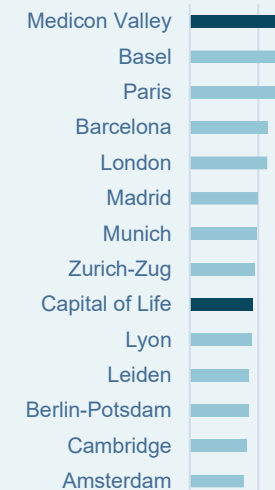
Source: Oxford Economics Nuts2 level for Population, Employment and GDP, The Economist for FDI Urban Area.

## Benchmark ranking

### Life Sciences R&D



### Life Sciences Manufacturing



# Capital of Life & the Medicon Valley (SE/DN)

Life sciences  
R&D



Strong academic foundations drive research excellence, with Medicon Valley leading in corporate scale and startup activity

## Capital of Life



### Academia

The cluster demonstrates strong academic foundation with the world-renowned universities of **Karolinska Institutet (31<sup>st</sup> globally)** and **Uppsala University (54<sup>th</sup>)** contributing to a large number of top cited publications and anchoring its position as a **leading research hub**.



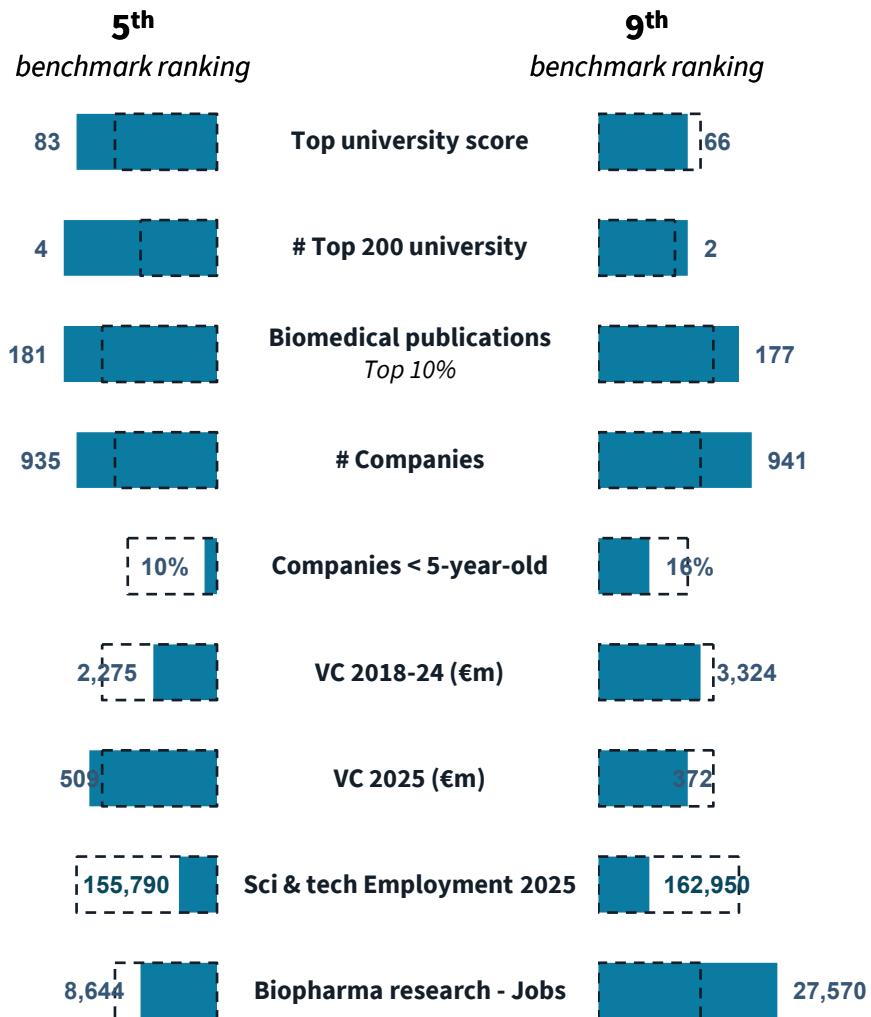
### Capital flows

VC funding (2018-24) at €2.3 billion remains modest compared to other top locations. Digital health companies such as Neko Health or Natural Cycles have been especially successful at attracting VC funding. Several large M&A or LBOs were concluded over the past 2 years, an encouraging sign for future funding.



### Corporate landscape

The region hosts **Karolinska Institutet ecosystem** with 935 companies. With only 10% of these companies being under 5 years old, the landscape is characterized by established industry players, supported by 8,644 jobs in biopharma research (source LinkedIn).



## Medicon Valley

### Academia



The cluster features strong academic excellence with Lund University and Technical University of Copenhagen as the top-ranking universities (both ranked in the top 125 globally), supported by 177 biomedical publications demonstrating **strong research output**.



### Capital flows

While higher than Stockholm-Uppsala, VC funding per capita to Medicon Valley companies ranks 6<sup>th</sup> out of the 14 benchmarked clusters. However, local foundations also bring precious financial or infrastructural support to early-stage research.



### Corporate landscape

Medicon Valley features a **vibrant and dynamic corporate landscape** with 941 companies. A higher share of young companies (16% are under 5 years old) indicates strong startup formation, while the cluster's significant scale is highlighted by an impressive 27,570 biopharma research roles on LinkedIn.

# Capital of Life & Medicon Valley (SE/DN)

Medicon Valley dominates with world-class pharma manufacturing, while Stockholm-Uppsala offers specialized high-quality operations

## Capital of Life



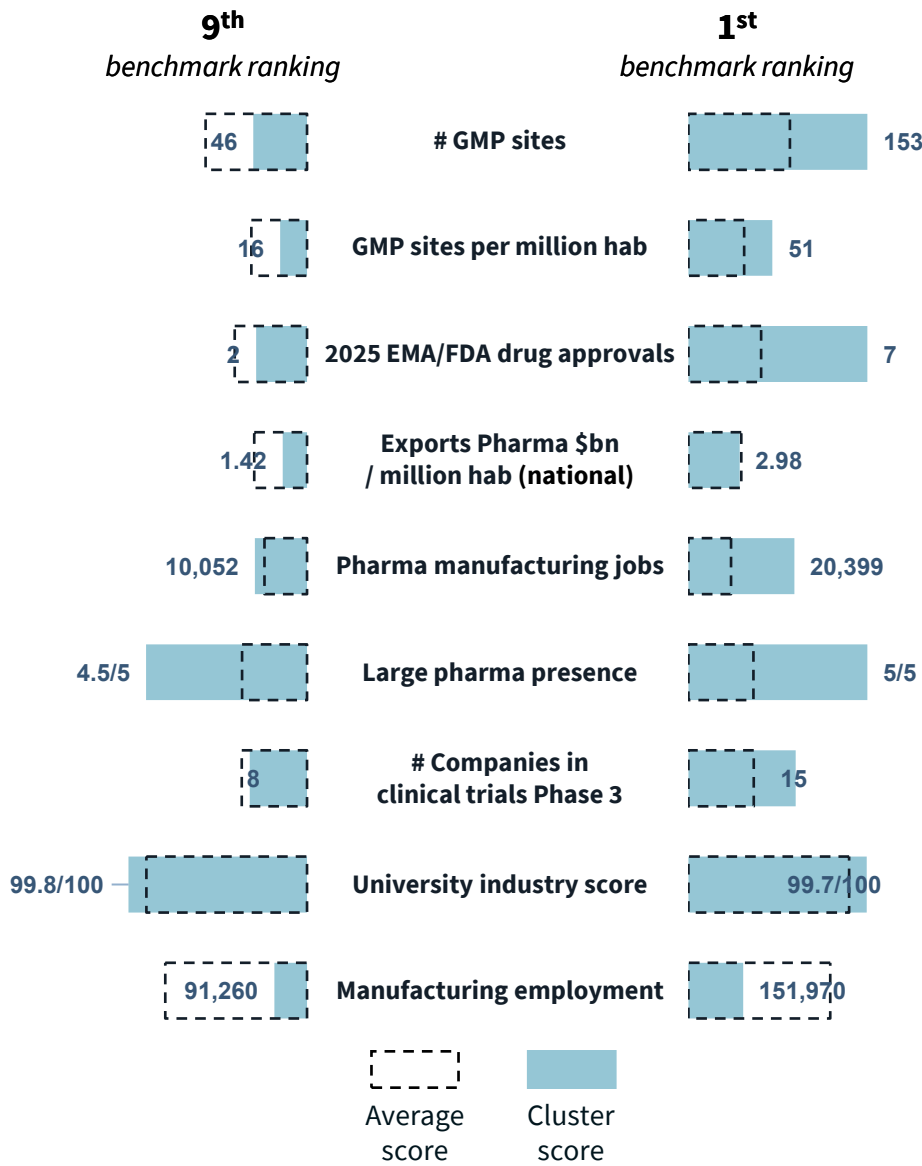
### Manufacturing landscape

Stockholm-Uppsala's manufacturing sector is relatively modest in size, employing 91,000 workers. Despite this moderate overall scale, the region demonstrates significant strength in life sciences manufacturing, with 10K pharmaceutical manufacturing jobs listed on LinkedIn. The most concentrated clusters of life sciences manufacturing activity are found in Uppsala—particularly within Uppsala Business Park—and Södertälje.



### Big pharma presence

The cluster has an exceptional big pharma presence, anchored by AstraZeneca's major R&D and manufacturing hub in Södertälje employing almost 5000 employees across multiple functions. This is complemented by a strong concentration of specialized companies in Uppsala, including Galderma (employing around 600 people), Thermo Fisher, and Fresenius Kabi, alongside Octapharma and Pfizer in the greater Stockholm area



## The Medicon Valley

### Manufacturing landscape

Medicon Valley's **manufacturing landscape is dominant**, with 153 GMP sites, over 61,000 pharma manufacturing jobs, and a total manufacturing workforce of 152,000. Supported by high national pharma exports and 7 EMA/FDA drug approvals, these strong data points reflect **a world-leading manufacturing ecosystem** and position the cluster as one of Europe's most significant pharmaceutical production regions. The area is home to a vibrant CDMO landscape, complementary to the strong big pharma presence.



### Big pharma presence

Medicon Valley's world-class big pharma presence is heavily concentrated on the Danish side, featuring the global R&D headquarters of Novo Nordisk (employing thousands of scientists) in Måløv, Lundbeck in Valby, and LEO Pharma in Ballerup, plus major operations for Biogen in Hillerød. The Swedish side contributes with innovative companies like Camurus and Baxter in Lund, collectively reinforcing its status as **a global pharmaceutical powerhouse**.



# Paris & Lyon (FR)

## Key life sciences focus

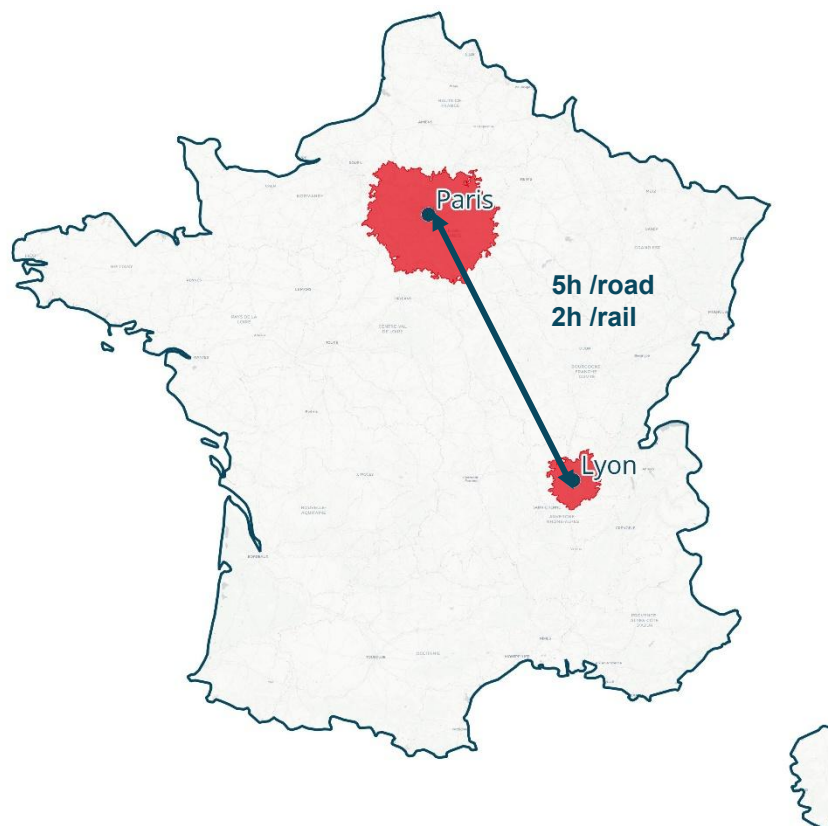
### Paris

- Foundational & Translational Research
- Infectious Disease & Vaccine Development
- Biopharmaceutical Development
- **Complementary Sector:** Engineering & Physics



### Lyon

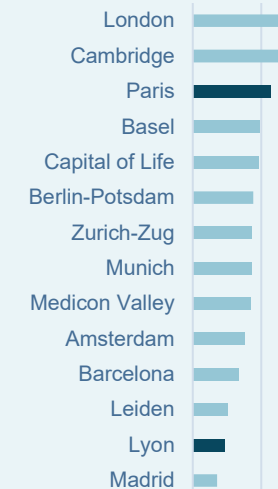
- Infectious Disease & Vaccine Development
- Foundational & Translational Research
- Biopharmaceutical Development
- **Complementary Sector:** Chemistry & Materials Science



	Paris	Lyon	Total
Population	12,459,600	6,904,100	19,363,700
Total Employment	7,188,000	3,163,000	10,351,000
GDP 2025 (€bn)	763	251	1,014
Tech/innovation FDI 2022-24 (€bn)	3.9	0.1	4.0

## Benchmark ranking

### Life Sciences R&D



### Life Sciences Manufacturing



# Paris & Lyon (FR)

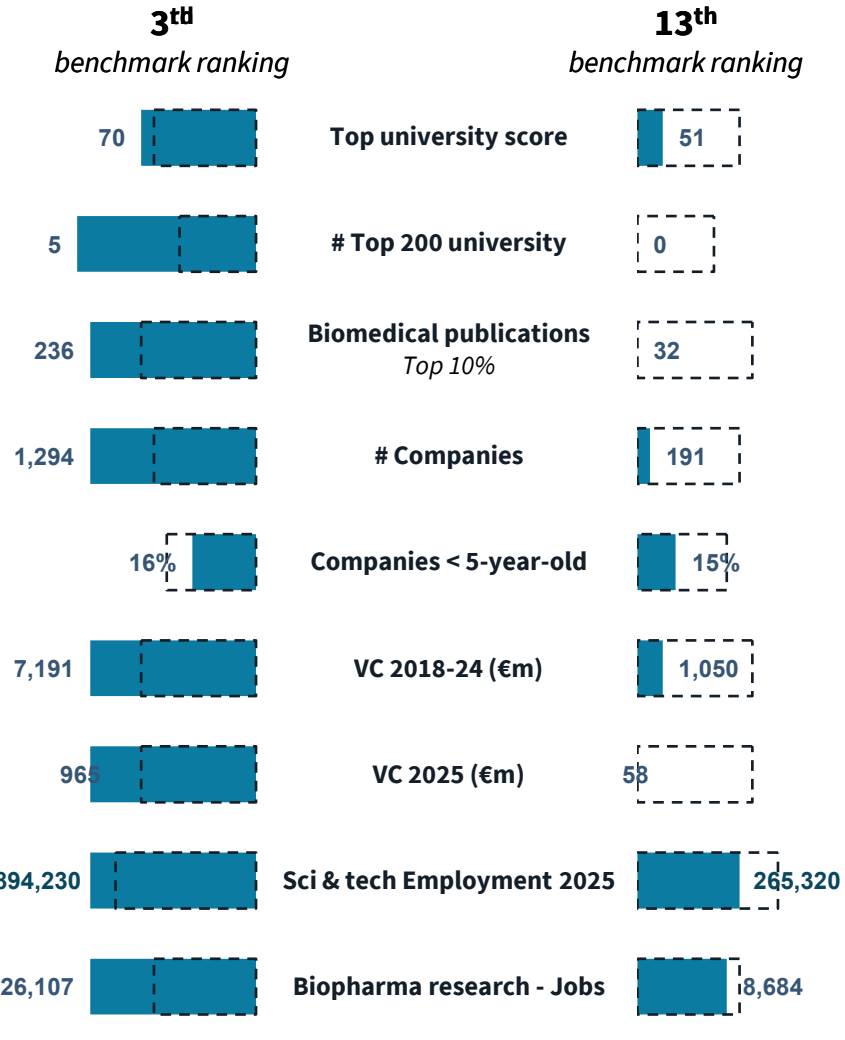
Paris leads with world-class academic foundations and massive corporate scale, while Lyon specializes in vaccines and agricultural innovation

## Paris

**Academia**  
The cluster has a **world-class academic foundation** led by Université Paris-Saclay (59th globally) and Sorbonne University (62nd globally). This is supported by five top-200 universities and a high volume of 236 biomedical publications, establishing it as a leading European research hub.

**Capital flows**  
As a global capital **Paris attracts large volumes of venture capital** however Life Sciences companies attract less than 60% of size comparable London. VC flows in Paris are evenly spread out across subsectors with **digital health** taking a strong proportion of venture investments.

**Corporate landscape**  
Paris boasts a **vast and dynamic corporate ecosystem** with 1,294 companies, being way above average. The region supports an immense science and tech workforce of 894K and a substantial 26K jobs in biopharma research (LinkedIn data), reflecting its **massive scale and industry depth**.



Average score  
 Cluster score

## Lyon

**Academia**  
Lyon's academic landscape, while important for the region, does not feature universities in the top 200 globally. As a result, top biomedical publications are low, indicating a **more focused research output** compared to Paris. Several national or international institutional players are in Lyon. Most notable is the **WHO's global academy**, inaugurated just over a year ago.

**Capital flows**  
Lyon is primarily driven by established life sciences players and lack world renowned universities to produce promising start-ups. As a result, **VC funding is relatively low in Lyon**.

**Corporate landscape**  
The Lyon region hosts a **specialized corporate landscape** with 191 companies. It maintains a strong focus on life sciences with 8.6K biopharma research jobs within a broader science and tech workforce of 265K, positioning it as a key national hub (LinkedIn data).

# Paris & Lyon (FR)

Paris demonstrates substantial manufacturing capacity with strong innovation output, while Lyon maintains specialized excellence in vaccines and animal health

Life sciences



Manufacturing

## Paris



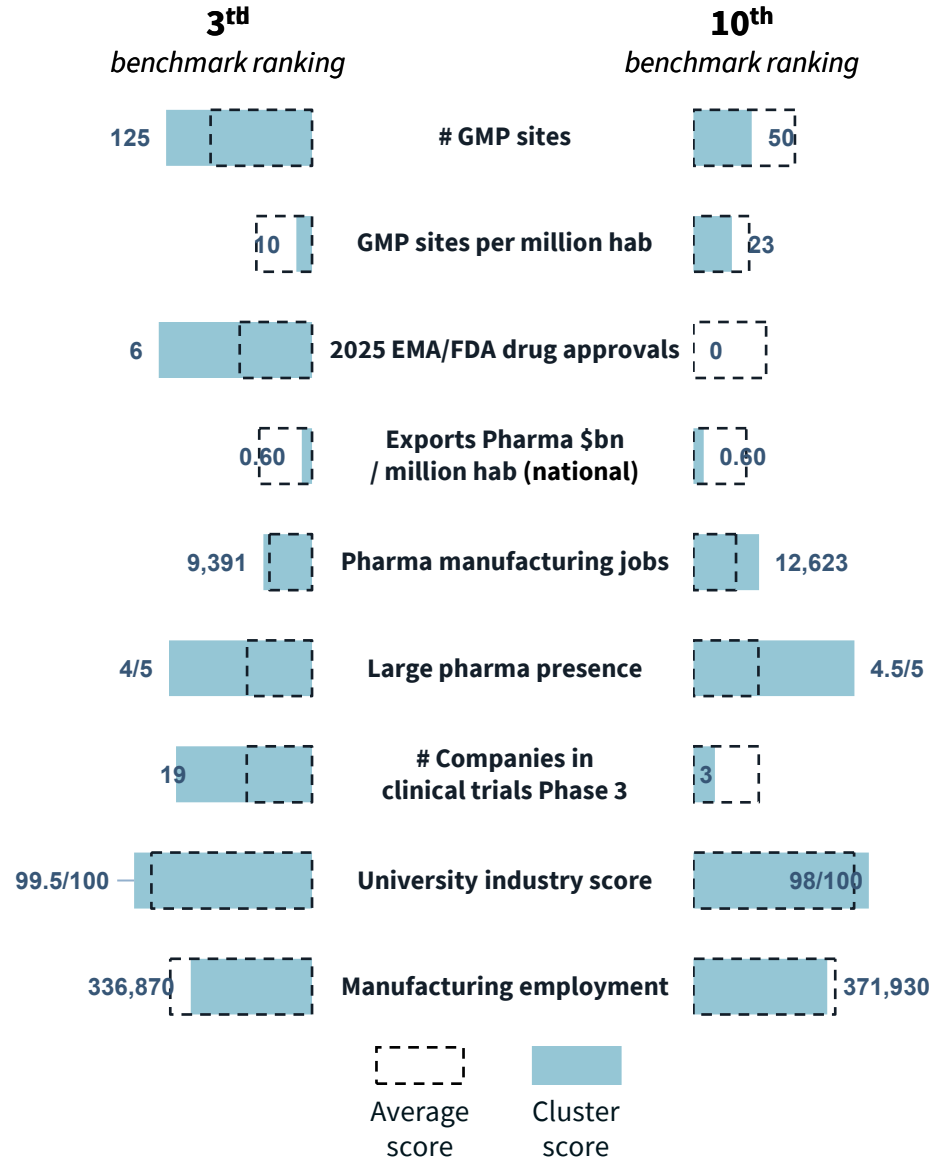
### Manufacturing landscape

Paris demonstrates **substantial manufacturing capacity** with 125 GMP sites and 122K pharma manufacturing jobs, supported by a total manufacturing workforce of 337K. The region shows **strong innovation output** with 6 EMA/FDA drug approvals in 2025.



### Big pharma presence

Paris hosts **world-class pharmaceutical companies** anchored by Sanofi's major presence and Servier's new Research and Development Institute (consolidating 1,500 research employees in a €370 million facility). The cluster ranks highly for large pharma presence, with both companies establishing state-of-the-art R&D facilities that serve as international innovation hubs.



## Lyon



### Manufacturing landscape

Manufacturing landscape Lyon shows **more modest manufacturing scale** with 50 GMP sites and 27K pharma manufacturing jobs within a substantial total manufacturing workforce of 372K. The region maintains specialized manufacturing capabilities, particularly in **vaccines and animal health products**, though overall capacity remains significantly smaller than Paris.



### Big pharma presence

Lyon features specialized pharmaceutical operations led by **Sanofi Pasteur's comprehensive vaccine R&D and manufacturing campus** at Marcy-l'Étoile (employing thousands of scientists), Boehringer Ingelheim's global Animal Health R&D hub, and Merck's bioprocessing innovation center with its M-Lab collaboration facility. Global leaders in homeopathic medicine and in vitro diagnostics, Boiron and BioMérieux both have significant activities in the surroundings of Lyon.

# Amsterdam & Leiden (NL)

## Key life sciences focus

### Amsterdam

- Foundational & Translational Research
- Genomics & Health Informatics
- Biopharmaceutical Development
- **Complementary Sector:** ICT, AI & Data Science



### Leiden

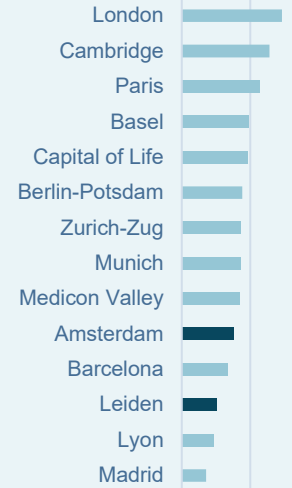
- Biopharmaceutical Development
- Advanced Therapies & Regenerative Medicine
- Infectious Disease & Vaccine Development
- **Complementary Sector:** High-Tech Systems & Materials



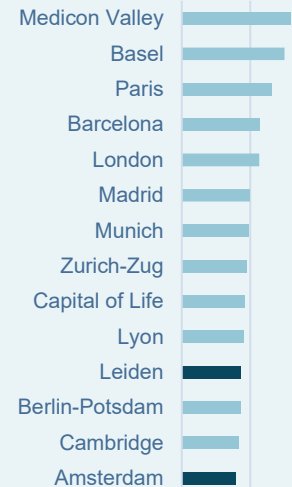
	Amsterdam	Leiden	Total
Population	3,014,400	3,882,000	6,896,400
Total Employment	1,888,000	2,128,000	4,016,000
GDP 2025 (€bn)	193	171	364
Tech/innovation	3.2	0.1	3.3
FDI 2022-24 (€bn)	3.2	0.1	3.3

## Benchmark ranking

### Life Sciences R&D



### Life Sciences Manufacturing



# Amsterdam & Leiden (NL)

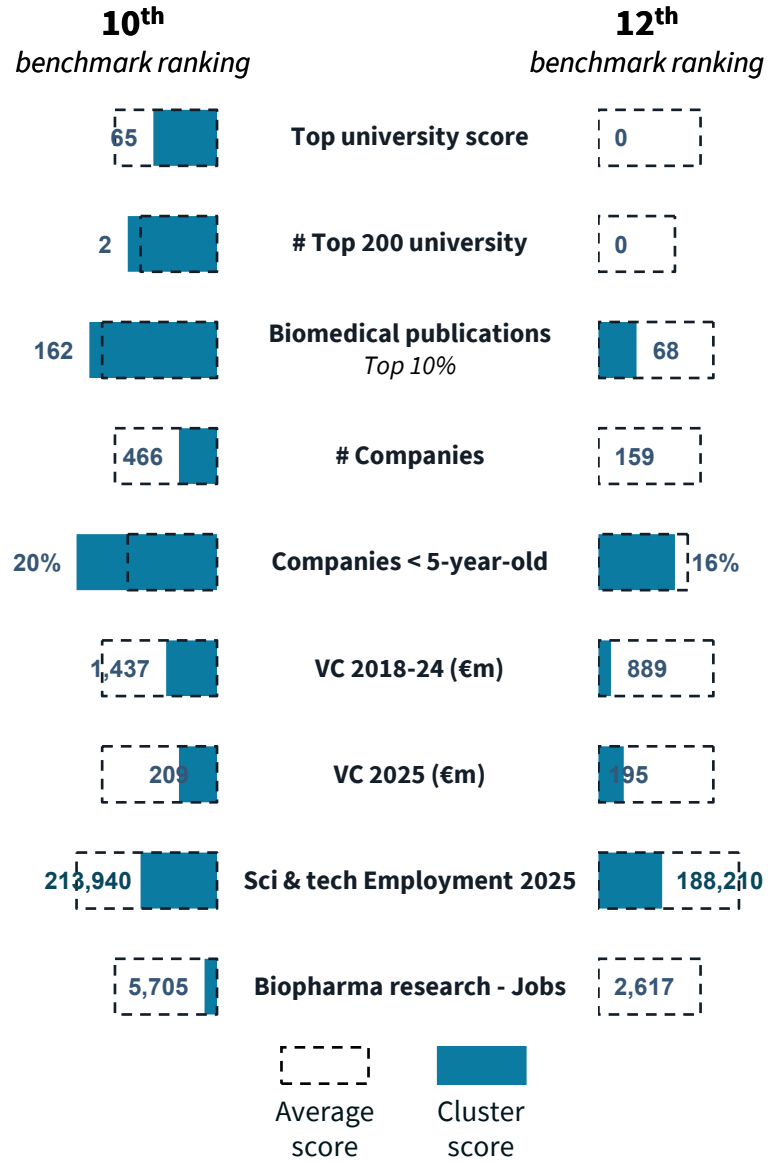
Amsterdam's research strength complements Leiden's specialized biotech cluster, creating a focused but modest-scale Dutch life sciences corridor

## Amsterdam

**Academia**  
The cluster demonstrates strong academic credentials with the University of Amsterdam (83rd globally) and Vrije Universiteit Amsterdam (126-150 globally) providing solid research foundations. This is supported a substantial output of 162 biomedical publications, establishing **Amsterdam as an important research center in the Netherlands.**

**Capital flows**  
Despite a strong proportion of young companies, Amsterdam attracts relatively low VC funding for life sciences. Other sectors such as Fintech and Saas dominate the start-up landscape. Life sciences researchers are successful at attracting ERC grants.

**Corporate landscape**  
Amsterdam hosts a modest corporate ecosystem with 466 companies, though it shows high startup activity with 20% of companies under 5 years old, indicating **strong entrepreneurial dynamism.** The science and tech and biopharma research jobs are both below average levels, suggesting a more focused but smaller-scale life sciences presence.



## Leiden

**Academia**  
Leiden's academic presence, while regionally important, does not feature universities in the global top-200 rankings. The cluster produces 68 biomedical publications annually, indicating focused research activity within the broader Dutch life sciences landscape.

**Capital flows**  
While VC funds to Leiden are low compared to other clusters it boasts the 3<sup>rd</sup> highest per capita long-term VC level, behind Cambridge and Basel. Notable raises were achieved by Azafaros (\$149m) and Avidicure (\$49m) in 2025.

**Corporate landscape**  
The Leiden region features a more concentrated corporate landscape with 159 companies, showing exceptional startup formation with 16% of companies under 5 years old. Despite its smaller scale, the region maintains a focused approach with 189K science and tech employment, positioning it as a specialized life sciences cluster.

# Amsterdam & Leiden (NL)

Leiden's Bio Science Park concentration of advanced biomanufacturing balances Amsterdam's broader pharmaceutical operations

Life sciences

Manufacturing



## Amsterdam



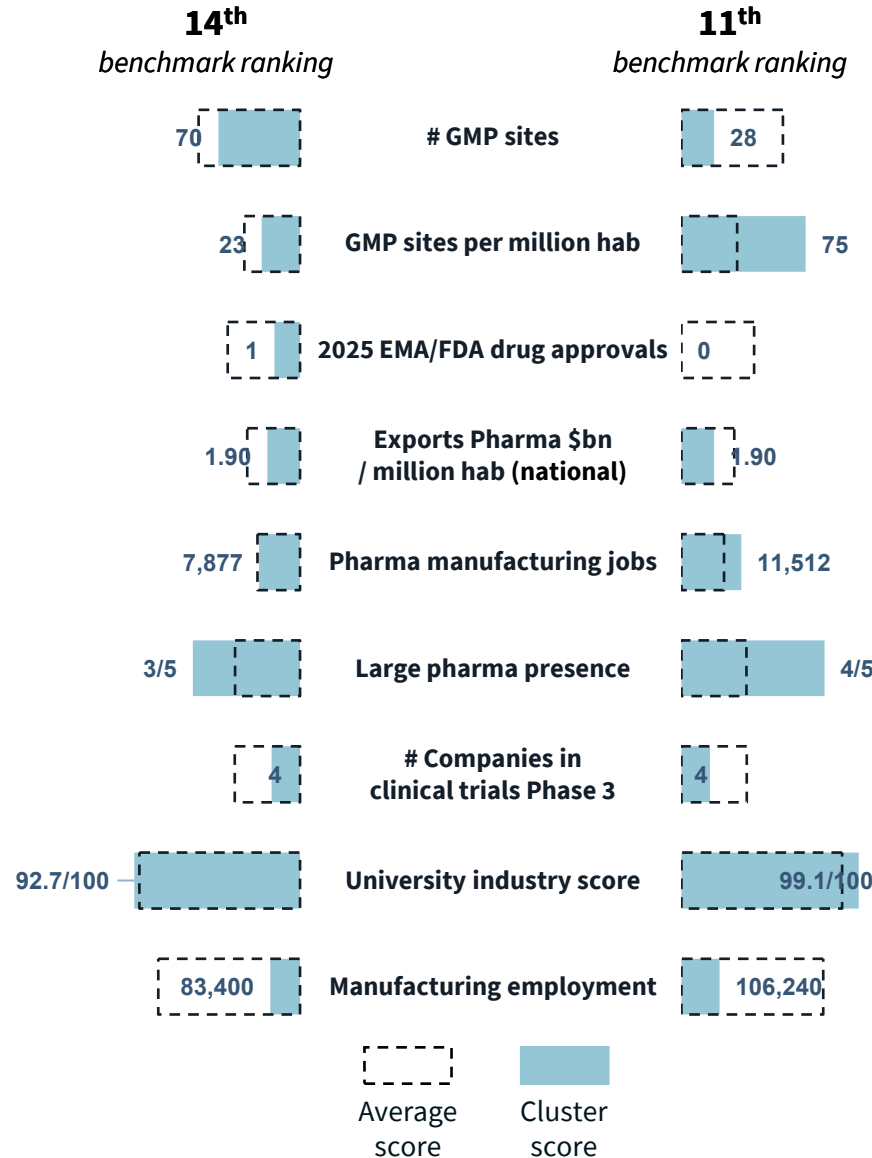
### Manufacturing landscape

Amsterdam shows **strong manufacturing capacity** with 70 GMP sites and 24K pharma manufacturing jobs, both around average levels. The region maintains specialized capabilities through facilities like Wacker Biotech's microbial fermentation operations, uniQure's AAV gene therapy manufacturing, and Kite's personalized CAR T-cell therapy facility, though overall scale remains limited.



### Big pharma presence

Amsterdam's big pharma presence is dominated by offices and research, with some manufacturing in nearby cities like Hoofddorp (Kite, ACT) and Haarlem (Teva). Notable Amsterdam operations include Novo Nordisk's large office and Neogene's office and lab space. Neogene is part of the Amsterdam Life Sciences District, a key innovation hub near the Academic Medical Centre (AMC) that provides shared lab facilities and offices for life science companies.



## Leiden



### Manufacturing landscape

Leiden shows moderate absolute manufacturing scale with 28 GMP sites and 106K manufacturing employment. However, with an exceptional 75 GMP sites per million inhabitants, the region demonstrates one of the highest manufacturing densities, indicating a **highly concentrated and advanced biomanufacturing hub**. This includes world-class facilities such as Janssen Vaccines' large-scale production, Bristol Myers Squibb's CAR T-cell facility, HALIX's biologics CDMO operations, Batavia Biomanufacturing state-of-the-art manufacturing facility and Cellares custom-built IDMO Smart Factory.



### Big pharma presence

The Bio Science Park features a major concentration of pharmaceutical companies, including Janssen Vaccines, Astellas Pharma, HAL Allergy, and IFF. The cluster continues to attract significant investment, with major new facilities for Batavia Biomanufacturing and Eli Lilly further strengthening its position as a leading European biopharmaceutical hub with significant research and production capabilities.

# Madrid & Barcelona (ES)

## Key life sciences focus

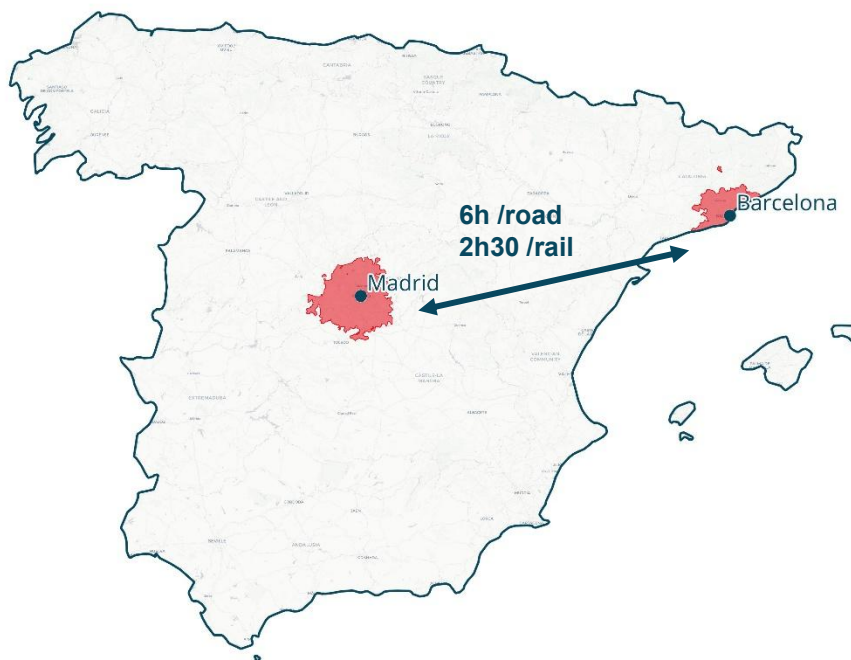
### Madrid

- Foundational & Translational Research
- Biopharmaceutical Development
- Medical Technology & Diagnostics (MedTech)
- **Complementary Sector:** Agri-Food & Nutraceuticals



### Barcelona

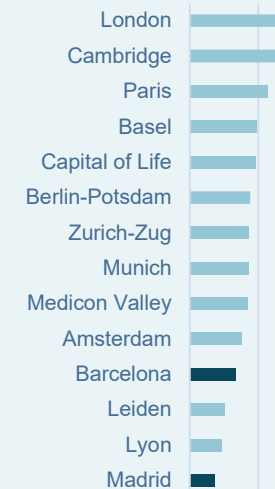
- Genomics & Health Informatics
- Foundational & Translational Research
- Biopharmaceutical Development
- **Complementary Sector:** High-Performance Computing & AI



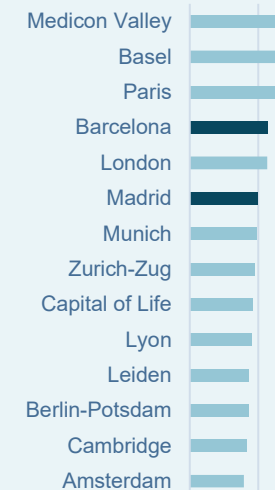
	Madrid	Barcelona	Total
Population	7,179,500	8,148,600	15,328,100
Total Employment	4,021,000	4,005,000	8,026,000
GDP 2025 (€bn)	267	251	518
Tech/innovation FDI 2022-24 (€bn)	4.2	4.6	8.8

## Benchmark ranking

### Life Sciences R&D



### Life Sciences Manufacturing



# Madrid & Barcelona (ES)

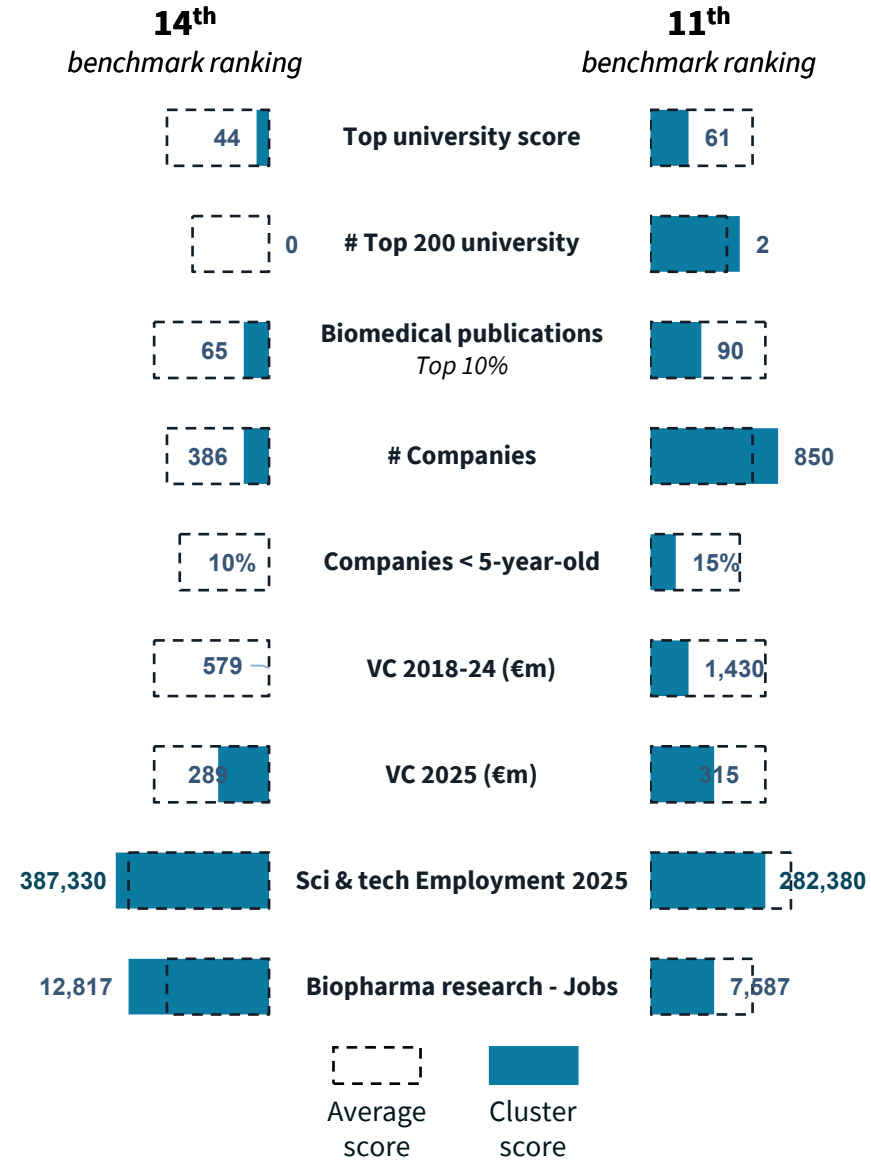
Madrid's established pharmaceutical infrastructure contrasts with Barcelona's dynamic startup ecosystem and innovation focus

## Madrid

**Academia**  
 Madrid's academic landscape shows limited presence in global rankings with no universities featured in the top-200 globally. The cluster produces 65 biomedical publications annually, indicating moderate research output within the Spanish life sciences ecosystem.

**Capital flows**  
 VC levels in Madrid rank 13<sup>th</sup> amongst the 14 benchmarked clusters. The cluster is primarily driven by manufacturing players and has limited young company landscape.

**Corporate landscape**  
 Madrid hosts a relatively modest corporate ecosystem with 386 companies. However, the region supports a substantial science and tech workforce and maintains large biopharma research jobs, indicating that employment is concentrated among larger, established companies rather than distributed across numerous smaller firms.



## Barcelona

**Academia**  
 Barcelona shows strong academic credentials with the **University of Barcelona** (101-125th globally) and **Universitat Autònoma de Barcelona (UAB)** (151-175th globally) providing excellent research foundations. Supported by a higher output of 90 biomedical publications, establishing Barcelona as Spain's leading research hub.

**Capital flows**  
 Barcelona's ecosystem is attracting growing investor interest. Its life sciences companies have managed to attract above average VC levels from 2022 to 2025 despite a tough funding environment. In 2025, SpliceBio and DeepUII respectively raised €119m and €45m VC funding. More recently, Biorce raised €44m in January 2026.

**Corporate landscape**  
 Barcelona features a vibrant and dynamic corporate landscape with 850 companies, significantly above average, strong startup formation with 15% of companies under 5 years old. The region maintains 282K science and tech employment and 7.5K biopharma research jobs, with its high startup activity positioning it as Spain's most entrepreneurial innovation cluster

# Madrid & Barcelona (ES)

Barcelona's specialized manufacturing excellence in plasma therapeutics and dermatology complements Madrid's solid pharmaceutical production base

Life sciences

Manufacturing



## Madrid



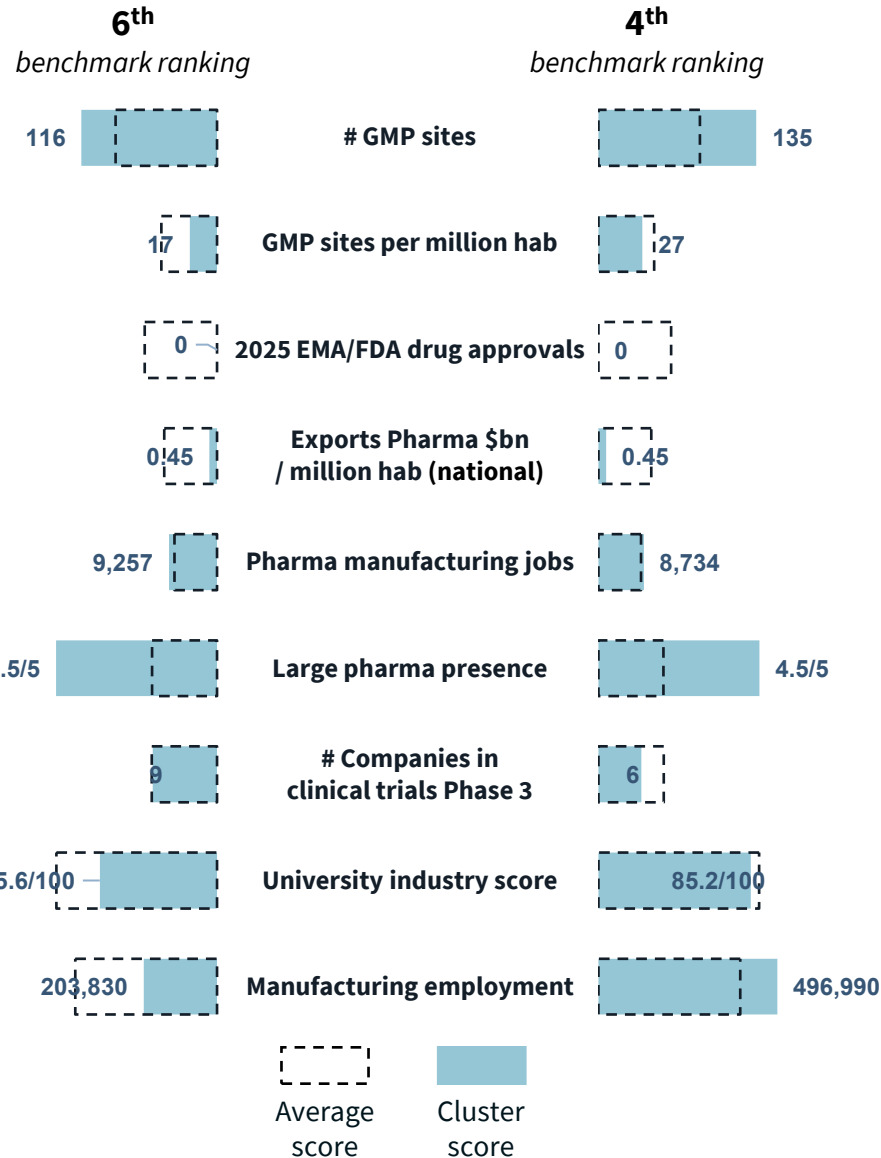
### Manufacturing landscape

Madrid demonstrates solid manufacturing capacity with 116 GMP-compliant facilities and 65K pharmaceutical manufacturing positions within a broader manufacturing workforce of 204K. The region features specialized operations including Laboratorios Rovi's sophisticated fill-and-finish capabilities and Takeda's plasma-derived therapeutics production facility.



### Big pharma presence

Madrid hosts significant pharmaceutical operations anchored by Eli Lilly's major integrated R&D and manufacturing site in Alcobendas, Janssen's API production facility in Borox, and corporate headquarters for companies like Pfizer and MSD managing extensive clinical operations. The cluster also features specialized companies like Roche's global diagnostics R&D center and GSK's unique global health research hub in Tres Cantos, **earning strong recognition for large pharma presence.**



## Barcelona



### Manufacturing landscape

Barcelona ranks 4<sup>th</sup> for life sciences manufacturing due to a strong concentration of GMP sites (135) and 44K pharma manufacturing jobs within a larger total manufacturing workforce of 497K. The region maintains specialized manufacturing excellence through facilities like Grifols' massive plasma fractionation complex at Parets del Vallès (~1,500 employees across over 150,000 square meters), Almirall's dermatology production plant in Sant Andreu de la Barca, and Reig Jofre's state-of-the-art sterile injectable center capable of producing 50 million vials annually.



### Big pharma presence

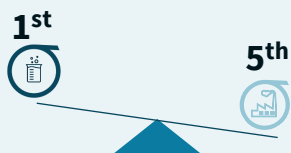
Barcelona features exceptional pharmaceutical operations distinguished by proprietary innovation and specialized therapeutics. The cluster is led by Grifols' world-leading plasma-derived medicines R&D and manufacturing campus, Almirall's global dermatology R&D center, and Ferrer's open innovation model for respiratory and neurological diseases. Additional strength comes from Novartis's complex radioligand therapy manufacturing site, Esteve's dual proprietary and CDMO R&D operations, and specialized companies focusing on injectables and consumer health products.

# London & Cambridge (UK)

## Key life sciences focus

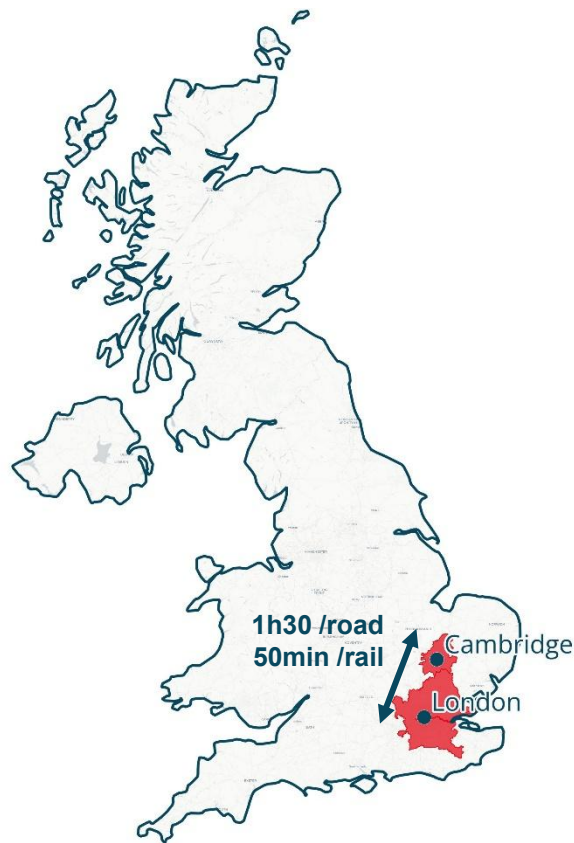
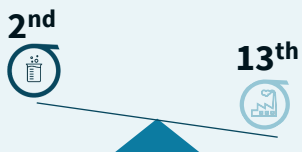
### London

- Foundational & Translational Research
- Biopharmaceutical Development
- Genomics & Health Informatics
- **Complementary Sector: Finance & Venture Capital, AI, tech**



### Cambridge

- Foundational & Translational Research
- Genomics & Health Informatics
- Biopharmaceutical Development
- **Complementary Sector: Computer Science & AI**

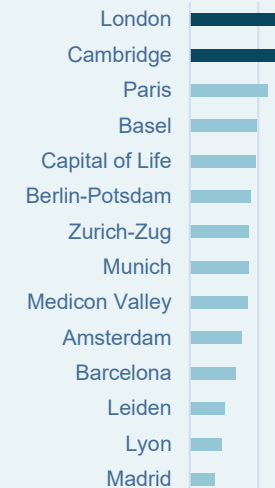


	London	Cambridge	Total
Population	9,133,800	2,670,000	11,803,800
Total Employment	6,422,000	1,391,000	7,813,000
GDP 2025 (€bn)	735	101	836
Tech/innovation	9.6	0.2	9.8
FDI 2022-24 (€bn)	9.6	0.2	9.8

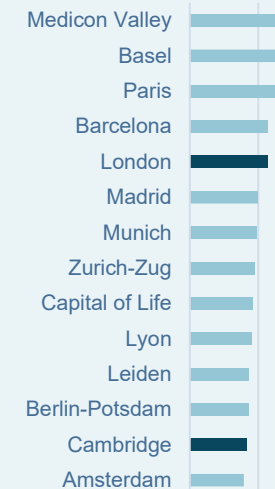
Source: Oxford Economics Nuts2 level for Population, Employment and GDP, The Economist for FDI Urban Area.

## Benchmark ranking

### Life Sciences R&D



### Life Sciences Manufacturing



# London & Cambridge (UK)

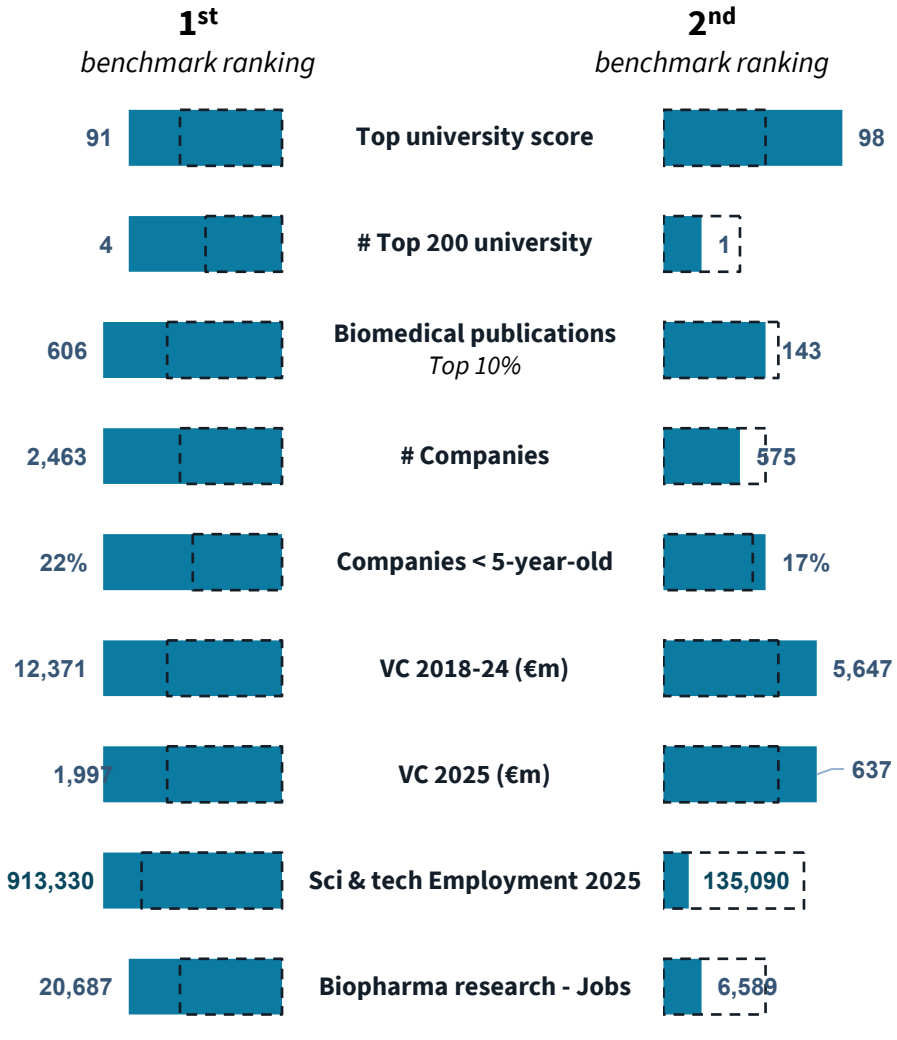
London's unmatched scale and venture capital dominance pairs with Cambridge's world-leading academic prestige and research productivity

## London

**Academia**  
London demonstrates **world-class academic excellence** with Imperial College London (12th globally) and UCL (20th globally). This is supported by four top-200 universities and a substantial output of 606 biomedical publications, establishing **London as one of the world's premier research capitals.**

**Capital flows**  
London is **the most successful cluster for total volume of VC attracted.** Locally based companies on average attracted €1.7bn from 2018 to 2024, with **€2bn achieved in 2025.** As for other sectors, London is the VC capital of Europe. **Isomorphic Labs** attracted the largest raise in 2025 with a €536m deal.

**Corporate landscape**  
London hosts an **extensive corporate ecosystem** with 2.5K companies, significantly above average, characterized by **dynamic startup activity** with 22% of companies under 5 years old, indicating exceptional entrepreneurial vitality.



Average score  
 Cluster score

## Cambridge

**Academia**  
Cambridge boasts unparalleled academic prestige with the University of Cambridge (2nd globally) representing one of the **world's top research institutions.** Despite having only one top-200 university, the cluster produces 143 biomedical publications annually, demonstrating exceptional research productivity and quality per institution.

**Capital flows**  
**Per capita, Cambridge is by far the highest performer from a VC perspective.** Its locally based companies on average attract close to **€800m per year.** CMR Surgical (£150m), CellCentric (£87m) and Artios (£85m) achieved the largest raises in 2025.

**Corporate landscape**  
Cambridge features a highly concentrated corporate landscape with **575 companies**, showing remarkable startup formation with 17% of companies under 5 years old. However, the region maintains relatively modest employment levels suggesting a cluster **focused on high-value, research-intensive companies** rather than large-scale employment.

# London & Cambridge (UK)

Cambridge demonstrates exceptional manufacturing density supporting its research cluster, while London's scale reflects its global hub status

Life sciences

Manufacturing



## London



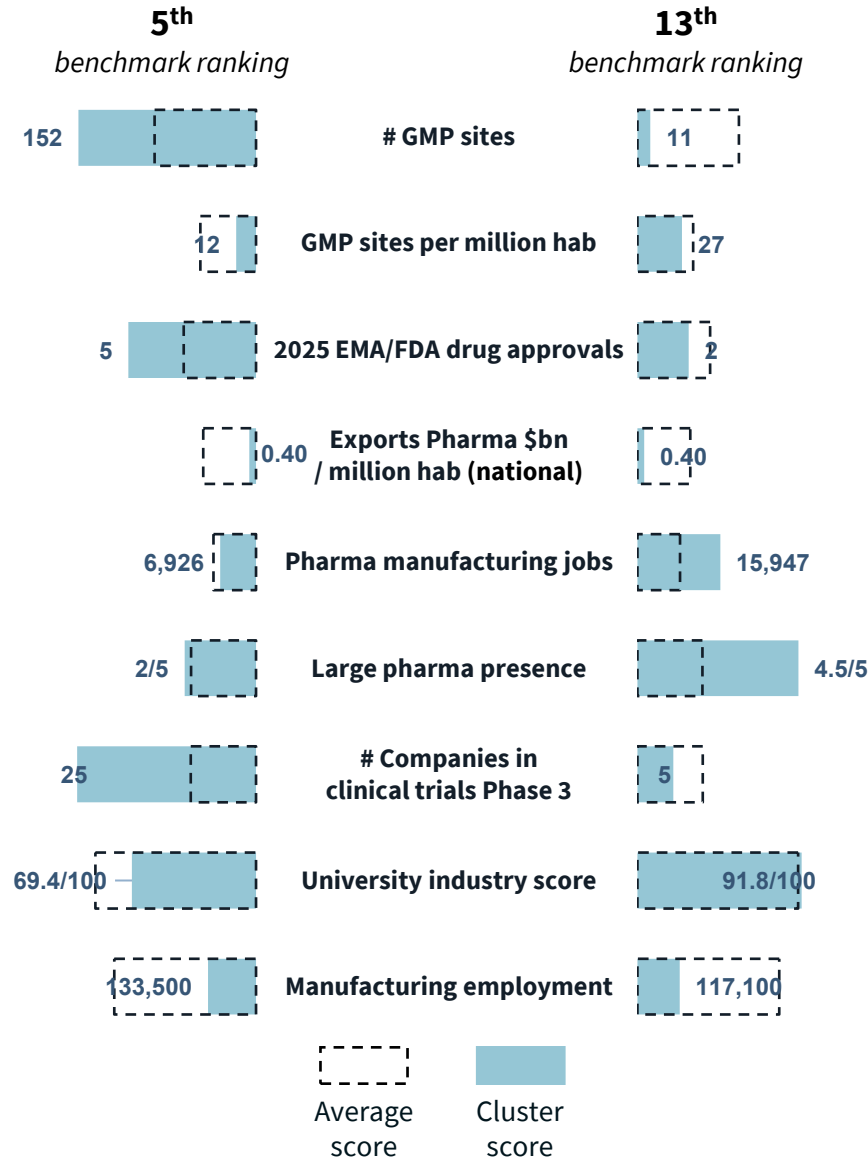
### Manufacturing landscape

London demonstrates substantial manufacturing capacity with 152 GMP sites and 87K pharma manufacturing jobs within a total manufacturing workforce of 134K. However, when adjusted for population density, the region shows only 12 GMP sites per million inhabitants, well below average, reflecting London's role as a global financial and services hub rather than a manufacturing center. The region shows strong innovation output with 5 EMA/FDA drug approvals in 2025, pointing to further research and manufacturing needs.



### Big pharma presence

London hosts world-class pharmaceutical operations anchored by major corporate headquarters and clinical development hubs. Key players include Pfizer's extensive clinical development and regulatory affairs operations, GSK's London headquarters coordinating global activities, and numerous multinational companies managing European clinical trial portfolios and regulatory submissions to MHRA and EMA. However, from a manufacturing perspective companies tend to locate outside greater London area.



## Cambridge



### Manufacturing landscape

Cambridge shows more modest absolute manufacturing scale with 11 GMP sites and 6.5K pharma manufacturing jobs within a total manufacturing workforce of 117K. However, with 27 GMP sites per million inhabitants, the region demonstrates **strong manufacturing density**, well above average, indicating highly concentrated and specialized pharmaceutical manufacturing capabilities supporting its research-intensive cluster.



### Big pharma presence

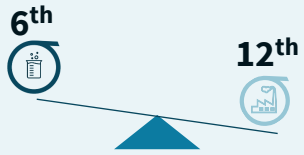
The cluster is anchored by AstraZeneca's massive global R&D headquarters (employing over 7,000 R&D personnel) serving as an integrated "discovery city," GSK's Stevenage center of excellence for small molecule discovery and vaccines research, and Illumina's major European innovation hub (over 1,000 engineers and scientists) driving genomics technology development. This concentration creates a **unique biotech ecosystem** leveraging proximity to Cambridge University and advanced academic research capabilities.

# Berlin-Potsdam & Munich (DL)

## Key life sciences focus

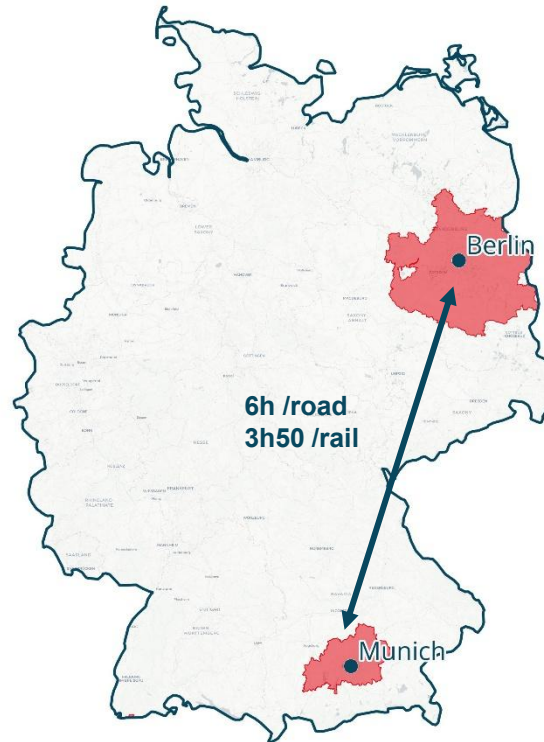
### Berlin-Potsdam

- Foundational & Translational Research
- Medical Technology & Diagnostics (MedTech)
- Biopharmaceutical Development
- **Complementary Sectors: ICT, AI & Digital Health**



### Munich

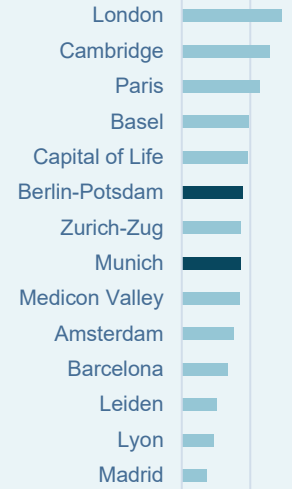
- Biopharmaceutical Development
- Medical Technology & Diagnostics (MedTech)
- Foundational & Translational Research
- **Complementary Sector: High-Tech Engineering & Automation**



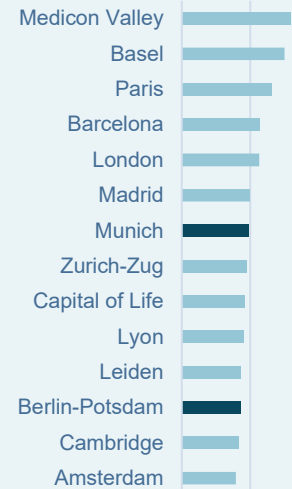
	Berlin-Potsdam	Munich	Total
Population	3,686,400	4,745,600	8,432,000
Total Employment	2,212,000	3,054,000	5,266,000
GDP 2025 (€bn)	164	286	450
Tech/innovation FDI 2022-24 (€bn)	1.4	2.2	3.6

## Benchmark ranking

Life Sciences R&D



Life Sciences Manufacturing



# Berlin-Potsdam & Munich (DL)

Berlin's startup dynamism and Munich's academic excellence create complementary innovation ecosystems driving Germany's life sciences leadership

## Berlin-Potsdam

**Academia**

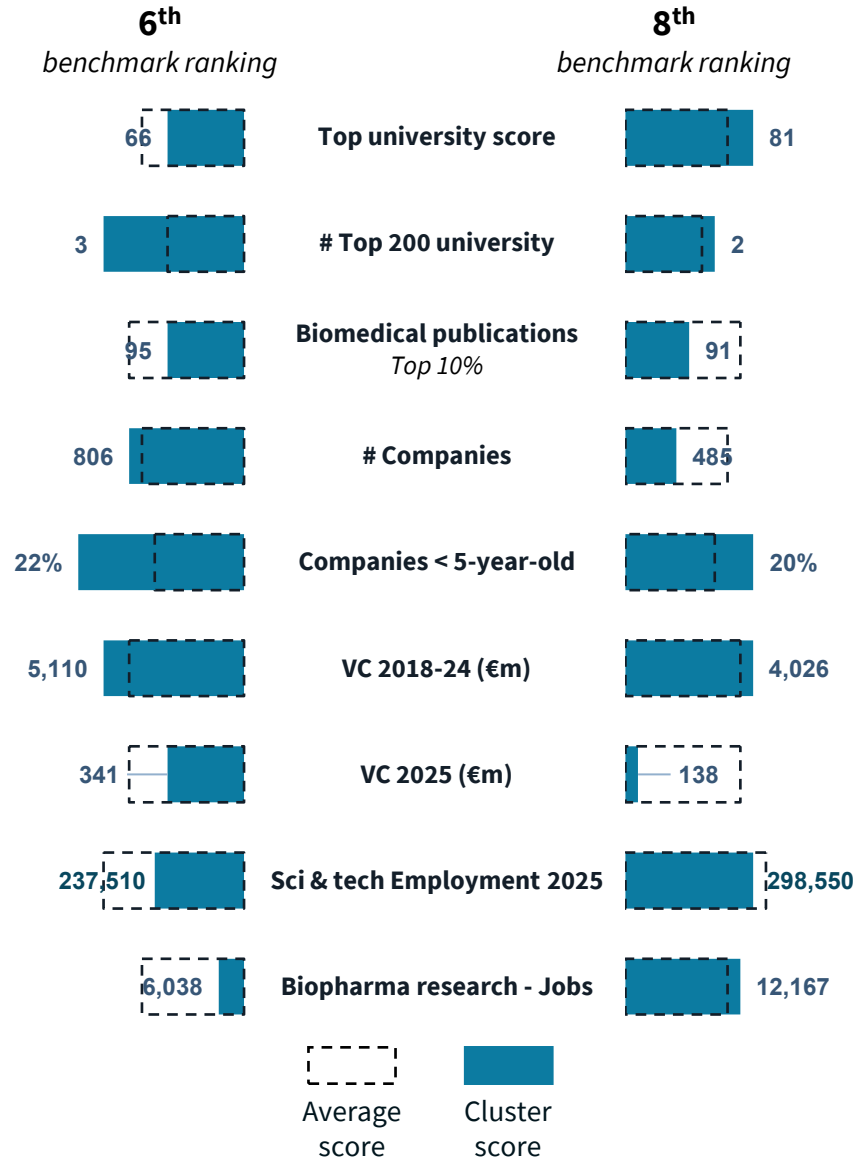
Berlin-Potsdam demonstrates strong academic credentials with Humboldt University of Berlin (78th globally) and Free University of Berlin (80th globally). This is supported by three top-200 universities and produces 95 biomedical publications annually, establishing the region as a significant research center in Germany.

**Capital flows**

Berlin ranks 4<sup>th</sup> for VC funding across the 14 analysed clusters. However, on average standing at €420 the last 3 years have been substantially below its long-term average performance of ~€720m.

**Corporate landscape**

Berlin-Potsdam hosts a large corporate ecosystem with 806 companies, well above average, demonstrating exceptional entrepreneurial dynamism with 22% of companies under 5 years old. The region supports a large science and tech workforce, reflecting its emergence as Germany's startup capital and innovation hub.



## Munich

**Academia**

Munich showcases exceptional academic excellence with Technical University of Munich (34th globally) and LMU Munich (43rd globally) representing world-class research institutions. With two top-200 universities and a strong output of 91 biomedical publications, Munich establishes itself as one of Europe's premier research centers.

**Capital flows**

Munich stands just behind Berlin from a VC perspective. If 2025 VC levels were well under average, in 2024 its life sciences companies managed to raise close to €750m. In 2025, oncology focused Nuclidium managed the largest raise €84m of later stage funding.

**Corporate landscape**

Munich features a dynamic corporate landscape with 485 companies, showing strong startup activity with 20% of companies under 5 years old. The region maintains substantial employment in both Sci & tech as well as biopharma, positioning as one of Germany's most important life sciences hubs.

# Berlin-Potsdam & Munich (DL)

Munich's world-class biologics manufacturing anchored by Roche complements Berlin's advanced therapy capabilities, establishing dual German pharma powerhouses

## Berlin-Potsdam



### Manufacturing landscape

Berlin-Potsdam demonstrates solid manufacturing capacity with 129 GMP sites and 20K pharma manufacturing jobs within a total manufacturing workforce of 111K. The region shows strong performance with 24 GMP sites per million inhabitants.



### Big pharma presence

Berlin-Potsdam features significant pharmaceutical operations anchored by advanced therapy capabilities. The cluster is distinguished by Bayer's multi-hundred-million-euro Cell & Gene Therapy facility, representing one of Europe's most advanced centers for next-generation therapeutics including viral vector production and personalized medicine manufacturing. The region benefits from Berlin's strong biotechnology ecosystem, academic institutions, and skilled workforce, creating an integrated environment for both R&D and manufacturing.

## Munich



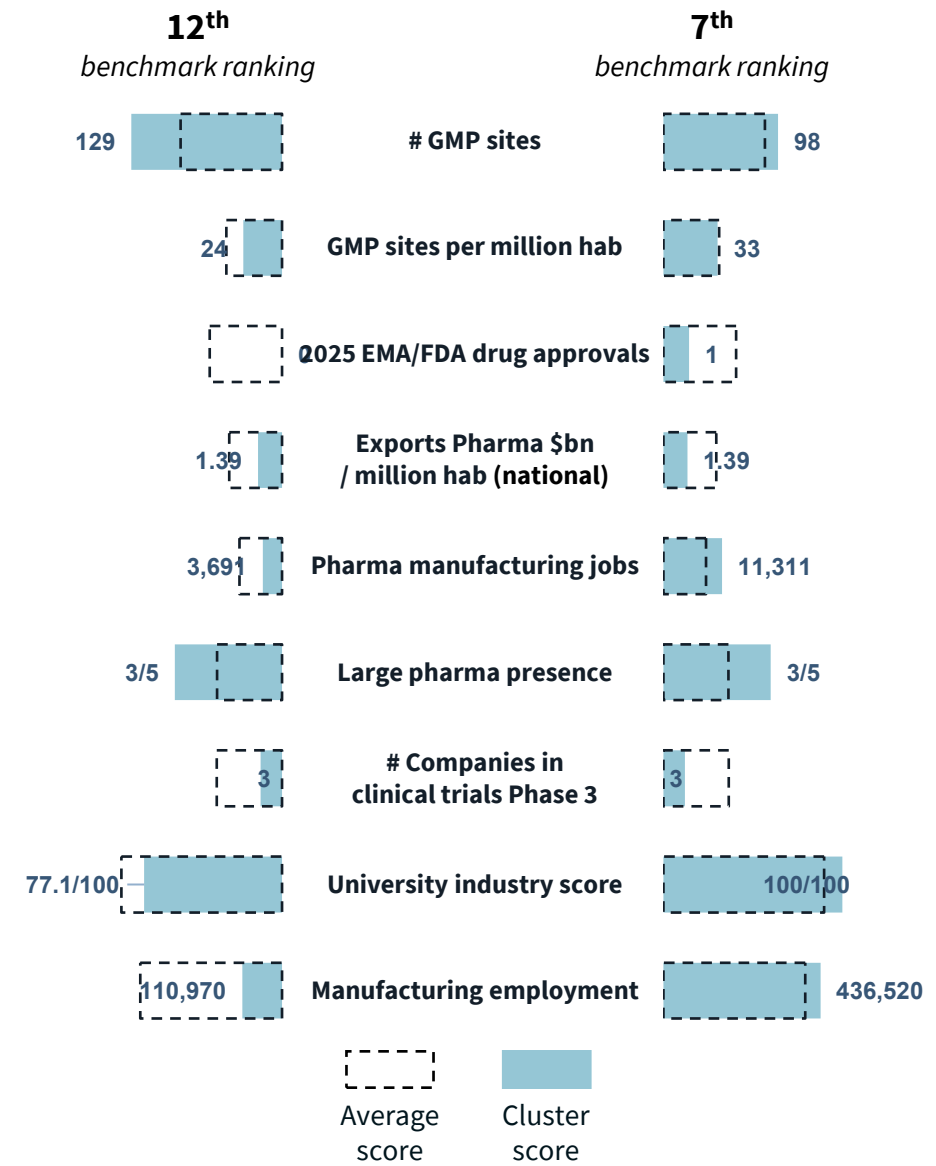
### Manufacturing landscape

Munich demonstrates exceptional manufacturing strength with 98 GMP sites and 34K pharma manufacturing jobs within a substantial total manufacturing workforce of 437K. The region shows strong performance with 33 GMP sites per million inhabitants, above average levels, contributing to the country's robust pharma exports.



### Big pharma presence

Munich features world-class pharmaceutical operations led by major integrated R&D and manufacturing facilities. The cluster is anchored by Roche's massive Penzberg campus (employing over 6,500 people) serving as a global center of excellence for biologics research and cancer therapeutics, Merck KGaA's life science technology development operations, and Sandoz's biosimilars and complex generics R&D capabilities. This concentration creates one of Europe's most important biotechnology manufacturing and innovation hubs.



# Zürich-Zug & Basel (CHE)

## Key life sciences focus

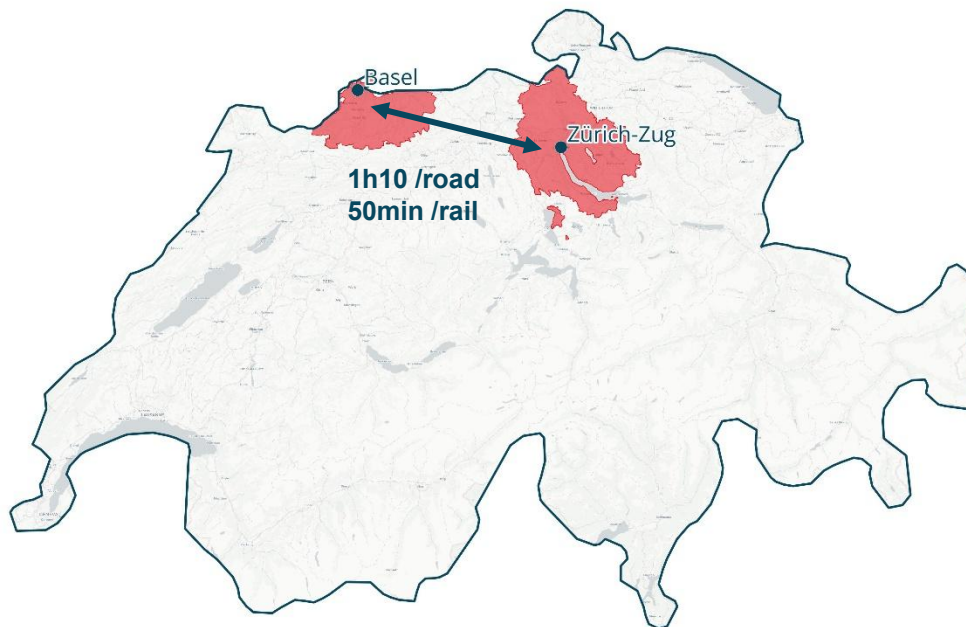
### Zürich-Zug

- Medical Technology & Diagnostics (MedTech)
- Biopharmaceutical Development
- Foundational & Translational Research
- **Complementary Sector: Blockchain/fintech/IT, tech (AI, robotics, advanced manufacturing), consumer goods/commodities, financial services**



### Basel

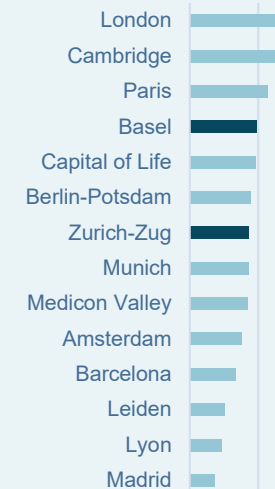
- Biopharmaceutical Development
- Advanced Therapies & Regenerative Medicine
- Medical Technology & Diagnostics (MedTech)
- **Complementary Sector: Advanced manufacturing, supply chain/logistics, food and agritech, consumer goods**



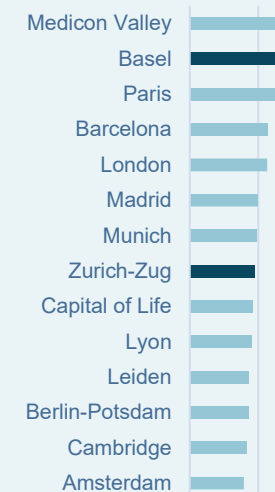
	Zürich-Zug	Basel	Total
Population	1,624,300	1,240,900	2,865,200
Total Employment	1,055,000	691,000	1,746,000
GDP 2025 (€bn)	160	106	266
Tech/innovation FDI 2022-24 (€bn)	0.2	0.1	0.3

## Benchmark ranking

### Life Sciences R&D



### Life Sciences Manufacturing



# Zürich-Zug & Basel (CHE)

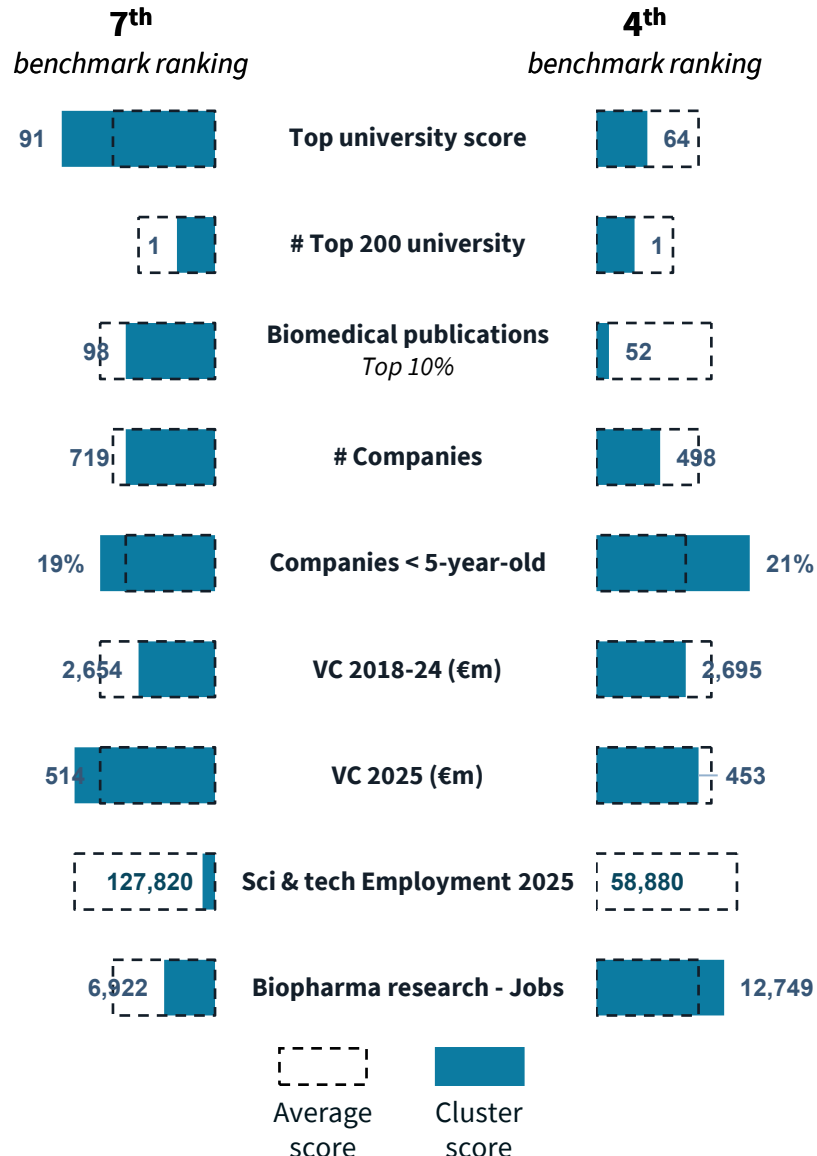
Switzerland's dual innovation engines: Zürich-Zug's mix of corporate headquarters and biotech startups complements Basel's concentration of major pharmaceutical R&D and production.

## Zürich-Zug

**Academia**  
Zürich-Zug demonstrates world-class academic excellence with ETH Zurich (12th globally) representing one of Europe's premier technical universities. With producing 90 biomedical publications annually, the region establishes itself as a leading research center combining engineering excellence with life sciences innovation.

**Capital flows**  
Companies with a footprint in Zurich-Zug have been successful at attracting venture funding despite falling short of the benchmark average, VC per capita ranks 4<sup>th</sup> behind Cambridge, Basel and Leiden. Digital health company Ovia raised €188m in January 2026.

**Corporate landscape**  
The Zürich-Zug area hosts a corporate ecosystem of 719 companies. Zürich functions as a hub for biotech startups, with 19% of companies under 5 years old, leveraging proximity to universities. Zug serves as a center for corporate headquarters like Roche Diagnostics. This combination fosters an entrepreneurial environment with growth potential.



## Basel

**Academia**  
Basel showcases strong academic credentials with the University of Basel (95th globally). With one top-200 university and producing 52 biomedical publications annually, Basel maintains more modest academic output, reflecting its focus on industry-driven rather than purely academic research.

**Capital flows**  
Relative to its size, Basel is the second-best VC performer behind Cambridge. While 2025 was in line with its long-term average, life sciences companies with a footprint in the city raised an impressive €1bn in 2024. Founded in 2024, Windward Bio raised €193m of early-stage VC in 2025.

**Corporate landscape**  
Basel features a highly specialized corporate landscape, serving as the headquarters and research center for major global players like Roche and Novartis. Despite its smaller size, Basel has big concentration of biopharma research jobs and exceptional startup environment, positioning it as a world-leading pharmaceutical innovation cluster driven by specialized talent

# Zürich-Zug & Basel (CHE)

Basel's powerhouse pharmaceutical R&D and manufacturing is complemented by the corporate and clinical development hub in the Zürich-Zug region.

Life sciences



Manufacturing

## Zürich-Zug



### Manufacturing landscape

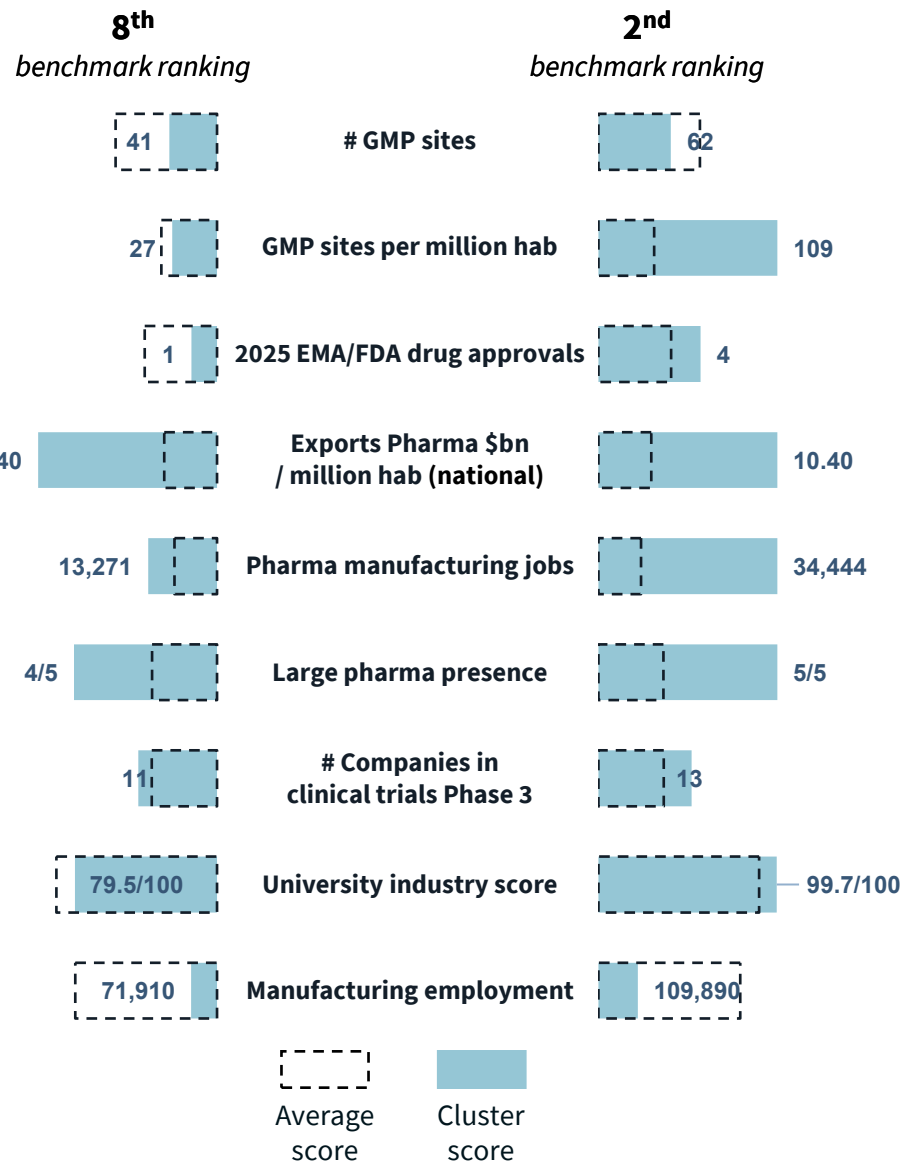
Zürich-Zug demonstrates modest manufacturing capacity with 41 GMP sites and 20K pharma manufacturing jobs within a total manufacturing workforce of 72K. However, the region shows strong innovation output with 27 GMP sites per million inhabitants contributing to Europe's solid pharma exports.



### Big pharma presence

The region hosts major anchors in the two cities Zug and Zürich. The Zug area includes Johnson & Johnson, AstraZeneca, Biogen, GSK, Pfizer, Galderma, and significant operations from Novartis and Roche Diagnostics, which has a new CHF 200m production building under construction. Zürich is home to Takeda and Bayer, while Lucerne will host MSD's new offices from 2026.

This broad corporate presence leverages Switzerland's advanced talent and regulatory environment.



## Basel



### Manufacturing landscape

Basel demonstrates exceptional manufacturing excellence with 62 GMP sites and 20K pharma manufacturing jobs within a substantial total manufacturing workforce of 110K. The region shows outstanding performance with 109 GMP sites per million inhabitants, far above average, and leads globally on medical innovation with 4 EMA/FDA drug approvals in 2025, reflecting its role as one of **the world's main pharmaceutical hubs**.



### Big pharma presence

Basel represents a highly concentrated pharmaceutical R&D and manufacturing ecosystem. It is anchored by the headquarters of Novartis and Roche, which is building a new CHF 500m research facility. The cluster features specialized leaders including Lonza (new CHF 500m building under construction), Bachem (CHF 750m planned investment), Sandoz, Actelion, and Idorsia. Recent major investments, such as Biogen's CHF 1.5bn factory, reinforce its status as a premier global hub.

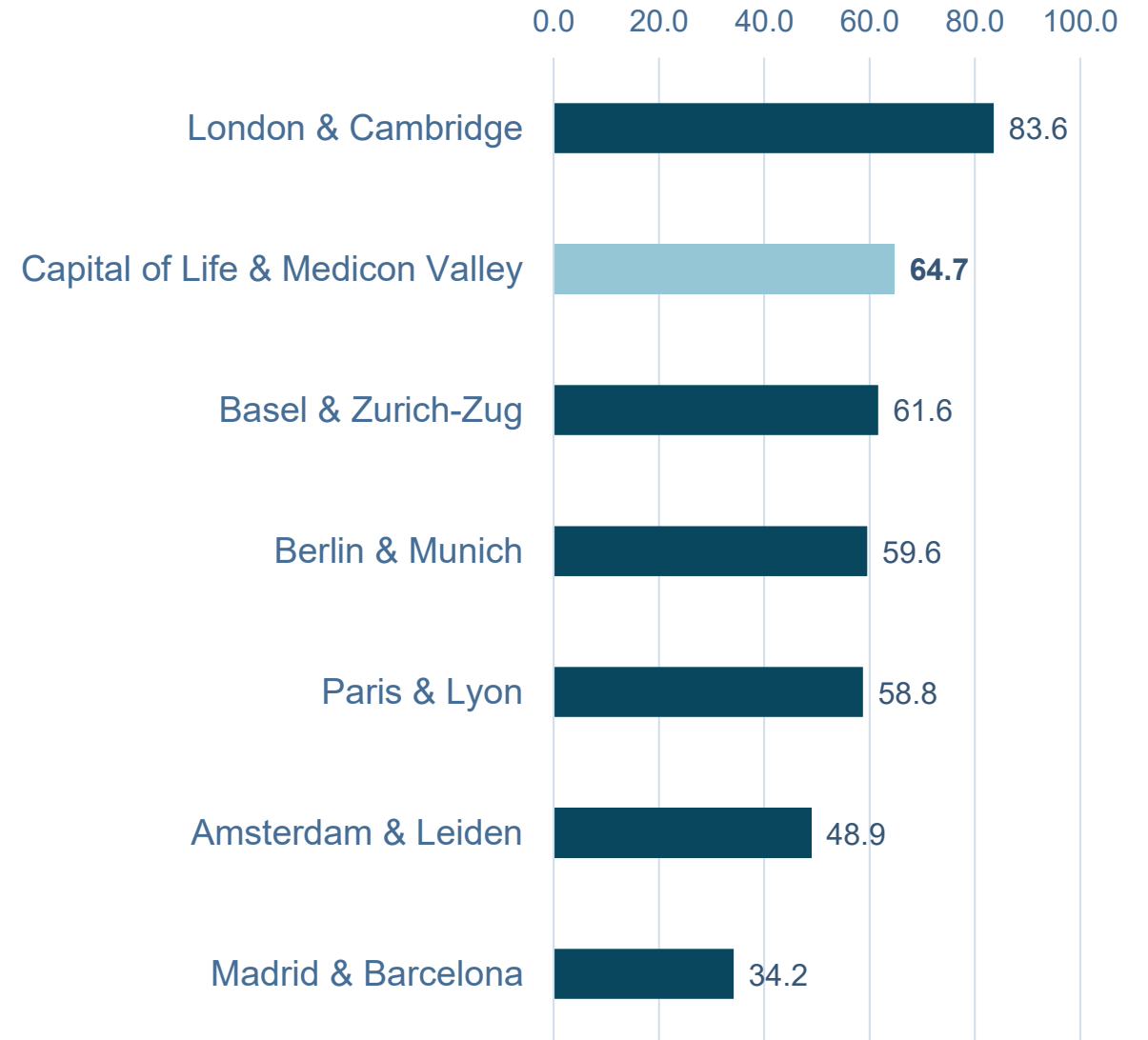
# Top 2 benchmark

# Top 2 benchmark – R&D

Capital of Life and Medicon Valley rank second out of the seven benchmarked locations for Life Sciences Research & Development. While far behind London & Cambridge, they achieve a clear three points on 3<sup>rd</sup> placed Basel & Zurich-Zug.

Both components of the Swedish-Danish pair have strong academic credentials and wide corporate ecosystems.

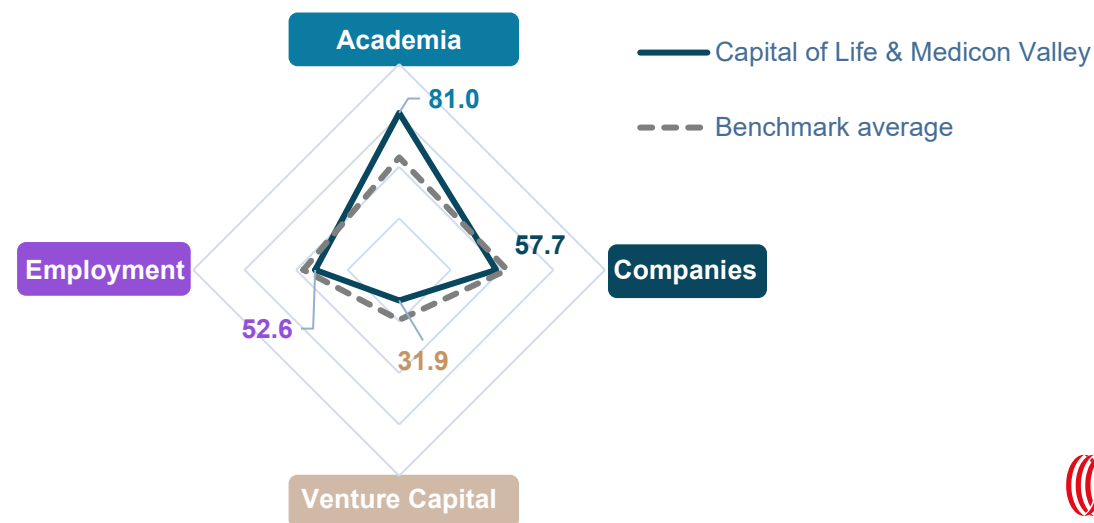
Capital of Life drives the pair's ranking due to its exceptional university rankings.



# R&D benchmark

		Top university score	# Top 200 university	Biomedical publications	# Companies per capita	Companies < 5-year-old	VC 2018-24 (€m)	VC 2025 (€m)	Sci & tech Employment per capita	Biopharma research - Jobs per capita	Total
	<b>Weighting</b>	20%	20%	10%	10%	10%	10%	5%	10%	5%	100%
<b>Rank</b>	<b>Benchmark average</b>	<b>75.1</b>	<b>64.3</b>	<b>40.0</b>	<b>41.1</b>	<b>82.9</b>	<b>40.2</b>	<b>37.9</b>	<b>65.7</b>	<b>40.2</b>	<b>58.8</b>
1	London & Cambridge	100.0	83.3	100.0	40.0	100.0	100.0	100.0	67.8	22.2	83.6
2	Capital of Life & Medicon Valley	78.6	100.0	47.8	55.1	60.3	31.1	33.4	46.0	65.8	64.7
3	Basel & Zurich-Zug	81.7	33.3	20.0	100.0	93.0	29.7	36.7	75.4	100.0	61.6
4	Berlin & Munich	77.2	83.3	24.8	26.0	99.7	50.7	18.2	53.0	22.7	59.6
5	Paris & Lyon	63.8	83.3	35.8	21.0	75.6	45.7	38.8	80.6	30.4	58.8
6	Amsterdam & Leiden	68.7	33.3	30.8	31.6	89.4	12.9	15.4	100.0	26.0	48.9
7	Madrid & Barcelona	55.4	33.3	20.8	13.9	62.7	11.1	22.9	37.1	14.2	34.2

Capital of Life and Medicon Valley achieve an above average score for Academia while being within average for Employment & Companies. Like other locations, Venture Capital is a clear area of improvement. It is important to note that the UK's dominance for R&D induces a compression of many other location's scores.



# Top 2 benchmark – Manufacturing

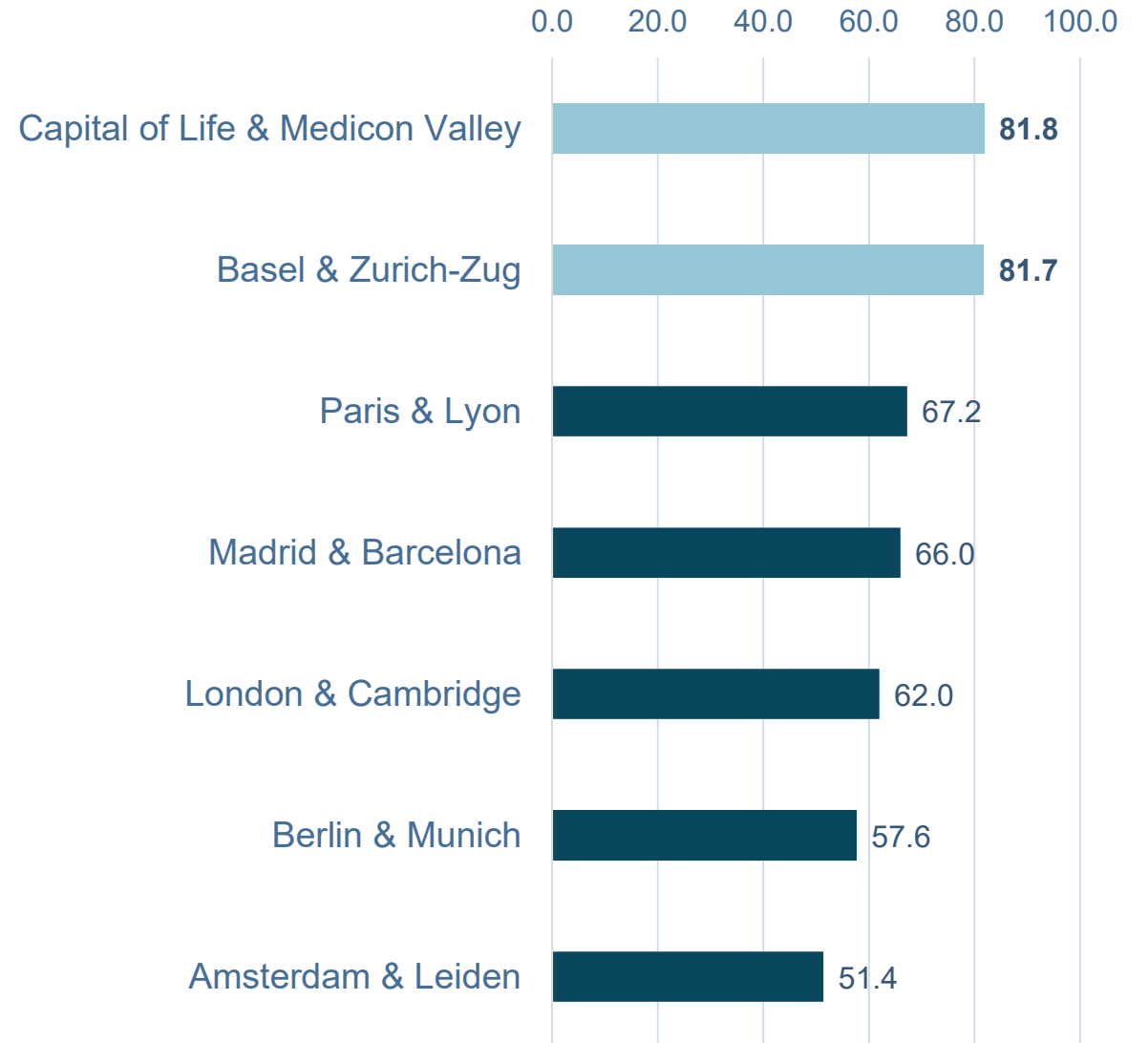
Life sciences  
Manufacturing



Combined, Capital of Life and Medicon Valley rank top of the seven benchmarked locations for Life Sciences Manufacturing. They are part of a breakaway group alongside the pair of Basel & Zurich both scoring close to 82 out of 100.

Both components of the Swedish-Danish pair have a long-established pharmaceutical industry, complemented by an extensive network of smaller manufacturers.

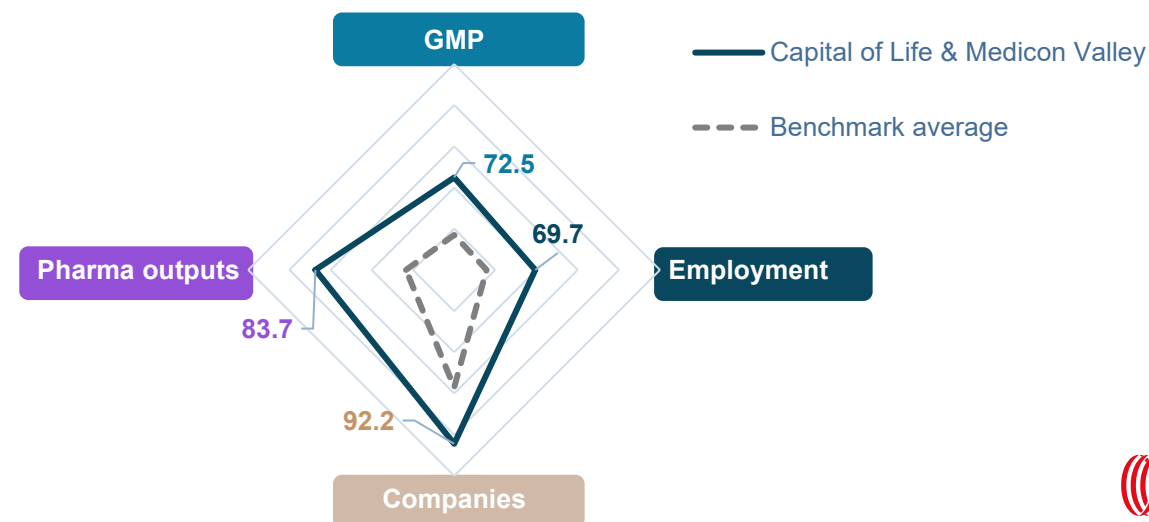
Ultimately, it is Medicon Valley's specialized expertise in pharmaceutical manufacturing and its significant volume of GMP sites that clinches the top spot for the combined region.



# Manufacturing benchmark

		GMP Sites	GMP Sites per capita	Manufacturing employment per capita	Pharma Manufacturing employment per capita	Large pharma manufacturing presence	# Companies running phase 3 clinical trials	University industry link	Pharma exports per capita (national)	Drug approvals 2025	Total
	Weighting	20%	10%	5%	10%	20%	10%	10%	5%	10%	100%
Rank	Benchmark average	69.2	53.2	61.1	56.3	87.3	61.0	96.4	23.5	46.0	66.8
1	Capital of Life & Medicon Valley	79.3	69.0	47.8	80.7	100.0	76.7	99.7	19.0	100.0	81.8
2	Basel & Zurich-Zug	41.0	100.0	100.0	100.0	100.0	80.0	99.7	100.0	55.6	81.7
3	Paris & Lyon	69.7	23.3	53.5	51.5	94.4	73.3	99.5	5.7	66.7	67.2
4	Madrid & Barcelona	100.0	41.9	66.3	47.3	100.0	50.0	85.2	4.3	0.0	66.0
5	London & Cambridge	64.9	25.3	22.1	37.7	72.2	100.0	91.8	3.9	77.8	62.0
6	Berlin & Munich	90.4	54.0	73.8	33.4	66.7	20.0	100.0	13.4	11.1	57.6
7	Amsterdam & Leiden	39.0	58.6	64.2	43.3	77.8	26.7	99.1	18.3	11.1	51.4

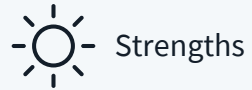
Capital of Life and Medicon Valley rank top for life sciences manufacturing alongside the Swiss pair of Basel & Zurich-Zug. Medicon Valley is the main driver of the pair's performance.





# Conclusion: SWOT Analysis and Recommendations

# Capital of Life & Medicon Valley fundamentals



Strengths

S

- Concentrated pharma R&D presence
- Advanced computing infrastructure
- Early-Stage Research Support
- Teacher exception
- Academic Excellence
- Strategic Science Park Locations
- Excellent Cluster Brand Recognition
- Equity Funding Availability
- Manufacturing Capabilities
- Growing clinical trials capacity
- Workforce Quality and Operational Excellence
- Major Pharma presence



Weaknesses

W

- Real Estate Supply Visibility
- Weak late-stage development
- Limited commercial translation
- Cross-border regulatory barriers
- Inter-Nordic competition
- Limited government incentives



Opportunities

O


- Research Facilities Expansion
- Life Science & Tech Convergence
- IPO Support Enhancement
- Later-Stage Development Support
- International Manufacturing Investment
- Nordic clinical trial collaboration
- Swedish Manufacturing Site Expansion



Threats

T

- Brain drain
- Changing lab space requirements
- Over reliance on few big pharma players
- Chinese manufacturing competition

 Strengths

# S

  
**Life Sciences  
R&D**

**Concentrated pharma R&D presence**  
All major pharmaceutical R&D facilities located within 15km of Copenhagen area

**Advanced computing infrastructure**  
Access to supercomputer (Gefion) infrastructure for both public and private players

**Early-Stage Research Support**  
Strong ecosystem including Foundations, Universities, Bio Innovation Center

**Teacher exception**  
Fosters innovation and protects academic freedom & autonomy

**Academic Excellence**  
Karolinska Institutet, Uppsala University, etc.

**Strategic Science Park Locations**  
Historic dedicated science parks adjacent to key anchors: Solna Campus, Uppsala Science Park, Flemingsberg

**Cost advantage of Swedish researchers**

  
**Medicon Valley**

**Excellent Cluster Brand Recognition**  
Medicon Valley is renowned across the life sciences industry globally

**Workforce Quality and Operational Excellence**  
Qualified labor force with strong manufacturing expertise, delivering reliable performance in quality, timeliness, and trustworthiness

**Equity Funding Culture**  
Stockholm Stock Market and Pension Funds. Ability to attract international capital.

**Capital of Life**  


**Exceptional Manufacturing Capabilities**  
Strong pharmaceutical and CDMO presence with specialized manufacturing facilities.

**Clean & cheap energy**  
Industrial electricity cost: 9.4 cents/kWh in Sweden and 9.8 in Denmark (vs 18.7 on average in Europe)

  
**Life Sciences  
Manufacturing**

**Major Pharma presence**  
While slightly less pronounced than in the Medicon Valley, strong Manufacturing presence. Most notable in Uppsala & Södertälje.

“Science Village is building an ecosystem that complements the mature ecosystem. It works but is happening in isolated pockets.”

“Our historic strength in life sciences, combined with today’s tech leadership, is a powerful advantage—we must bring them together.”



## Weaknesses

# W

“Half Danish / Half Swedish, it is a challenge and a blessing”

“A lot of researchers have publications but never actually commercialised – so this is a challenge.”



## Medicon Valley

### Real Estate Supply Transparency

Limited visibility on local ownership specificities and available space and rents.

### Somewhat fragmented sub-clusters

Lack of inter-cluster movements

### Cross-border physical & regulatory barriers

National border creates problems with legislation, pension, parental leave. Very few companies move from Swedish to Danish side and vice versa.

### Production investment disequilibrium

No production investment over last 5-year in Skan vs SEK 165 billion invested in Denmark’s Sjælland



## Life Sciences R&D

### Limited commercial translation

Many researchers have publications but never actually commercialise their research

### Weak late-stage funding

VC funding is relatively low considering the start-up landscape and quality of academia

### Inter-Nordic competition

Competition between Denmark and Sweden at national level despite regional cooperation



## Life Sciences Manufacturing

### Limited government incentives

Very few incentives in Sweden for start-ups

**Over-concentration of real estate** offering owned by by state-owned entities Vasakronan and Akademiska Hus.

**Lack of suitable sizeable space in attractive locations in Stockholm** Except Uppsala

**Limited residential offering** Stockholm

### Arlanda Airport

Relatively poor international connections limits capital and corporate attractiveness

## Capital of Life





## Opportunities



### Medicon Valley

#### Complementary Research Facilities Expansion

Next-generation research facilities under development (ESS); regulation sources operational in 2027

#### Increase real estate supply & visibility

Develop greater offering for growing companies and make the market more readable

#### Increase International Manufacturing Investment

International companies seeking highly specialized manufacturing (HGC Biologics, FujiFilm, etc.)

#### Europe Manufacturing policies

Be the leader for life sciences manufacturing development in Europe across various fields

#### Later-Stage Development Support

Offering more comprehensive later-stage development support (VC, regulatory...)

#### Nordic clinical trial collaboration

#### Swedish Manufacturing Expansion

Increasing leverage of Swedish sites for manufacturing (Skilled and cheaper labor). Uppsala, Skan

Vs Office



### Life Sciences R&D

#### Life Science & Tech Convergence

Growing tech convergence creating cross-funding alliance between life science and tech sectors

#### IPO Support Enhancement

Increasing venture capital and expanding support to timely IPOs increasing VC attraction

#### Real estate competition

Favor new laboratory developments by private players (Vectura, Fabège, etc.) complementary to existing public backed players



### Life Sciences Manufacturing

“We need to work together as Europe to compare with the US.”

“It would be great if Stockholm and Medicon Valley worked more closely together”

“The glue is very important!!”

### Capital of Life





Threats



Life Sciences  
R&D

“Skåne lacks Copenhagen’s critical mass and influence — real progress depends on Danish and Swedish politicians working together, despite diverging interests.”

“China is now cheap and good quality, so we are under extreme pressure.”

**IP drain**  
Risk of lost IP linked to teacher exception

**R&D out licensing competition**  
Big pharma & mid to large biotechs are increasingly looking east to refill their new drug pipelines

**Changing lab space requirements**  
Less lab space needed due to virtual work and outsourcing chemistry to India

**Brain drain**  
Companies and talent leaving for the US where wages for researchers are much higher

**Low premium for lab space**  
Hagastaden and Uppsala central offer low premiums for lab space. Strong competition from office users could lead to dilution of life sciences subclusters.



Medicon Valley

**Over reliance on few big pharma players**  
While it is a structural part of Medicon Valley, there is a strong reliance on large players. Strong business contraction can have rippling effects across the ecosystem.

**Manufacturing outsourcing competition**  
China/India are now cheap and good quality, creating extreme pressure

**Most Favoured Nation**  
America first. Potential supply issues, leading to fewer launches in turn meaning less jobs.

**Regulatory burden**  
Long planning or zoning timelines can deter new developments

**Tariffs**  
America first & supply chain rethinking



Life Sciences  
Manufacturing

Capital of Life

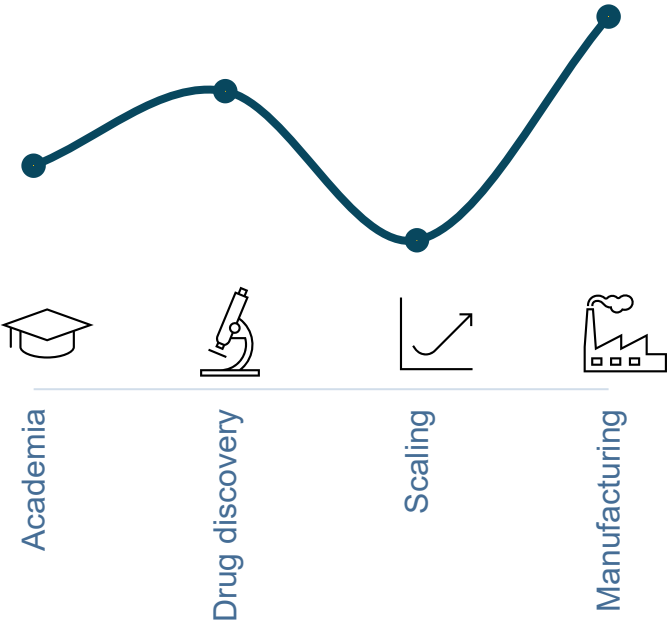


# Key recommendation for Medicon Valley and Capital of Life

## Medicon Valley



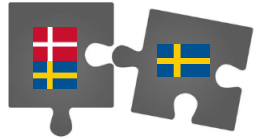
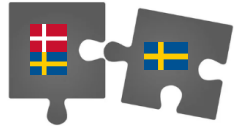
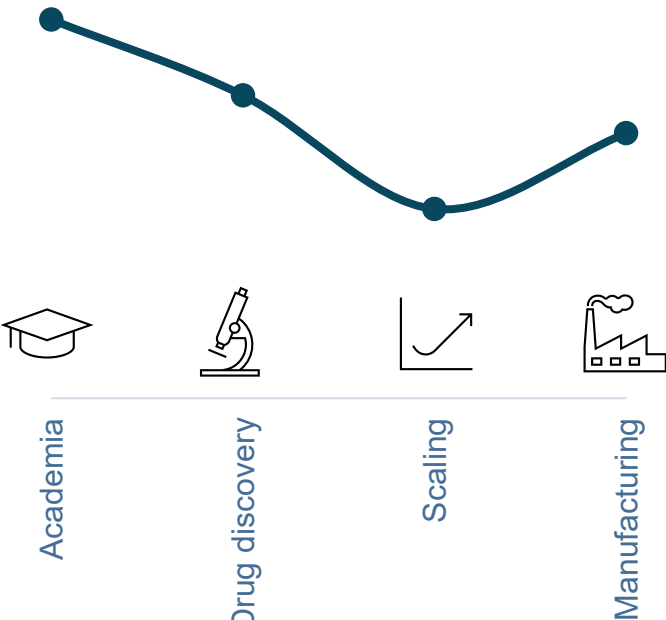
Medicon Valley needs to support the development of scaling companies, favoring independent growth paths



## Capital of Life



Capital of life needs to increase its manufacturing capacities to offer outcomes to its strong drug discovery landscape



# Strategic collaboration perspectives for Medicon Valley and Capital of Life

## 1

### Build Complementary Strengths while leveraging best practices

- The clusters should leverage their distinct strengths by **focusing on complementary specialisations**— ie Manufacturing in Medicon Valley and R&D in Capital of Life.
- It is encouraged they share **best practices** (CDMO, AI/tech, digital health, ATMP, etc.). Adopting each other's manufacturing and R&D excellence will improve both hubs individually and strengthen the entire Nordic ecosystem, making it more competitive on a European scale.

## 2

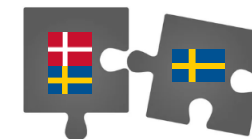
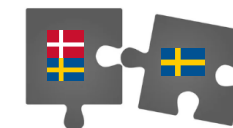
### Lead Europe's quest for industrial competitiveness through life sciences

- The Nordics should actively leverage their world-class research & manufacturing capacity, identified as a core strength, to **attract inward investments and organic growth**.
- **Focusing on life sciences manufacturing** will maximise the impact across all spheres of the economy.
- Leverage key infrastructures (Fehmarnbelt Tunnel, Airport Developments, etc.) to increase attractiveness and fully integrate **Denmark and Sweden as key components of Northern Europe's manufacturing powerhouse**.

## 3

### Strengthen Cross-Border Clinical Trials Integration

- Strengthen Nordic regulatory and ethical harmonisation. Establish a **unified Nordic Clinical Trial Network** leveraging combined population of 28 million.
- **Increase collaboration** between academia, healthcare, and industry, establishing clear incentives, harmonizing regulatory pathways, and enhancing patient recruitment and cross-border data system interoperability.
- **Develop patient engagement** platforms listing all active trials, increase public awareness, encourage use of virtual visits and remote monitoring



# Strategic collaboration perspectives for Medicon Valley and Capital of Life

## 4

### Talent/IP attraction & retention

- Offer **favorable tax conditions for R&D-intensive companies** and IP-holding entities.
- To counter ‘brain drain,’ Sweden & Denmark must **promote their quality of life and great work environment** to attract and retain global talent.
- To prevent ‘IP drain’ from the ‘teacher exception,’ the region must create strong incentives that **help academics commercialise their innovations locally**.

## 5

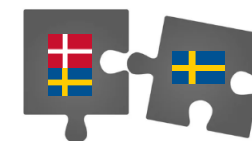
### Bridge the Commercialisation Gap Through VC, European funding and IPO support

- Encourage **later stage venture funding** (From series B onward) targeting more established companies.
- Establish **pan Nordic IPO advisory program**. Help the right companies leverage Stockholm Stock Market at the right time. Encourage local M&A deals.
- Capitalize on recent European reformed pharma legislation and the **BiotechAct**, aiming to mobilise €10bn in investment in 2026–27. The focus sits on late-stage development and scale-up.

## 6

### Increase commercial laboratory supply and visibility

- **Increase commercial laboratory supply** to allow later stage company growth
- Favor **real estate investment liquidity** by encouraging new real estate investment players in the lab sphere
- Favor **real estate transparency** through clear mapping of supply
- Drive best in class tech-enabled R&D research favoring AI integration and cross-sector fertilisation



# Thank you

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