





Executive Summary

FCF Overview
Market Overview
Sector Analysis

Therapeutics - Micro*

Therapeutics - Small*

Therapeutics - Medium*

Diagnostics

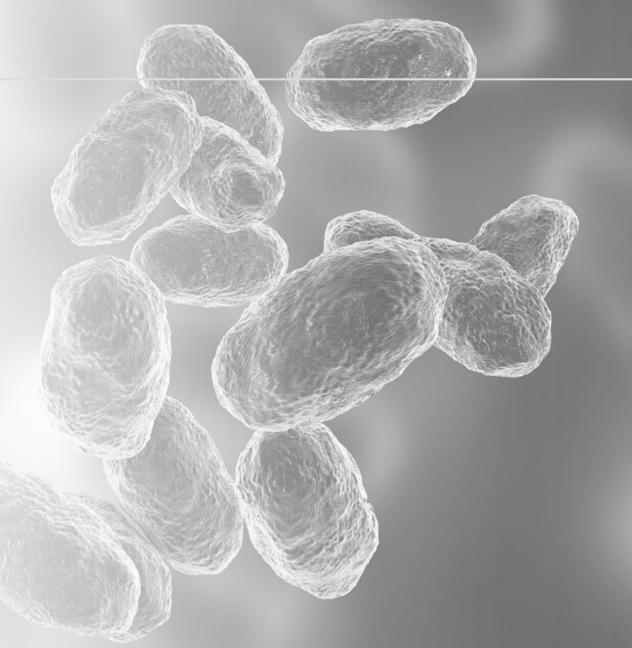
Biotechnology - Others

Services

Health Technology

Medical Technology

Supplier & Engineering





Executive Summary

The FCF Life Science Monitor is a standardized report on valuations in the European biotechnology, pharmaceutical and medical technology segments and is a quick reference for investors, corporates and professionals

More advanced, detailed and / or customized reports are available upon request

FCF Life Science Monitor

is a comprehensive, standardized valuation analysis for biotechnology, pharmaceutical and medical technology companies in the micro, small and midcap market segment in Europe

Selection of Companies

The selection of companies is based on the following criteria:

- Companies operating in the biotechnology, pharmaceutical, medical technology, service or other sectors
- Headquarter located in Europe
- Current market capitalization (as of June 30th, 2018) is between EUR 50 million and EUR 1 billion as to focus on the micro - mid cap market segment instead of the large / blue chip Life Science companies
- Life Science companies with a market capitalization below EUR 50m and above EUR 1 billion are excluded
- The Therapeutics sector has been divided into Micro Cap (market capitalization between EUR 50m - 100m), Small Cap (market capitalization between EUR 100m - 250m) and Medium Cap (EUR 250m - 1,000m) due to the large number of companies

Recipients

The FCF Life Science Monitor targets the following recipients:

- Corporates / Executives
- Institutional investors
- Private equity investors
- Venture capital investors
- Family Offices / High Networth Individuals
- Advisors

Availability

The FCF Life Science Monitor is available on FCF's website at "www.fcf.de"

Data

All input data is provided by S&P Capital IQ and is not independently verified by FCF. Ratio and multiple calculations are driven based on the input data available. For additional information and disclaimer, please refer to the last page

To recommend colleagues or fellow investors to be added to the mailing list, kindly send an email with the respective contact information

If you have questions, comments or ideas, please do not hesitate to contact us



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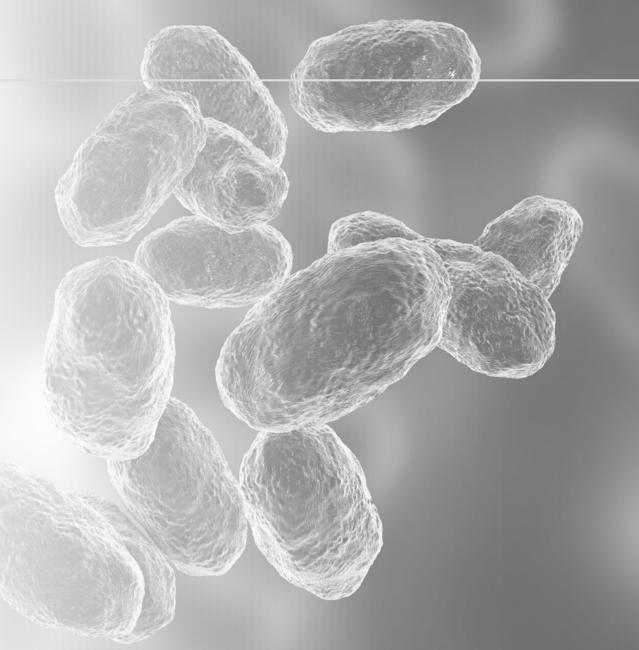
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FCF in the Life Science Sector

Life Science Overview



Focus on Midcap and R&D Companies

FCF has traditionally served Small- and Midcap companies in the German speaking region, providing customized and innovative financing solutions, with mandates in the Pharmaceuticals sector.

FCF has expanded its focus on the Life Science sector, closing 4 Life Science transactions in 2017:







August 2017









FCF is currently advising companies in following indications regarding equity and debt transactions:



Oncology



Respiratory MedTech

Infectious Diseases



HealthTech

Financing Advisory

FCF advises with its dedicated Life Science team on the following transaction types:









Advisory Services

Integrated Financial Modeling

Management Presentation



Post-Transaction Support

Investor / IB

Equity & Debt

Fundraising



Roadshow



rm Sheet Closing





IPO Execution Support

Assistance

(extract from service portfolio)

Life Science Team



Arno Fuchs



Dr. Mathias Schott Vice President



Sebastian Sommer Analyst

Life Science Advisory Board



Claus Schalper
Co-Founder & former
CFO Pieris Pharma



Dr. Holger Bengs Founder & CEO BCNP Consultants



To be announced Former Life Science Venture Capitalist

FCF Life Science Research Series

The FCF Life Science VC Report analyses the latest Venture Capital funding activities in the Life Science sector in Europe and the US.



The FCF Life Science IPO Report examines recent IPO trends in the Life Science sector, with a strong focus on the comparison of European and US characteristics.



The FCF Life Science Monitor is the most detailed analysis of European publicly listed companies, from the Life Science sectors.





FCF Overview

FCF seeks to provide its clients with financing solutions

- (i) at the lowest cost,
- (ii) with the highest flexibility,
- (iii) in the shortest period of time,
- (iv) with the highest closing probability, and with
- (v) financing partners that integrate well into their strategy

Who We Are

- Specialized investment bank and financing specialist
- Advising public and private small / midcap companies
- Advisor for structuring and placement of financing transactions:
 - All instruments: Unbiased approach to all available corporate financing instruments (no product selling approach), allowing for customized financing structures
 - All investors: Close and trusted relationships with senior executives of virtually all relevant equity and debt investors
 - Fast process: Process management skills and direct / personal access to institutional debt and equity investors enable fast transactions
- More than 100 transactions with a total placement volume in excess of EUR 4.0 billion since foundation in 2005
- Approx. 10 professionals headquartered in Munich

Capital Markets Capabilities and Services

| ξź | Private / Pre-IPO | Venture capital Growth capital | Private equity |
|--------|----------------------|---|---|
| Equity | Public | Initial Public Offering (IPO) / Capital increase Dual-track (IPO and alternative transaction | pursued in tandem) Private Investment in Public Equity (PIPE) Block trade |
| | Short-term Debt | Receivables / Factoring / ABS Borrowing base / Inventory | Working capital / Revolving credit facility Guarantees / Letter of Credit |
| Debt | Long-term Debt | Bank loan facility / Straight debt Sale-and-lease back Corporate bonds (public / private placement) | Promissory note (Schuldscheindarlehen) High-yield / PIK bond (public / private) Second lien |
| | Mezzanine | Mezzanine capital | Convertible bonds |

Selected Transactions





FCF Facts & Figures



More than 100

Completed Transactions



2000

Contacts to Family
Offices and Ultra
High Net Worth
Individuals
worldwide



#1

Financing Advisor in Germany, purely focusing on corporate financing transactions



More than 10

Investment Banking Professionals



Network

Access to more than 4000 international financial institutions



More than 4 bn

Total volume of advised & closed transactions since 2005



Leading

Advisor for Financing Transactions with EIB in the DACH region



Close to 100

Years of aggregated, investment banking / financing experience



More than 120

Articles and research papers published



More than **25**

International conferences organized



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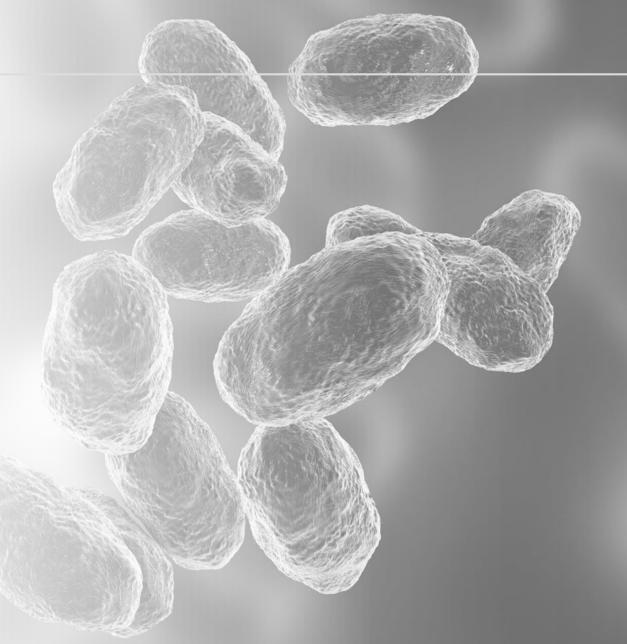
Biotechnology - Others

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Health Technology

Medical Technology

Supplier & Engineering





Facts & Figures

As of Q2 2018

Quarterly Performance by Sector

Last 3 Months (L3M)

| | Q2/18 | Q1/18 |
|------------------------|-------|-------|
| Life Science Monitor | +7% | +1% |
| | | |
| Therapeutics – Micro | -6% | -7% |
| Therapeutics – Small | +14% | +3% |
| Therapeutics – Medium | +6% | +8% |
| Diagnostics | +7% | 0% |
| Biotechnology - Others | +8% | +4% |
| Services | +7% | -5% |
| Health Technology | +2% | -8% |
| Medical Technology | +7% | -3% |
| Supplier & Engineering | +17% | -1% |

Top/Worst Performing Countries (L3M)

| <u>(8)</u> | (5) Spain | +27% | (4) Italy | -13% |
|------------|------------|------|--------------|------|
| | (6) Poland | +24% | (3) Romania | -7% |
| | (2) Latvia | +19% | (2) Bulgaria | -6% |

Top/Worst Performing Companies (L3M)

| rop/morotro | | ompamoo (Lo | , |
|--------------|-------|-------------|------|
| ProQR | +151% | 💎 prothena" | -58% |
| SHIELD | +138% | Tiziana | -55% |
| oncopeptides | +99% | GenSight | -52% |

EUR **54,233 bn**

N

in aggregated

Market

Capitalisation

(205 companies)

Trading at **72%**

of 52 Week

Market Highs
on average

Capital Raised since IPO

EUR

26,476 m

Life Science
Companies
estimated to reach
Profitability
before 2020



Potential Consensus

Life Science Monitor

+79%



| Potential | Q2/18 | Q1/18 |
|------------------------|-------|-------|
| Therapeutics – Micro | +161% | +158% |
| Therapeutics – Small | +107% | +101% |
| Therapeutics – Medium | +62% | +60% |
| Diagnostics | +59% | +62% |
| Biotechnology - Others | +59% | +31% |
| Services | +26% | +65% |
| Health Technology | +33% | +32% |
| Medical Technology | +39% | +60% |
| Supplier & Engineering | +35% | +97% |



European Public Life Science Companies

Market Overview - Number of European Life Science Companies

About 205 European Life Science companies with a market capitalization between EUR 50m and EUR 1,000m are currently listed in the micro to mid cap segment in Europe

The United Kingdom, France and Sweden host the most public Life Science companies

As in Q1 2018, Germany ranks 4th with 22 companies

Total Number and Distribution of Public Life Science Companies by Country (HQ)







European Public Life Science Companies

Market Overview - Market Capitalization of European Life Science Companies

The aggregated market capitalization of all 205 European publicly listed Life Science companies in the micro to mid cap segment amounts to EUR 54.2bn

The UK, Sweden and France feature the highest aggregated market capitalization among all European public Life Science companies

As in Q1 2018, Germany ranks 4th with EUR 6bn

Total Market Capitalization and Distribution by Country (HQ)







Performance Metrics by Region

Alphabetical Order

| Values | 3 | | Sha | re Price | Perfori | mance | | | | | | | | | | | | | EV/ | Sales | | | | |
|--------|---------------|-------|--------|----------|--------------|--------|-----------|-----------------------------------|-------------------------------------|----------------|----------------|-----------------------------------|----------------|---------------|-------|--------------|---------------|--------|----------|----------|----------|--------------|------------------------|---------------------|
| ountry | # of Comp. | 1M | 3M | YTD | since IPO | p.a. | Potential | Free float / Shares out. | Ø3M Sh. Trad. / Free Float | Company Age | Time to IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | ROE (LTM) | ROCE (LTM) | CY2017 | ' CY2018 | CY2019 | CY2020 | Cash / TA | Expected Profitability | Cash Los (LF) |
| | 8 | 5.4% | 14.5% | 28.6% | -13.1% | -4.6% | 29.2% | 68% | 0.35% | 19 yrs | 10 yrs | 139.8 | 352.5 | 34.8 | 327.0 | -19.7% | -16.4% | 27.8x | 25.5x | 10.9x | 25.6x | 36% | 2020 | 0.9 |
| | 2 | 0.1% | 4.1% | 5.1% | 77.8% | 17.9% | 27.2% | 23% | 0.01% | 52 yrs | 46 yrs | 6.8 | 280.4 | 9.2 | 353.3 | 8.7% | 10.3% | 9.4x | 0.8x | 0.7x | 0.6x | 2% | Profitable | |
| | 9 | 3.3% | 12.6% | 7.9% | 90.9% | -1.6% | 62.8% | 53% | 0.58% | 16 yrs | 6 yrs | 133.9 | 221.3 | 34.2 | 167.3 | 144.5% | -31.0% | 12.6x | 9.3x | 14.3x | 7.4x | 59% | 2021 | 2. |
| | 2 | 3.3% | 21.3% | 24.8% | 55.6% | 9.5% | -7.3% | 46% | 0.17% | 30 yrs | 12 yrs | 1.0 | 217.6 | 2.8 | 211.4 | 49.6% | 32.7% | 11.4x | 13.7x | 11.6x | 9.7x | 17% | Profitable | |
| | 33 | -3.7% | -6.7% | -9.1% | 36.7% | -4.9% | 87.2% | 51% | 0.51% | 26 yrs | 16 yrs | 146.6 | 251.6 | 47.7 | 255.1 | -27.6% | 60.2% | 16.7x | 20.1x | 12.9x | 12.7x | 45% | 2019 | 2. |
| | 22 | -6.0% | -10.0% | -1.5% | 61.0% | -4.4% | 68.2% | 62% | 0.26% | 30 yrs | 17 yrs | 88.8 | 287.0 | 34.0 | 279.1 | -18.7% | -16.4% | 17.0x | 14.3x | 12.3x | 8.2x | 36% | 2020 | 2. |
| | 8 | -5.6% | -12.8% | -21.3% | -53.4% | -23.8% | 133.2% | 62% | 0.46% | 15 yrs | 7 yrs | 583.7 | 253.1 | 83.6 | 191.7 | -49.3% | -41.0% | 4.3x | 17.2x | 6.5x | 5.7x | 59% | 2020 | 1 |
| | 4 | 1.9% | 8.2% | 0.3% | -23.5% | -10.3% | 134.1% | 60% | 0.26% | 16 yrs | 9 yrs | 124.6 | 186.5 | 16.9 | 164.4 | -29.3% | -29.3% | 24.9x | 8.4x | 14.5x | 4.7x | 64% | 2021 | 3 |
| | 2 | -5.2% | -7.1% | 3.7% | 189.4% | 11.3% | 16.4% | 29% | 0.04% | 37 yrs | 17 yrs | 1.9 | 91.5 | 4.5 | 110.0 | 8.6% | 8.1% | 1.0x | 1.1x | - | - | 3% | Profitable | |
| | 4 | 11.3% | 50.7% | 49.3% | -10.1% | 1.2% | 63.5% | 73% | 0.19% | 14 yrs | 7 yrs | 246.0 | 418.8 | 69.0 | 368.7 | | -13.8% | 74.6x | 15.9x | 33.2x | 26.1x | 67% | 2019 | 1 |
| | 9 | -1.0% | 10.9% | 19.1% | 127.0% | 12.5% | 45.1% | 52% | 0.28% | 16 yrs | 9 yrs | 38.0 | 126.4 | 18.7 | 109.1 | -11.6% | -18.3% | 12.7x | 3.8x | 3.2x | 2.3x | 54% | 2020 | 3 |
| | 6 | 0.0% | 9.1% | -5.0% | 378.5% | 25.4% | 36.1% | 47% | 0.12% | 11 yrs | 5 yrs | 47.4 | 200.6 | 23.5 | 198.4 | 4.4% | 22.8% | 7.1x | 7.1x | 6.4x | 7.3x | 35% | 2018 | 3 |
| | 3 | 3.3% | 2.9% | 5.0% | 93.0% | 9.4% | - | 52% | 0.01% | 72 yrs | 54 yrs | 3.9 | 150.8 | 16.1 | 140.7 | 15.8% | 17.6% | 2.0x | - | - | - | 17% | Profitable | |
| | 1 | 5.4% | 6.1% | 0.0% | 9.9% | 0.4% | _ | 0% | - | 77 yrs | 52 yrs | <u>-</u> | 567.1 | 0.0 | 567.0 | 15.4% | 20.7% | 6.8x | <u>-</u> | <u>-</u> | <u>-</u> | 0% | Profitable | |
| | 5 | 31.6% | 27.5% | 53.6% | -12.2% | -6.9% | 68.5% | 46% | 0.19% | 53 yrs | 45 yrs | 37.0 | 311.2 | 19.3 | 327.6 | 2.6% | -0.2% | 8.3x | 12.5x | 6.9x | 7.5x | 16% | 2019 | 3 |
| | 35 | -2.5% | 14.4% | 11.4% | 140.6% | 29.3% | 62.4% | 61% | 0.33% | 19 yrs | 12 yrs | 54.0 | 256.3 | 19.7 | 250.3 | -11.5% | -10.6% | 17.7x | 19.5x | 18.6x | 13.8x | 44% | 2020 | 4 |
| - | 13 | -0.1% | 5.1% | 1.8% | -10.1% | -4.6% | 101.5% | 43% | 0.30% | 26 yrs | 19 yrs | 238.8 | 335.8 | 47.6 | 310.2 | -18.6% | -23.0% | 15.9x | 13.5x | 18.2x | 11.2x | 51% | 2021 | 2 |
| | 39 | 1.1% | 10.4% | 8.0% | 33.4% | 4.2% | 112.5% | 59% | 0.18% | 19 yrs | 12 yrs | 143.0 | 280.2 | 26.7 | 258.0 | -24.8% | -10.0% | 17.3x | 14.2x | 12.6x | 9.5x | 39% | 2020 | 4 |
| · | 6 | 2.4% | 9.0% | 10.1% | 65.1% | 3.3% | 65.0% | 49% | 0.25% | 30 yrs | 20 yrs | 113.1 | 266.0 | 28.2 | 255.0 | 2.3% | -2.1% | 16.0x | 12.3x | 12.2x | 10.2x | 36% | 2020 | 2. |

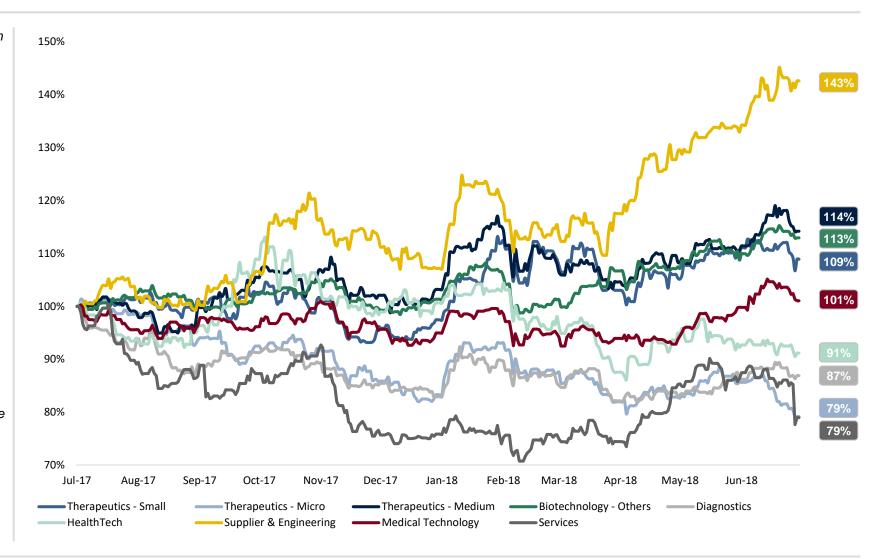


Indices by Subsector

Market Overview (L1Y)

Among the European Life Science subsectors, Supplier & Engineering recorded the best share price performance with a gain of +43 percentage points over the last twelve months, followed by Therapeutics – Medium(+14%) and Biotechnology – Others (+13%)

The Therapeutics – Micro* and the Services subsector featured the worst performance with a loss of 21 percentage points, respectively





Performance Metrics by Subsector

| Ø Values | | | Sha | re Price | Perfor | mance | | F | Ø3M Sh. | | | Comital | | | | | | | EV/ | Sales | | | | |
|------------------------|---------------|-------|-------|----------|--------------|--------|-----------|-----------------------------------|--------------------------|----------------|----------------|-----------------------------------|----------------|---------------|-------|--------------|---------------|--------|--------|--------|--------|--------------|------------------------|-------------------------|
| Subsector | # of Comp. | 1M | 3M | YTD | since IPO | p.a. | Potential | Free float / Shares out. | Trad. / Free Float | Company Age | Time to IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | ROE (LTM) | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash / TA | Expected Profitability | Cash / Loss (LFY) |
| Therapeutics - Micro | 31 | -8.0% | -5.7% | -6.5% | -21.3% | -11.6% | 165.9% | 53% | 0.31% | 17 yrs | 10 yrs | 67.8 | 70.8 | 15.7 | 58.1 | -31.1% | -9.8% | 15.1x | 12.4x | 12.0x | 9.5x | 47% | 2020 | 2.1x |
| Therapeutics – Small | 32 | 0.9% | 13.6% | 9.8% | 16.4% | 2.4% | 116.8% | 49% | 0.36% | 15 yrs | 9 yrs | 146.5 | 166.4 | 39.4 | 126.4 | 19.2% | -29.4% | 22.7x | 18.7x | 18.7x | 21.3x | 70% | 2020 | 3.8x |
| Therapeutics – Medium | 39 | 0.4% | 5.7% | 9.5% | 61.6% | 7.3% | 63.0% | 63% | 0.50% | 18 yrs | 10 yrs | 308.7 | 540.1 | 76.3 | 494.2 | -34.5% | -22.4% | 26.7x | 21.0x | 19.2x | 17.4x | 53% | 2020 | 3.0x |
| Diagnostics | 15 | 0.9% | 7.3% | 5.7% | -7.9% | -6.6% | 59.2% | 66% | 0.24% | 23 yrs | 12 yrs | 132.2 | 160.5 | 18.9 | 157.0 | -26.5% | -31.2% | 13.7x | 21.9x | 14.5x | 7.0x | 35% | 2019 | 1.5x |
| Biotechnology - Others | 31 | 2.9% | 7.7% | 10.5% | 94.2% | 4.1% | 58.0% | 45% | 0.24% | 44 yrs | 32 yrs | 85.2 | 290.2 | 21.7 | 292.3 | 1.2% | 1.6% | 9.8x | 10.4x | 12.3x | 7.2x | 19% | 2019 | 6.9x |
| Services | 6 | -7.9% | 7.2% | 3.6% | 219.9% | 8.6% | 25.8% | 57% | 0.17% | 15 yrs | 10 yrs | 85.0 | 253.4 | 13.5 | 314.3 | 9.9% | -5.2% | 4.0x | 3.2x | 3.1x | 2.7x | 24% | 2018 | 3.2x |
| Health Technology | 8 | -2.5% | 1.8% | -8.9% | 187.0% | 14.1% | 32.4% | 61% | 0.37% | 21 yrs | 9 yrs | 136.5 | 244.8 | 14.8 | 263.1 | -3.3% | 2.5% | 12.7x | 9.4x | 6.3x | 7.7x | 29% | >2022 | 0.6x |
| Medical Technology | 35 | 1.8% | 6.7% | 3.2% | 126.2% | 14.9% | 40.5% | 60% | 0.16% | 30 yrs | 19 yrs | 39.5 | 244.6 | 23.2 | 245.8 | -15.8% | 60.3% | 13.0x | 14.3x | 11.5x | 8.0x | 34% | 2019 | 2.4x |
| Supplier & Engineering | 8 | 5.7% | 16.9% | 38.2% | 160.7% | | 34.7% | 53% | 0.32% | 22 yrs | 15 yrs | 30.1 | 276.0 | 9.1 | 277.5 | 14.1% | 2.2% | 24.9x | 29.9x | 7.4x | 3.9x | 32% | 2019 | 2.0x |
| Ø | | -0.6% | 6.8% | 7.2% | 93.0% | 7.0% | 66.3% | 56% | 0.30% | 23 yrs | 14 yrs | 114.6 | 249.6 | 25.8 | 247.6 | -7.4% | -3.5% | 15.9x | 15.7x | 11.7x | 9.4x | 38% | 2019 | 2.8x |



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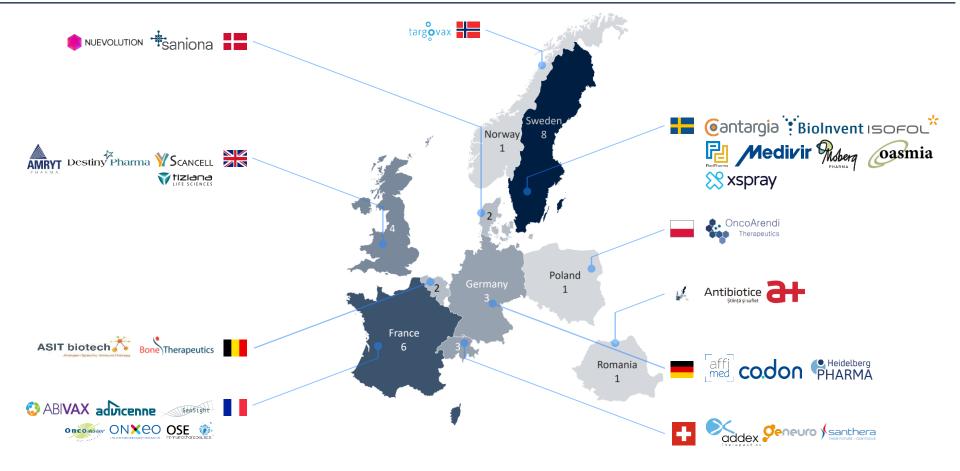
Sector Analysis Therapeutics - Micro

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Therapeutics - Medium
Diagnostics
Biotechnology - Others
Services
Health Technology
Medical Technology
Supplier & Engineering





Total Number and Distribution of Public Therapeutics - Micro* Companies by Country (HQ)



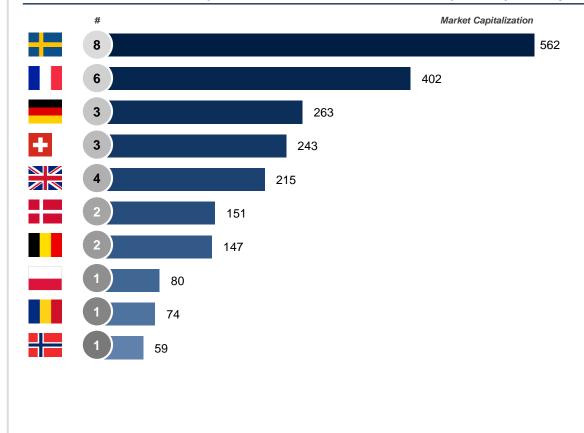


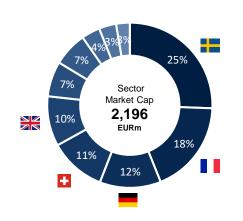
Market Overview

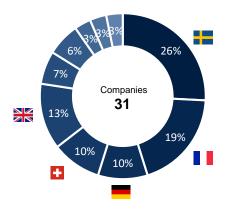
Within the
Therapeutic – Micro
subsector, Sweden
hosts the most public
companies (8),
followed by France
(6) and the United
Kingdom (4)

In terms of market capitalization, Sweden leads by far with EUR 562m followed by France and Germany

Total Number and Market Capitalization of Public Life Science Companies by Country









| | | General Information | | | | | | | | | | | | | Valua | ation Me | trics | | | | |
|----------------------------------|---|--|-----------------------|--------------------------------|---------------|-----------------------|---------|-------|--------------------------|-------------|---------------|----|-------|---------------|--------|----------|--------|--------|-----|-----------------------------|--------|
| | | | Products in | on | | | Yea | ar of | _ | | | | | | | EV/S | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Mark | Primary et Exchange | US Listing | Cross- p border IF | O Found | . IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | / Expected Profitability | |
| ABIVAX S.A. | ABIVAX Société Anonyme, a biotechnology company, develops, markets, and commercializes anti-viral therapies and therapeutic vaccines for the treatment of infectious diseases in Asia and Latin America. | Anti-infectives, FRA Small molecules, Vaccines | 4 | Euronext Paris | · 🗸 | | 2013 | 2015 | 50 | 68 | 2 | 51 | -23% | -29% | nm | 23.6x | nm | 27.4x | 3% | >2022 | . 0.2x |
| Addex Therapeutics Ltd | Addex Therapeutics Ltd, a development-stage biopharmaceutical company, discovers, develops, and commercializes small-molecule pharmaceutical products for the treatment of human health. | CH Small molecules | 7 | Swiss - Stock Exchang | √ | | 2002 | 2007 | 146 | 62 | 2 | 60 | -244% | -204% | nm | nm | 7.0x | 14.9x | 85% | 2021 | 0.8x |
| Advicenne S.A. | Advicenne S.A., a late-stage biopharmaceutical company, develops pediatric therapeutics for the treatment of orphan renal diseases and niche neurology indications. | FRA Other, Small molecules | 7 | Euronext Paris | | | 2007 | 2017 | 27 | 97 | 36 | 62 | -18% | -18% | 32.9x | nm | 6.2x | 51.4x | 94% | >2022 | 6.0x |
| Affimed N.V. | Affimed N.V., a clinical-stage biopharmaceutical company, focuses on discovering and developing cancer immunotherapies in the United States, Europe, and Germany. | DEU Antibodies | 11 | - NASDAC |) ✓ | ✓ | 2000 | 2014 | 372 | 88 | 55 | 39 | -57% | -48% | 6.1x | 11.4x | 18.7x | 18.8x | 83% | >2022 | ! 1.8x |
| Amryt Pharma plc | Amryt Pharma plc, a commercial stage pharmaceutical company, focuses on the acquisition, development, and commercialization of medicines for the treatment of rare and orphan diseases. | GBR Other, Peptides, Small molecules | 4 | 2 AIM London | | | - | 2016 | 15 | 50 | 21 | 40 | -119% | -20% | 29.9x | 3.2x | 2.6x | 2.1x | 26% | >2022 | ? 0.8x |
| Antibiotice S.A. | Antibiotice S.A. develops and produces generic drugs for human and veterinary use in Romania. | ROU Anti-infectives, Generics | - | Buchares 5 Stock Exchang | | | 1955 | 1997 | 0 | 74 | 1 | 91 | 8% | 9% | 1.2x | - | - | - | 1% | Profitable | - |
| ASIT Biotech S.A. | ASIT Biotech S.A., a clinical-stage biopharmaceutical company, focuses on the research, development, and commercialization of immunotherapy products for the treatment of allergies in Belgium and internationally. | BEL Antibodies, Peptides, Proteins | 2 | Euronext Brussels | | | 1997 | 2016 | 23 | 61 | 2 | 60 | nm | -734% | 35.4x | - | - | - | 50% | >2022 | 0.2x |
| BioInvent International AB | BioInvent International AB (publ) focuses on the discovery and development of antibody-based drugs against cancer. | SWE Antibodies | 6 | NASDAC - OMX Sweden |) • | | 1997 | 2001 | 84 | 64 | 8 | 53 | -56% | -57% | 7.2x | - | 7.9x | 6.2x | 34% | >2022 | 0.7x |
| Bone Therapeutics S.A. | Bone Therapeutics SA, a biotechnology company, engages in the development of cell therapy products for orthopedics and bone diseases. | BEL Other, Cell therapy | 4 | Euronext Brussels | | | 2006 | 2015 | 40 | 86 | 8 | 89 | -535% | -101% | 57.4x | - | - | 5.9x | 33% | 2018 | 0.7x |
| Cantargia AB | Cantargia AB (publ), a biotechnology company, engages in the research and development of antibody-based therapies for serious diseases. | SWE Antibodies | 3 | NASDAC - OMX Sweden |) | | 2010 | 2015 | 35 | 90 | 8 | 67 | -24% | -24% | - | - | - | - | 32% | 2020 |) 1.3x |
| co.don AG | co.don AG engages in cell cultivation for the regenerative treatment of articular cartilage and spinal disc defects worldwide. | DEU Regenerative Medicine | - | 1 Deutsche Börse | e | | 1993 | 2001 | 59 | 99 | 3 | 87 | -44% | -44% | 15.5x | 14.0x | 12.1x | 9.1x | 14% | 2021 | 0.4x |



Share Price Analysis & Shareholding Structure

| | | | | | | | Share | Price Ana | alysis | | | | | | | Share | holding Str | ucture | | | |
|----------------------------------|----------------|------|------|------|---------|----------|---------|----------------------|--------------------|------------------|---------------|-----------------|-----------|---|------------|--|-------------|---|-------------|-----------------------------|-------------------------------|
| | | 52 V | /eek | | Share F | Price Pe | erforma | nce | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| ABIVAX S.A. | 6.8 | 6.5 | 14.3 | 1% | -9% | -21% | -68% | -31% | " | 4 | • | 18.2 | 165% | Truffle Capital | 63% | Kepler Capital Markets, Asset Management Arm | 7 % | Amundi Asset Management | 7 2% | 32.7% | 0.35% |
| Addex Therapeutics Ltd | 2.3 | 1.7 | 3.5 | -9% | -4% | 20% | -95% | -23% | | 1 | | 10.7 | 355% | New Enterprise Associates | 34% | Addex Pharma SA | 16% | Credit Suisse Asset Management (Switzerland) | 12% | 23.0% | 0.66% |
| Advicenne S.A. | 12.1 | 11.3 | 14.2 | 0% | -8% | -13% | -14% | 1% | -111 | 2 | • | 22.9 | 90% | Bpifrance Investissement | 28% | Ostrum Asset Management | 71% | Caisse des dépôts et consignations | 71% | 0.0% | - |
| Affimed N.V. | 1.4 | 1.0 | 2.4 | -23% | -6% | 31% | -74% | -29% | ••• | 6 | | 6.1 | 334% | Aeris Holding AG | 14% | Wellington Management Group LLP | 11% | New Enterprise Associates | 8% | 67.3% | 0.93% |
| Amryt Pharma plc | 0.2 | 0.2 | 0.3 | -7% | -10% | -19% | -39% | -20% | 7 | 2 | ♦ | 0.5 | 187% | Software Ag Stiftung, Endowment Arm | 22% | AXA Investment Managers S.A. | 10% | Raglan Road Capital Limited, Asset Management Arm | 12% | 61.7% | 0.07% |
| Antibiotice S.A. | 0.1 | 0.1 | 0.1 | 7% | -3% | -4% | 113% | 4% | | - | | - | - | Ministerul Sanatatii | 53% | Societatea de Investitii Financiare Oltenia SA | 14% | Broadhurst Investments Limited | 1 % | 31.9% | 0.00% |
| ASIT Biotech S.A. | 3.6 | 3.2 | 5.8 | 2% | -2% | 0% | -48% | -26% | | 2 | • | 5.0 | 37% | Federal Holding and Investment Company | 9% | de Spoelberch, Rodolphe | 7% | S.R.I.B. S.A. | 5% | 74.4% | 0.12% |
| BioInvent International AB | 0.2 | 0.2 | 0.3 | -8% | -4% | -13% | -96% | -17% | 1- | 1 | | 0.5 | 190% | Imeurope | (7% | Van Herk Investments B.V. | 9% | Omega Fund Management, LLC | 8% | 69.4% | 0.50% |
| Bone Therapeutics S.A. | 11.2 | 7.6 | 11.9 | 6% | 14% | 45% | -30% | -10% | | 3 | | 12.3 | 10% | Société Régionale d'Investissement de Wallonie S.A. | 9% | Reymann, Jacques | 8% | GROUPE SFPI SA | 6% | 68.3% | 0.06% |
| Cantargia AB | 1.4 | 0.5 | 1.6 | -8% | 71% | 110% | -57% | -23% | ul _e . | 2 | - | 1.0 | -23% | Första AP-fonden | 7% | Lund University Bioscience AB | 6% | AP Fonden 4 | 1 % | 88.5% | 0.12% |
| co.don AG | 5.1 | 4.7 | 11.5 | -12% | -21% | -26% | -75% | -8% | | 2 | • | 10.6 | 106% | Bauerfeind Beteiligungsgesellschaf Mbh | ft 21% | Wegener, Bernd | 7% | Alto Invest | 7 3% | 71.4% | 0.09% |



| | | General Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|------------------------------------|--|---|--------------------|---------|-----------------------------|----------|---------------------|---------|--------|--------------------------|----|-----------------|-----|-------|---------------|--------|---------|--------|--------|-----|---------------------------|--------|
| | | | Products | in / or | <u>1</u> | | | Ye | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment M | arket | Primary Exchange | | Cross- border IP | O Found | l. IPO | Capital Raised since IPO | | t Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | |
| Destiny Pharma plc | Destiny Pharma plc, a clinical stage biotechnology company, focuses on the discovery, development, and commercialization of novel medicines for the treatment of infectious diseases in the United Kingdom. | GBR Anti-infectives | 4 | - | AIM London | ✓ | | 1996 | 2017 | 20 | 52 | 13 | 34 | -18% | -16% | - | - | - | - | 69% | >2022 | 2 3.9x |
| GeNeuro S.A. | GeNeuro SA, a clinical-stage biopharmaceutical company, develops drugs for the treatment of neurological disorders and autoimmune diseases. | CH Other | 5 | - | Euronext Paris | ✓ | ✓ | 2006 | 2016 | 33 | 90 | 27 | 64 | -45% | -39% | 10.8x | 12.3x | 4.0x | 3.7x | 88% | >2022 | 2 4.6x |
| GenSight Biologics S.A. | GenSight Biologics S.A., a clinical-stage biotechnology company, engages in therapies for mitochondrial and neurodegenerative diseases of the eye, and central nervous system. | FRA Other, Gene therapy | 2 | - | Euronext Paris | ✓ | | 2012 | 2016 | 124 | 62 | 55 | 10 | -44% | -41% | 3.3x | 2.1x | 0.3x | 1.4x | 89% | >2022 | 2 2.3x |
| Heidelberg Pharma AG | Heidelberg Pharma AG, through its subsidiaries, operates as a biopharmaceutical company that focuses on oncology and antibodies, and specializes in antibody drug conjugates (ADCs) in Germany, Europe, the United States, China, and Australia. | DEU Antibodies | 9 | - | Deutsche Börse | | | 1997 | 2006 | 151 | 76 | 26 | 50 | -35% | -36% | 23.6x | 20.1x | 13.8x | 9.8x | 69% | >2022 | 2 2.3x |
| Isofol Medical AB | Isofol Medical AB (publ), a clinical stage company, develops folate-based therapies. | SWE Other | 7 | - | NASDAQ OMX Sweden | | | 2008 | 2017 | 45 | 69 | 33 | 36 | -24% | -25% | nm | nm | - | - | 99% | >2022 | 2 4.5x |
| Medivir AB | Medivir AB (publ) researches, develops, and sells pharmaceuticals primarily for the treatment of oncology in Europe, the Nordic region, the United States, and the rest of the world. | Other, Anti- infectives, Small molecule therapeutics | 7 | 2 | NASDAQ OMX Sweden | ✓ | | 1988 | 1996 | 139 | 76 | 4 | 26 | -59% | -59% | 2.6x | 5.9x | 6.1x | 6.3x | 6% | >2022 | 2 0.1x |
| Moberg Pharma AB | Moberg Pharma AB (publ), a pharmaceutical company, develops and sells medical products. | Other, Anti- SWE infectives, Drug delivery | 2 | 2 | NASDAQ OMX Sweden | ✓ | | 2006 | 2011 | 94 | 54 | 10 | 102 | 3% | 3% | 2.9x | 2.3x | 2.7x | 2.7x | 8% | Profitable | - |
| Nuevolution AB | Nuevolution AB (publ), a biopharmaceutical company, focuses on developing drug treatments for oncology and chronic inflammatory diseases. | DNK Small molecules | 2 | - | NASDAQ OMX Sweden | | ✓ | 2001 | 2015 | 27 | 78 | 9 | 70 | -124% | -128% | 5.5x | - | 6.9x | 5.9x | 80% | 2020 | 0 0.7x |
| Oasmia Pharmaceutica I AB | Oasmia Pharmaceutical AB (publ) develops, manufactures, a markets, and sells drugs in the field of human and veterinary oncology primarily in Sweden. | SWE Other, Drug delivery | , 8 | 1 | NASDAQ OMX Sweden | | | 1990 | 2005 | 111 | 69 | 1 | 85 | -34% | -30% | nm | nm | 63.2x | 2.9x | 3% | 2020 | 0 0.1x |
| OncoArendi Therapeutics S.A. | OncoArendi Therapeutics S.A., a biotechnology company, engages in the development and commercialization of drugs for the treatment of inflammatory and cancer diseases in Poland. | POL Other | 3 | - | Warsaw Stock Exchange | | | - | 2018 | 14 | 80 | 2 | 77 | -8% | -9% | nm | - | - | - | 30% | >2022 | 2 4.0x |
| Oncodesign S.A. | Oncodesign Société Anonyme, a biotechnology company, engages in the preclinical evaluation of anti-cancer therapies in France. | FRA Other | 1 | - | Euronext Paris | ✓ | | 1995 | 2014 | 12 | 66 | 12 | 70 | -53% | -15% | 4.8x | 4.2x | 3.5x | 1.7x | 27% | 2019 | 9 2.3x |



Share Price Analysis & Shareholding Structure

| | | | | | | | Share | Price Ana | alysis | | | | | | | Share | holding Str | ucture | | | |
|------------------------------------|----------------|------|------|------|---------|---------|--------------|----------------------|-----------------|---------------------|---------------|-------------------|-----------|--|-----|---|-------------|---------------------------------|--------------|-----------------------------|-------------------------------|
| | | 52 W | leek | 5 | Share F | rice Pe | rforma | nce | | | Conser | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | 1M 3M YTD IPO p | # of .a. Analyst | s Buy Hold Se | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| Destiny Pharma plc | 1.2 | 1.2 | 1.9 | -7% | -10% | -25% | -29% | 12% | | 2 | | 3.3 | 173% | Love, William Guy | 16% | Hargreave Hale Limited, Asset Management Arm | 11% | Rosetta Capital Limited | 7% | 36.7% | - |
| GeNeuro S.A. | 6.2 | 3.9 | 12.9 | 3% | -6% | 9% | -52% | -28% | | 3 | • | 11.5 | 85% | Eclosion SA | 44% | Compagnie Merieux Alliance | 34% | LES LABORATOIRES SERVIER SAS | 9% | 14.9% | 0.17% |
| GenSight Biologics S.A. | 2.7 | 2.6 | 7.7 | -16% | -52% | -57% | -67% | -42% | | 3 | | 8.0 | 201% | Novartis AG | 15% | Versant Venture Management, LLC | 14% | Abingworth LLP | 13% | 52.1% | - |
| Heidelberg Pharma AG | 2.7 | 2.4 | 4.0 | -4% | -16% | -16% | -81% | -13% | [| 3 | | 4.3 | 60% | dievini Hopp BioTech holding GmbH & Co. KG | 52% | Hopp, Dietmar | 20% | UCB SA | * *** | 18.7% | 0.22% |
| Isofol Medical AB | 2.2 | 1.9 | 2.8 | 1% | -8% | -3% | -29% | -24% | | 2 | | 4.1 | 89% | Biofol AB | 11% | Handelsbanken Asset Management | 10% | Danske Capital AS | 7 3% | 74.2% | - |
| Medivir AB | 3.1 | 3.1 | 7.8 | -21% | -10% | -36% | -79% | -7% | | 2 | • | 6.5 | 105% | Nordea Investment Management AB | 7% | Avanza Fonder AB | 73% | Paradigm Capital AG | * *** | 93.2% | 0.40% |
| Moberg Pharma AB | 3.1 | 2.2 | 4.9 | 4% | 18% | 10% | -4% | -1% | .lı | 2 | | 4.2 | 36% | Östersjöstiftelsen, Endowment Arm | 13% | Zimbrine Holding BV | 10% | Armistice Capital LLC | 10% | 71.0% | 0.80% |
| Nuevolution AB | 1.6 | 1.4 | 2.3 | -2% | -6% | -6% | -16% | -6% | | 2 | | 2.6 | 62% | Sunstone Capital A/S | 21% | SEB Venture Capital | 24% | Industrifonden | 20% | 31.4% | 0.16% |
| Oasmia Pharmaceutica I AB | 0.4 | 0.2 | 0.6 | -5% | 3% | 46% | -85% | -14% | | • . | • | - | - | Arwidsson, Per Axel | 13% | Alceco International S.A. | 11% | Avanza Fonder AB | 7% | 74.2% | 0.37% |
| OncoArendi Therapeutics S.A. | 5.8 | 5.6 | 7.5 | -12% | - | -16% | -15% | -5% | Πį. | - | • | - | - | Szumowski Investment SKA | ts | Quercus Towarzystwo Funduszy Inwestycyjnych Spólka Akcyjna | 1 % | Szumowski, Marcin Jan | 70% | 0.0% | - |
| Oncodesign S.A. | 9.7 | 9.3 | 14.1 | -7% | -6% | -15% | 33% | 7% | I. | 3 | | 16.1 | 65% | Etoile Gestion | 71% | AXA Investment Managers S.A. | 71% | Financiere Arbevel | 70% | 49.9% | 0.49% |



| | | General Information | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|------------------------------------|--|------------------------------------|-------------------------|------------------------------|---------------|------------------------|---------|-------|--------------------------|----------------|---------------|----|-------|---------------|--------|---------|--------|--------|--------|-----------------------------|-------|
| | | | Products in / | on | | | Ye | ar of | | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Market | Primary t Exchange | US Listing | Cross- p border IPC |) Found | | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash (| / Expected Profitability | |
| Onxeo S.A. | Onxeo SA, a biotechnology company, develops drugs for the treatment of orphan oncology diseases worldwide. | FRA Other | 4 | Euronext Paris | ✓ | | 1997 | 2005 | 125 | 55 | 14 | 41 | -118% | -32% | 9.2x | 6.6x | 15.6x | 10.5x | 18% | >2022 | 0.2x |
| OSE Immunotherap eutics S.A. | OSE Immunotherapeutics SA, a biotechnology company, focuses on the development of immunotherapies for immune activation and regulation in the fields of immuno-oncology and autoimmune diseases. | FRA Peptides, Vaccines | 5 | Euronext Paris | | | - | 2015 | 21 | 54 | 10 | 46 | -19% | -20% | nm | - | 3.7x | 1.9x | 12% | 2019 | 0.9x |
| PledPharma AB | PledPharma AB, a pharmaceutical company, develops various pharmaceutical products to treat life threatening diseases. | SWE Other, Small molecules | 3 | NASDAQ - OMX Sweden | | | 2006 | 2011 | 68 | 67 | 29 | 38 | -32% | -32% | , - | 43.6x | 32.8x | 7.2x | 98% | >2022 | 3.2x |
| Saniona AB | Saniona AB (publ), a research and development company, engages in the development of drugs for diseases of the central nervous system, autoimmune diseases, metabolic diseases, and treatment of pain in Denmark. | DNK Other, Small molecules | 11 | NASDAQ - OMX Sweden | | ✓ | 2011 | 2014 | 10 | 73 | 2 | 71 | -166% | -192% | 9.1x | 19.2x | 17.9x | 15.8x | 48% | >2022 | 0.5x |
| Santhera Pharmac. Holding AG | Santhera Pharmaceuticals Holding AG, a specialty pharmaceutical company, develops and commercializes medicines for orphan and other diseases with high unmet medical needs in the European countries. | CH Other | 4 | Swiss 1 Stock Exchange | ✓ | | - | 2006 | 163 | 90 | 39 | 85 | -160% | -52% | 4.8x | 4.4x | 3.4x | 2.5x | 41% | 2021 | 0.9x |
| Scancell Holdings plc | Scancell Holdings plc, a biopharmaceutical company, engages in the discovery and development of novel monoclonal antibodies and vaccines for the treatment of cancer based on its ImmunoBody and Moditope platforms in the United Kingdom. | GBR Vaccines | 2 | _ AIM _ London | ✓ | | 2008 | 2008 | 38 | 56 | 6 | 50 | -42% | -52% | , - | - | - | - | 51% | >2022 | 1.3x |
| Targovax A.S.A. | Targovax ASA, a clinical stage immuno-oncology company, engages in the development of targeted immunotherapies for cancer patients. | NOR Peptides, Vaccines | 9 | NASDAQ - OMX Norway | | | - | 2014 | 34 | 59 | 24 | 40 | -27% | -22% | nm | nm | - | 1.5x | 38% | 2019 | 1.9x |
| Tiziana Life Sciences plc | Tiziana Life Sciences Plc, a clinical stage biotechnology company, focuses on the discovery and development of therapeutics to treat diseases in oncology and immunology in the United Kingdom. | GBR Other, Antibodies | 8 | - AIM - London | | | 2013 | 2014 | 8 | 56 | 0 | 56 | - | 490% | , - | - | - | - | 3% | >2022 | 0.0x |
| Xspray Pharma AB | Xspray Pharma AB (publ) engages in developing protein kinase inhibitors for targeted cancer treatments in Sweden. | SWE Other, Drug delivery, Proteins | - | NASDAQ - OMX Sweden | | | 2003 | 2017 | 14 | 73 | 18 | 54 | -4% | -4% | 24.5x | - | - | - | 78% | 2020 | 13.7x |



Share Price Analysis & Shareholding Structure

| | | | | | | | Share | Price An | alysis | | | | | | | Share | holding Str | ucture | | | |
|------------------------------------|----------------|------|------|------|---------|----------|--------------|----------------------|-------------------------|------------------|---------------|-----------------|-----------|--------------------------------------|-----------|--|-------------|--|-------------|-----------------------------|-----------------------------|
| | | 52 V | Veek | ; | Share F | Price Pe | rforma | псе | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | d 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. Free Float |
| Onxeo S.A. | 1.1 | 1.0 | 4.7 | -14% | -19% | 1% | -92% | -18% | I. | 1 | | 1.4 | 29% | Financiére de la Montagne | 13% | Dimensional Fund Advisors L.P. | 71% | LA Banque Postale Asset Management | 0 % | 86.8% | 0.35% |
| OSE Immunotherap eutics S.A. | 3.7 | 3.2 | 5.6 | -11% | 6% | -4% | -66% | -28% | · · · jı | 3 | | 9.1 | 145% | Loria, Emile | 25% | Costantini, Dominique | 13% | MS Medical Synergy S.A. | 5% | 44.6% | 0.10% |
| PledPharma AB | 1.4 | 1.1 | 2.1 | -10% | -3% | -26% | -19% | -3% | -11 | 1 | • | 2.5 | 82% | Persson, Staffan | 21% | Lindell, Peter | 14% | Avanza Fonder AB | 6% | 42.8% | 0.05% |
| Saniona AB | 3.2 | 2.4 | 5.3 | 4% | 23% | 4% | 472% | 51% | | 2 | | 6.4 | 97% | Feldthus, Thomas | 12% | Drejer, Jørgen | 11% | Avanza Fonder AB | 5% | 60.0% | 0.99% |
| Santhera Pharmac. Holding AG | 13.8 | 13.7 | 63.8 | -11% | -4% | -55% | -76% | -11% | - 1 | 3 | • | 27.9 | 102% | Consonance Capital Partners | 9% | Iglu Group AG | 9% | Goldman Sachs Group, Investment Banking and Securities Investments | 7% | 67.5% | 0.57% |
| Scancell Holdings plc | 0.1 | 0.0 | 0.2 | -3% | -7% | 2% | -81% | -15% | | 1 | | 0.6 | 327% | Investec Wealth & Investment Limited | 1% | Hargreaves Lansdown Asset Management Limited | 9% | City Financial Investment Company Limited | 7 3% | 75.7% | 0.18% |
| Targovax A.S.A. | 1.1 | 1.1 | 2.4 | -40% | -25% | -34% | -62% | -21% | | 1 | • | 2.2 | 99% | HealthCap | 23% | Nordea Investment Management AB | 8% | The Norwegian Radium Hospital Research Foundation | 8% | 57.7% | 0.03% |
| Tiziana Life Sciences plc | 0.4 | 0.4 | 2.0 | -44% | -55% | -72% | 37% | 8% | ·III - | 1 | | 5.7 | 1184% | Cerrone, Gabriele Marco Antonio | 51% | Beaufort Asset Clearing Services Limited, Asset Management Arm | | Mayflower Medical Ventures Ltd | 7 4% | 31.9% | 0.03% |
| Xspray Pharma AB | 5.3 | 2.5 | 8.9 | -2% | -9% | -16% | 130% | -20% | | 1 | | 11.6 | 118% | Östersjöstiftelsen, Endowment Arm | 18% | Vasastaden Holding Ab | 10% | Swedbank Robur Fonder AB | 7% | 70.1% | - |



Executive Summary
FCF Overview
Market Overview
Sector Analysis

Therapeutics - Micro

Therapeutics - Small

Therapeutics - Medium Diagnostics Biotechnology - Others

Services

Health Technology

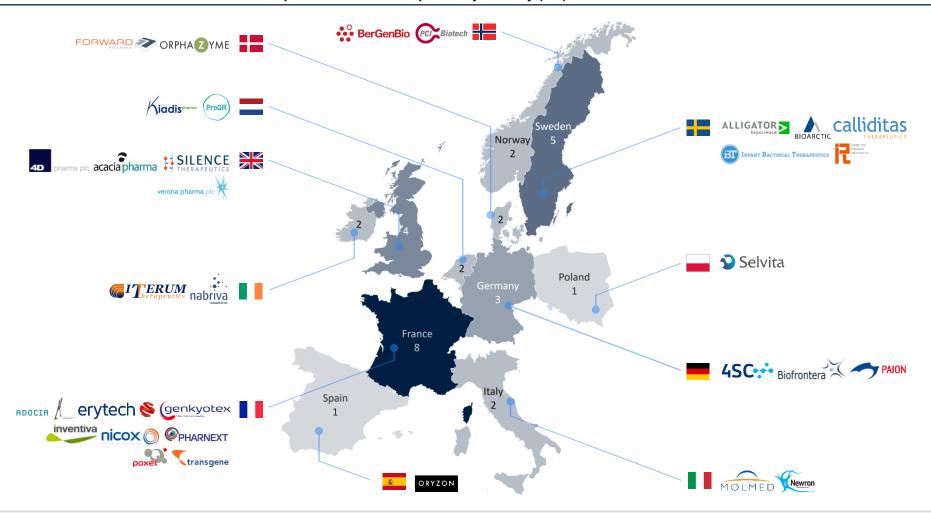
Medical Technology

Supplier & Engineering





Total Number and Distribution of Public Therapeutics - Small* Companies by Country (HQ)



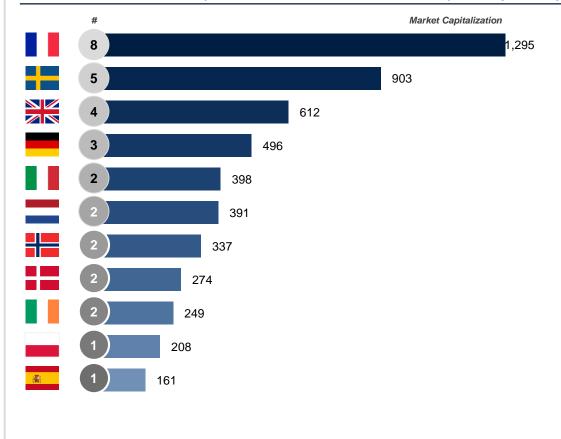


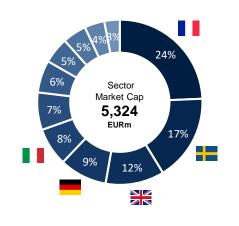
Market Overview

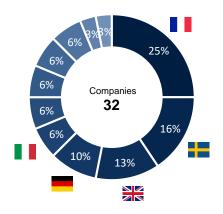
France leads in the Therapeutics – Small subsector in terms of number of public companies (8) and market capitalization (EUR 1.3bn)

Sweden and the United Kingdom rank on 2nd and 3rd place, respectively

Total Number and Market Capitalization of Public Life Science Companies by Country









| | | General Information | | | | | | | | | | | | | | Valu | ation Me | etrics | | | | |
|----------------------------------|---|---------------------------------|--------------------|--------|-------------------------|---------------|---------------------|---------|--------|--------------------------|----------------|---------------|-----|-------|---------------|--------|----------|--------|--------|-----|---------------------------|------|
| | | | Products | in / o | <u>n</u> | | | Ye | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment M | larket | Primary Exchange | US Listing | Cross- border IF | O Found | i. IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | |
| 4D pharma plc | 4D pharma plc engages in the research, development, and production of live biotherapeutic products. | GBR Other | 11 | - | AIM London | | | 2014 | 2014 | 134 | 160 | 13 | 104 | -29% | -28% | - | - | - | - | 15% | >2022 | 0.6x |
| 4SC AG | 4SC AG, a clinical-stage biopharmaceutical company, engages in developing small-molecule drugs that target key indications in cancer with high unmet medical needs. | DEU Small molecules | 3 | - | Deutsche Börse | ✓ | | 1997 | 2005 | 174 | 131 | 41 | 90 | -25% | -24% | 43.8x | 21.6x | 20.0x | 19.4x | 86% | 2021 | 3.8x |
| Acacia Pharma Group plc | Acacia Pharma Group Plc, a pharmaceutical company, focuses on the development and commercialization of hospital products for surgical and cancer patients in the United States and internationally. | GBR Other | 2 | - | Euronext Brussels | | ✓ | 2007 | 2018 | 40 | 177 | 3 | 192 | - | 17% | - | - | - | 71.1x | 86% | 2022 | 0.5x |
| Adocia S.A. | Adocia SA, a clinical-stage biotechnology company, researches and develops formulations of pre-approved therapeutic proteins and peptides for the treatment of diabetes and other metabolic diseases. | FRA Drug delivery, Proteins | 18 | - | Euronext Paris | 1 | | 2005 | 2012 | 57 | 128 | 35 | 101 | -23% | -18% | 3.3x | 2.6x | 5.5x | 1.2x | 65% | 2018 | 4.1x |
| Alligator Bioscience AB | Alligator Bioscience AB (publ) develops antibody-based pharmaceuticals for cancer treatment. | SWE Antibodies, Proteins | s 6 | - | NASDAQ OMX Sweden | ✓ | | 2001 | 2016 | 43 | 222 | 43 | 179 | -17% | -18% | 29.3x | 15.1x | nm | 10.2x | 79% | 2020 | 6.6x |
| BerGenBio A.S.A. | BerGenBio ASA, a clinical stage oncology biotech company, develops medicines to treat cancer. | NOR Antibodies, Small molecules | 11 | - | NASDAQ OMX Norway | | | 2007 | 2017 | 44 | 216 | 34 | 182 | -58% | -58% | - | - | - | - | 96% | >2022 | 1.8x |
| BioArctic AB | BioArctic AB (publ), a research intensive biopharmaceutical company, develops disease modifying treatments and diagnostics for neurodegenerative diseases in Sweden. | SWE Other, Antibodies, Vaccines | 7 | - | NASDAQ OMX Sweden | | | 1992 | 2017 | 73 | 184 | 1,189 | 79 | 5% | 6% | 7.1x | 6.5x | 3.5x | 1.8x | 97% | Profitable | - |
| Biofrontera AG | Biofrontera AG, a biopharmaceutical company, engages in the treatment of dermatological conditions and diseases caused primarily by exposure to sunlight that result in sun damage to the skin. | DEU Small molecule therapeutics | 2 | 1 | Deutsche Börse | ✓ | | 1997 | 2006 | 139 | 231 | 30 | 213 | -73% | -39% | 34.7x | 17.7x | 10.9x | 6.8x | 79% | 2020 | 1.9x |
| Calliditas Therapeutics AB | Calliditas Therapeutics AB (publ) operates as a specialty pharmaceutical company in Sweden. | SWE Other | 1 | - | NASDAQ OMX Sweden | | | 2004 | 2018 | 62 | 149 | 5 | 144 | -454% | -449% | - | - | - | - | 93% | >2022 | 0.6x |
| ERYTECH Pharma S.A. | ERYTECH Pharma S.A., a biopharmaceutical company, develops therapies for severe forms of cancer and orphan diseases. | FRA Other | 6 | - | Euronext Paris | ✓ | | 2004 | 2013 | 271 | 173 | 186 | -10 | -18% | -17% | - | - | - | - | 95% | >2022 | 5.5x |
| Forward Pharma A/S | Forward Pharma A/S operates as a biopharmaceutical company. | DNK Small molecules | 2 | - | NASDAQ | ✓ | ✓ | 2005 | 2014 | 257 | 110 | 91 | 19 | nm | -70% | - | 0.0x | - | - | 99% | Profitable | - |



Share Price Analysis & Shareholding Structure

| | | | | | | | Shar | e Price A | nalysis | | | | | | | | Share | holding Str | ucture | | | |
|----------------------------------|----------------|------|-------|------|---------|----------|--------------|---------------------|---------|--------------|------------------|---------------|-------------------|-----------|---|-----|--|-------------|--|------------|-----------------------------|-----------------------------|
| | | 52 V | leek_ | ; | Share F | Price Pe | erforma | ance | | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualize (p.a.) | | YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. Free Float |
| 4D pharma plc | 2.4 | 1.3 | 5.3 | 63% | 87% | -35% | 101% | 5 17% | | | 1 | | 5.3 | 118% | Woodford Investment Management Limited | 30% | Invesco Ltd. | 14% | Norwood, David Robert | 11% | 62.0% | 0.10% |
| 4SC AG | 4.3 | 3.4 | 8.6 | -14% | -40% | -14% | -79% | 5 -12% | _ | _ | 3 | | 6.7 | 55% | Santo Holding (Deutschland) GmbH | 38% | ATS Beteiligungsverwaltung GmbH | 21% | FCP Anlage AG | 6% | 47.9% | 0.11% |
| Acacia Pharma Group plc | 3.3 | 3.0 | 4.0 | -3% | -2% | -2% | -7% | 5 -1% | | | 1 | | 4.3 | 29% | Gilde Healthcare Partners B.V. | 29% | Lundbeckfond Invest A/S | 21% | Novo Holdings A/S | 12% | 34.5% | - |
| Adocia S.A. | 18.5 | 13.3 | 21.3 | -4% | 36% | 29% | 16% | 5 2% | | lı_ | 4 | | 27.8 | 50% | Soula, Gérard | 13% | Bpifrance Investissement | 11% | KKR & Co. Inc. | 7 % | 66.7% | 0.94% |
| Alligator Bioscience AB | 3.1 | 2.1 | 3.3 | -2% | 30% | 31% | -6% | -4% | | | 2 | | 4.0 | 30% | Banque Internationale a Luxembourg SA, Asset Management Arm | | Johnson & Johnson Innovation - JJDC, Inc. | 8% | Sunstone Capital A/S | 8% | 64.2% | - |
| BerGenBio A.S.A. | 3.9 | 2.0 | 5.8 | -25% | -10% | 88% | 45% | 35% | | li. | 1 | | 6.5 | 66% | Meteva AS | 30% | Investinor AS | 13% | BNPP Asset Management Holding | 6% | 46.3% | - |
| BioArctic AB | 2.1 | 2.0 | 3.1 | -11% | 0% | -21% | -17% | 4% | | II • | 2 | • | 6.6 | 219% | Lannfelt, Lars | 36% | Gellerfors, Pär | 24% | Third Swedish National Pension Fund | 5% | 40.1% | - |
| Biofrontera AG | 5.2 | 3.1 | 7.6 | -9% | -13% | 25% | -65% | 5 -9% | | - | 1 | | 6.9 | 32% | Maruho Co.,Ltd. | 20% | Deutsche Balaton AG | 9% | DELPHI Unternehmensberatung AG | 6% | 60.4% | 0.20% |
| Calliditas Therapeutics AB | 4.5 | 4.3 | 4.5 | - | - | 0% | 4% | 5 2% | | | - | | - | - | Industrifonden | 7 | Investinor AS | 0% | Julander, Bengt | 0 % | 0.0% | - |
| ERYTECH Pharma S.A. | 9.6 | 9.6 | 29.7 | -40% | -43% | -48% | -17% | s -3% | | ľ | 4 | | 32.3 | 235% | BVF Partners LP | 5% | Baker Bros. Advisors LP | 45% | Auriga Partners | 11% | 36.4% | 0.32% |
| Forward Pharma A/S | 2.3 | 1.4 | 25.7 | 2% | 32% | -24% | -86% | 5 -41% | | | - | • | - | - | NB Capital ApS | 53% | BVF Partners LP | 11% | Rosetta Capital Limited | 199 | 10.4% | 0.51% |



| | | General Information | | | | | | | | | | | | | Valua | tion Me | etrics | | | | |
|---------------------------------------|--|--|-------------------------|----------------------------|---------------|---------------------|---------|-------|--------------------------|----------------|---------------|-----|-------|---------------|--------|---------|--------|-------|-----|---------------------------------|-------|
| | | | Products in / o | <u>n</u> | | | Yea | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Market | Primary Exchange | US Listing | Cross- border IP | O Found | . IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY202 | | / Expected (Profitability L | |
| Genkyotex S.A. | Genkyotex S.A., a biopharmaceutical company, develops oral small molecule NOX therapeutics. | FRA Other, Small molecules | 5 - | Euronext Paris | | | 2006 | 2017 | 0 | 128 | 11 | 117 | -110% | -58% | - | - | - | - | 42% | >2022 | 0.4x |
| Infant Bacteria Therapeutics AB | Infant Bacterial Therapeutics AB (publ), a clinical stage pharmaceutical company, develops drugs to treat diseases affecting infants. | SWE Other | 1 - | NASDAQ OMX Sweden | | | 2013 | 2016 | 66 | 163 | 57 | 107 | -6% | -6% | nm | - | - | - | 97% | >2022 | 15.4x |
| Inventiva S.A. | Inventiva S.A., a clinical stage biopharmaceutical company, develops drugs for the treatment of fibrotic diseases, cancers, and orphan diseases. | FRA Other, Small molecules | 6 - | Euronext Paris | | | = | 2017 | 84 | 161 | 59 | 102 | -27% | -32% | 7.1x | - | 40.9x | 40.9x | 79% | >2022 | 3.4x |
| IRLAB Therapeutics AB | IRLAB Therapeutics AB (publ) operates as a drug discovery and development company that provides drugs in the field of neurological and neuropsychiatric disorders. | SWE Small molecules | 6 - | NASDAQ OMX Sweden | | | - | 2017 | 12 | 184 | 6 | 178 | -43% | -43% | nm | nm | - | 22.4x | 40% | 2020 | 1.0x |
| Iterum Therapeutics plc | Iterum Therapeutics plc, a clinical-stage pharmaceutical company, engages in developing anti-infectives for multi-drug resistant pathogens in Ireland and the United States. | IRL Anti-infectives | 3 - | NASDAQ | · 🗸 | ✓ | 2015 | 2018 | 82 | 128 | 31 | 78 | -60% | -60% | - | - | nm | nm | 56% | >2022 | 1.3x |
| Kiadis Pharma N.V. | Kiadis Pharma N.V., a clinical stage biopharmaceutical company, engages in the pharmaceutical development of cell-based immunotherapy products in the field of blood building system diseases. | NLD Cell therapy, Stem cells | 1 - | Euronext Amsterda m | a ✓ | | 1997 | 2015 | 79 | 191 | 30 | 185 | -107% | -41% | - | - | - | 45.8x | 67% | 2020 | 1.8x |
| MolMed S.p.A | MolMed S.p.A., a medical biotechnology company, focuses on the research, development, and clinical validation of anticancer therapies. | ITA Cell therapy, Gene therapy, Proteins | 21 - | Borsa Italania | | | 1996 | 2008 | 173 | 216 | 0 | 199 | -25% | - | 8.7x | - | - | - | - | >2022 | 0.0x |
| Nabriva Therapeutics plc | Nabriva Therapeutics plc, a clinical stage biopharmaceutical company, engages in the research and development of anti- infective agents to treat infections in humans. | IRL Anti-infectives, Small molecules | 6 - | NASDAQ | · 🗸 | ✓ | 2005 | 2017 | 626 | 121 | 73 | 49 | -82% | -80% | 8.0x | 11.0x | 5.3x | 3.6x | 89% | 2022 | 1.2x |
| Newron Pharmac. S.p.A. | Newron Pharmaceuticals S.p.A., a clinical stage biopharmaceutical company, focuses on the research and development, manufacture, and distribution of therapies for the treatment of central and peripheral nervous system. | ITA Other | 6 2 | Swiss Stock Exchange | √ | ✓ | 1998 | 2006 | 169 | 182 | 56 | 122 | -8% | -6% | 18.2x | 8.4x | 14.2x | 5.2x | 77% | 2020 | 10.7x |
| Nicox S.A. | Nicox S.A., an ophthalmic company, researches, develops, and markets therapies that target various ophthalmic conditions in France and internationally. | FRA Other, Drug delivery | , 7 1 | Euronext Paris | ✓ | | 1996 | 1999 | 301 | 238 | 41 | 197 | -3% | -12% | nm | 47.9x | 19.9x | 82.8x | 27% | >2022 | 11.4x |
| Orphazyme A/S | Orphazyme A/S, a biopharmaceutical company, develops therapies for the treatment of orphan protein-misfolding diseases in the Denmark, the United States, and internationally. | DNK Other, Small molecules | 4 - | NASDAC OMX Copenhag | | | 2009 | 2017 | 81 | 164 | 85 | 79 | -20% | -21% | - | - | - | - | 95% | >2022 | 5.0x |



Share Price Analysis & Shareholding Structure

| | | | | | | | Share | Price Ana | alysis | | | | | | | Share | holding Str | ucture | | | |
|--|----------------|------|------|------|---------|---------|--------------|----------------------|-----------------|---------------------|----------------|-------------------|-----------|-----------------------------------|------------|---|-------------|--|-------------|----------------------------|---------------------------------|
| | | 52 W | leek | , | Share P | rice Pe | rforma | nce | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | 1M 3M YTD IPO p | # of .a. Analyst | s Buy Hold Sel | Target I Price | Potential | <u>#1</u> | % | #2 | % | #3 | % | Free float / Shares out | Ø3M Sh. Trad. / . Free Float |
| Genkyotex S.A. | 1.6 | 1.4 | 2.1 | -2% | 4% | -1% | -24% | -18% | | 3 | | 3.9 | 138% | Andera Partners | 25% | Eclosion SA | 18% | Vesalius Biocapital Partners S.à r.l. | 9% | 29.9% | - |
| Infant Bacterial Therapeutics AB | 14.5 | 7.7 | 19.8 | -17% | 30% | 24% | 130% | 44% | | - | | - | - | E. Öhman J:or Fonder AB | 6% | Annwall & Rothschild Investments AB | 1 % | Swedbank Robur Fonder AB | 7 3% | 86.1% | 0.39% |
| Inventiva S.A. | 7.2 | 4.5 | 8.2 | -4% | -9% | 46% | -15% | -11% | | 2 | | 11.5 | 59% | Cren, Frederic | 37% | Broqua, Pierre | 24% | BVF Partners LP | 11% | 16.4% | - |
| IRLAB Therapeutics AB | 22.8 | 10.3 | 27.5 | 24% | 89% | 57% | 259% | 157% | | 1 | | 19.3 | -15% | Fv Group Ab | 9% | Ancoria Insurance Public Ltd., Asset Management Arm | 8% | Sievert Larsson Scholarship Foundation Endowment Arm | 8% | 56.9% | - |
| Iterum Therapeutics plc | 9.1 | 8.4 | 11.1 | -7% | - | -17% | -18% | -7% | • 11 | 4 | | 17.8 | 94% | Canaan Partners | 0 % | Sofinnova Ventures, Inc. | . 7% | Frazier Healthcare Partners | 0 % | 0.0% | - |
| Kiadis Pharma N.V. | 9.5 | 5.1 | 13.9 | -6% | 4% | 20% | -24% | -9% | | 5 | • | 17.9 | 88% | Life Sciences Partners BV | 11% | Lenildis Holding B.V. | 6% | Alta Partners LP | 5% | 81.7% | 0.10% |
| MolMed S.p.A. | 0.5 | 0.4 | 0.6 | 0% | -2% | -1% | -78% | -13% | <u> </u> | | | - | - | Fingruppo Holding S.p.A. | 23% | Airain Servicos De Cconsultadoria e Marketing Sociedade Unipessoal LDA | 5% | H-Equity SARL SICAR | 1 % | 66.9% | 0.48% |
| Nabriva Therapeutics plc | 3.0 | 2.8 | 12.1 | -22% | -27% | -40% | -67% | -66% | | 7 | • | 15.1 | 407% | Wellington Managemen Group LLP | 14% | Vivo Capital, LLC | 11% | OrbiMed Advisors, L.L.C. | 11% | 61.2% | 0.05% |
| Newron Pharmac. S.p.A. | 10.2 | 7.0 | 18.8 | 13% | 45% | 3% | -70% | -10% | | - 4 | • | 26.1 | 155% | Duba AB | 9% | Aviva Investors Global Services Limited | 8% | Gefim S.p.A. | 1 % | 85.9% | 0.28% |
| Nicox S.A. | 8.1 | 7.7 | 13.5 | -3% | -11% | -21% | -90% | -11% | | 2 | • | 18.9 | 135% | HBM Partners Ltd. | | Medical Strategy GmbH, Asset Management Arm | 7 | Bpifrance Participations SA | | 98.3% | 1.35% |
| Orphazyme A/S | 8.2 | 7.7 | 11.0 | 0% | -12% | -20% | -24% | 3% | -41 | 4 | | 15.2 | 85% | Novo Holdings A/S | 19% | Orpha Pooling B.V. | 12% | Sunstone Capital A/S | 9% | 47.6% | - |



| | | General Information | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|--------------------------------|--|--|-------------------------|-----------------------------|---------------|----------------------|--------|------|-----------------------------|----------------|---------------|-----|-------|---------------|---------|---------|--------|--------|-----|---------------------------|--------|
| | | | Products in / c | <u>on</u> | | | Year | of | | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Market | Primary Exchange | US Listing | Cross- border IPC | Found. | | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | |
| Oryzon Genomics S.A. | Oryzon Genomics S.A., a clinical stage biopharmaceutical company, discovers and develops epigenetic therapies to treat oncology and neurodegenerative diseases. | Other, Antibodies, ESP Peptides, Proteins, Small molecules, | 6 | Madrid Stock Exchange | • | | 2000 | 2015 | 18 | 161 | 31 | 152 | -15% | -9% | 30.4x | 32.1x | 21.7x | 24.2x | 52% | >2022 | 5.9x |
| Paion AG | Paion AG, a specialty pharmaceutical company, develops and commercializes drugs for use in out-patient and hospital-based sedation, anesthesia, and critical care services worldwide. | DEU Small molecules | 4 - | Deutsche Börse | 1 | | 2000 | 2005 | 119 | 134 | 0 | 109 | -52% | | - 25.5x | 18.8x | 30.5x | 9.0x | - | >2022 | 0.0x |
| PCI Biotech Holding A.S.A | PCI Biotech Holding ASA, a biopharmaceutical company, focuses on the development and commercialization of novel therapies for the treatment of cancer through its photochemical internalization (PCI) technology platform. | Drug delivery, NOR Nucleic acid drugs, Vaccines | 4 - | NASDAQ OMX Norway | | | 2000 | 2008 | 35 | 121 | 4 | 117 | -167% | -157% | s nm | - | - | - | 81% | >2022 | 0.9x |
| Pharnext S.A. | Pharmext SA, a clinical-stage biopharmaceutical company, develops therapeutics for severe orphan and common neurodegenerative diseases in France. | FRA Other | 6 - | Euronext Paris | | | 2007 | 2016 | 31 | 104 | 12 | 116 | - | -159% | 26.3x | 58.1x | - | - | 65% | >2022 | . 0.6x |
| Poxel S.A. | Poxel SA, a biopharmaceutical company, develops drugs for metabolic diseases with a primary focus on type II diabetes. | FRA Other | 4 - | Euronext Paris | ✓ | | 2009 | 2015 | 51 | 178 | 54 | 125 | -115% | -109% | s nm | 5.7x | 2.9x | 3.0x | 81% | 2020 | 2.4x |
| ProQR Therapeutics N.V. | ProQR Therapeutics N.V., a biopharmaceutical company, engages in the discovery and development of RNA-based therapeutics for the treatment of genetic disorders. | NLD Gene therapy, Vaccines | 5 - | NASDAQ | ✓ | ✓ | 2012 | 2014 | 365 | 200 | 38 | 169 | -149% | -115% | s nm | nm | 74.7x | 42.2x | 90% | >2022 | 0.9x |
| Selvita S.A. | Selvita S.A., a drug discovery company, researches and develops therapies primarily in the area of oncology, and provides integrated drug discovery services worldwide. | POL Small molecules | 6 - | Warsaw Stock Exchange | • | | 2007 | 2011 | 43 | 208 | 38 | 173 | 10% | 2% | 11.5x | 7.3x | 7.8x | 6.0x | 63% | Profitable | - |
| Silence Therapeutics plc | Silence Therapeutics plc focuses on the discovery, development, and delivery of novel RNA therapeutics. | GBR Nucleic acid drugs | 3 - | AIM London | ✓ | | 1994 | 1995 | 143 | 107 | 48 | 59 | -3% | -27% | 65.0x | - | 3.7x | 2.5x | 78% | >2022 | 26.4x |
| Transgene S.A. | Transgene SA, a biotechnology company, designs, develops, and produces therapeutic vaccines and oncolytic viruses for the treatment of cancer and infectious diseases. | Other, Anti- infectives, Cell therapy, Gene therapy, Vaccines | 12 - | Euronext Paris | ✓ | | 1979 | 1998 | 570 | 186 | 2 | 206 | -115% | -33% | 20.8x | 26.6x | 19.5x | 7.7x | 2% | >2022 | 0.1x |
| Verona Pharma plc | Verona Pharma plc, a clinical stage biopharmaceutical company, develops and commercializes therapeutics to treat respiratory diseases. | GBR Other | 5 - | AIM London | 1 | | 2005 | 2006 | 345 | 168 | 33 | 85 | -51% | -47% | | - | - | - | 35% | >2022 | 1.4x |



Share Price Analysis & Shareholding Structure

| | | | | | | | Share | Price An | alysis | | | | | | | Share | holding St | ructure | | | |
|--------------------------------|----------------|------|------|------|---------|----------|---------|----------------------|------------------------|---------------------|-------------|-------------------|-----------|-------------------------------|-----|---|------------|---|------------|-----------------------------|-------------------------------|
| | | 52 W | leek | | Share F | Price Pe | rformar | nce | | | Conser | isus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | d 1M 3M YTD IPO p.a | # of a. Analysts | Buy Hold Se | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| Oryzon Genomics S.A. | 4.8 | 1.8 | 4.9 | 82% | 98% | 84% | 5% | 2% | | 1 | | 15.0 | 211% | Arjol, Carlos Manuel Buesa | 11% | Maes, Tamara | 11% | Arriendos Venferca, S.L. | 6% | 48.2% | 0.31% |
| Paion AG | 2.1 | 2.0 | 3.2 | -7% | -10% | -23% | -74% | -9% | | 2 | | 3.9 | 84% | Cosmo Pharmaceuticals N.V. | 9% | Teachers Insurance and Annuity Association of America | 1 % | FPS Vermögensverwaltung | 71% | 89.8% | 0.53% |
| PCI Biotech Holding A.S.A. | 4.8 | 1.9 | 6.8 | -14% | 4% | 13% | 93% | 7% | | - | | - | - | Erik Must AS | 10% | Myrlid As | 6% | MP Pensjon | 6% | 60.2% | 0.11% |
| Pharnext S.A. | 8.7 | 6.6 | 10.3 | 19% | 17% | 9% | -20% | -10% | II. | l ¹ | | 16.5 | 90% | Financiere Arbevel | 5% | Norges Bank Investment Management | 72% | Gestys | 7 % | 0.0% | - |
| Poxel S.A. | 7.2 | 5.2 | 8.2 | -1% | 19% | 10% | 9% | 2% | _ | 3 | • | 13.0 | 80% | Bpifrance Investissement | 17% | Andera Partners | 14% | Kuhn, Thomas | 6% | 52.5% | 1.05% |
| ProQR Therapeutics N.V. | 6.3 | 2.4 | 6.4 | 28% | 151% | 133% | -38% | -12% | | 3 | | 12.7 | 103% | Sofinnova Partners | 11% | Jennison Associates LLC | 9% | JDG B.V | 9% | 59.5% | 0.09% |
| Selvita S.A. | 13.0 | 8.9 | 14.9 | 1% | -10% | -6% | 838% | 37% | | 2 | | 19.4 | 49% | Przewiezlikowski, Pawel | 36% | Wesolowski, Tadeusz | 8% | Nationale-Nederlanden Powszechne Towarzystwo Emerytalne S.A. | 7% | 50.2% | 0.06% |
| Silence Therapeutics plc | 1.5 | 1.1 | 2.9 | -7% | -26% | -30% | -95% | -12% | | 1 | | 3.1 | 106% | Keith, Robert | 18% | Invesco Ltd. | 12% | Vertu Motors plc | 8% | 66.7% | 0.05% |
| Transgene S.A. | 3.0 | 2.4 | 3.8 | 3% | 0% | 5% | -78% | -7% | | 5 | • | 4.1 | 37% | Merieux, Alain | 57% | Groupe Industriel Marcel Dassault S.A. | 5% | Meeschaert Asset Management | 7 % | 38.0% | 0.24% |
| Verona Pharma plc | 1.6 | 1.1 | 2.3 | -9% | -24% | 36% | 2596% | 32% | | 2 | | 3.4 | 112% | New Enterprise Associates | 50% | OrbiMed Advisors, L.L.C. | 15% | venBio LLC | 13% | 0.0% | - |



Executive Summary
FCF Overview
Market Overview
Sector Analysis

Therapeutics - Micro Therapeutics - Small

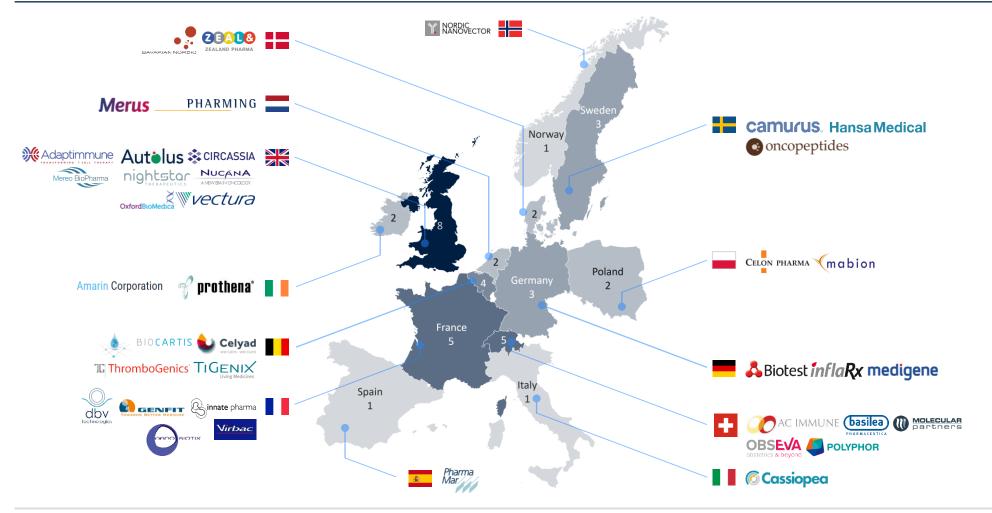
Therapeutics - Medium

Diagnostics
Biotechnology - Others
Services
Health Technology
Medical Technology
Supplier & Engineering





Total Number and Distribution of Public Therapeutics – Medium* Companies by Country (HQ)





Therapeutics – Medium*

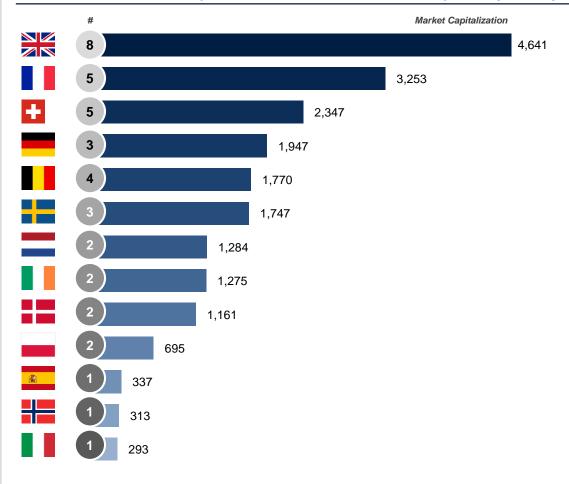
Market Overview

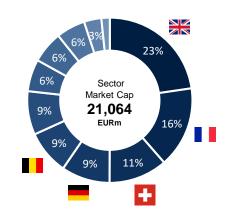
The United Kingdom features with 8 public Therapeutics – Medium companies the highest total market capitalization (EUR 4.6bn)

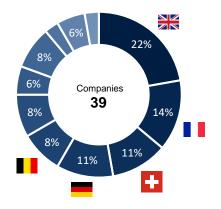
France with 5 public Therapeutic – Medium companies, ranks on 2nd place, followed by Switzerland (5)

Germany finds itself on 4th place with an aggregated market capitalization of EUR 1.9bn

Total Number and Market Capitalization of Public Life Science Companies by Country









Therapeutics – Medium

| | | General Information | | | | | | | | | | | | | Valu | ation Me | etrics | | | | |
|------------------------------------|---|---|------------------------|--------------------------------|---------------|--------------------|---------|--------|--------------------------|----------------|---------------|-------|------|---------------|--------|----------|--------|--------|--------|---------------------------|-------|
| | | | Products in / | on | | | Ye | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Marke | Primary t Exchange | US Listing | Cross- border I | O Found | I. IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash / | Expected Profitability | |
| AC Immune S.A. | AC Immune SA, a clinical stage biopharmaceutical company, discovers, designs, and develops therapeutic and diagnostic products for prevention, diagnosis, and treatment of neurodegenerative diseases associated with protein misfolding. | Other, Antibodies, Vaccines, Molecular diagnostics | 11 | - NASDAC | 1 🗸 | ✓ | 2003 | 2016 | 413 | 459 | 93 | 366 | -27% | -23% | 16.9x | 20.5x | nm | 23.4x | 91% | >2022 | 4.1x |
| Adaptimmune Therapeutics plc | Adaptimmune Therapeutics plc, a clinical-stage biopharmaceutical company, focuses on the provision of cancer immunotherapy products based on its proprietary Specific Peptide Enhanced Affinity Receptor (SPEAR) T-cell platform. | GBR Other, Cell therapy | / 12 | - NASDAC | ı 🗸 | ✓ | 2014 | 2015 | 1545 | 958 | 43 | 826 | -36% | -45% | 61.4x | 24.9x | 19.5x | 43.9x | 22% | >2022 | 0.7x |
| Amarin Corporation plo | Amarin Corporation plc, a biopharmaceutical company, focuses on the development and commercialization of therapeutics for the treatment of cardiovascular diseases in the United States. | IRL Other | 2 | 2 NASDAC | · 🗸 | ✓ | 1989 | 1993 | 1687 | 778 | 105 | 769 | - | -51% | 6.2x | 5.1x | 3.8x | 2.4x | 60% | 2019 | 1.9x |
| Autolus Therapeutics plc | Autolus Therapeutics PIc, a clinical-stage biopharmaceutical company, is developing next-generation programmed T cell therapies. | GBR Other, Cell therapy Gene therapy | ·/-, - | - NASDAC | ı 🗸 | ✓ | 2018 | 2018 | 129 | 891 | 0 | 891 | - | - | | nm | - | nm | - | >2022 | - |
| Basilea Pharmaceutica AG | Basilea Pharmaceutica AG, together with its subsidiaries, operates as an integrated biopharmaceutical company. | Other, Anti- CH infectives, Small molecules | 9 | Swiss 2 Stock Exchang | √ | | 2000 | 2004 | 664 | 619 | 172 | 564 | - | -5% | 9.2x | 7.2x | 5.8x | 5.0x | 57% | 2020 | 10.4x |
| Bavarian Nordic A/S | Bavarian Nordic A/S, a biotechnology company, develops, manufactures, and commercializes a portfolio of novel vaccines for the prevention and treatment of life-threatening infectious diseases and cancer. | DNK Anti-infectives, Vaccines | 13 | NASDAC OMX Copenha en | 1 | | 1994 | 1998 | 482 | 815 | 20 | 556 | 0% | 7% | 4.1x | 3.1x | 7.2x | 4.3x | 5% | Profitable | - |
| Biocartis Group N.V. | Biocartis Group NV, a molecular diagnostics company, provides diagnostic solutions enhancing clinical practice for the benefit of patients, clinicians, payers, and healthcare industry, with a focus on oncology. | BEL Molecular diagnostics | - | 5 Euronext Brussels | | | 2007 | 2015 | 180 | 628 | 113 | 551 | -32% | -26% | 40.0x | 29.3x | 16.5x | 9.5x | 62% | 2021 | 2.7x |
| Biotest AG | Biotest Aktiengesellschaft develops, manufactures, and sells biological and biotechnological pharmaceutical products in Germany and internationally. | Other, Antibodies, DEU Anti-infectives, Proteins | 9 | Deutsche Börse | · 🗸 | | 1946 | 1992 | 95 | 954 | 43 | 1,254 | 14% | -1% | 3.1x | 2.3x | 3.2x | 3.0x | 4% | 2018 | 12.2x |
| Camurus AB | Camurus AB (publ) operates as a research based pharmaceutical company in Sweden, North America, and internationally. | Drug delivery, SWE Peptides, Proteins Small molecules | , 13 | NASDAC 1 OMX Sweden | 1 ✓ | | 1991 | 2015 | 69 | 339 | 19 | 320 | -54% | -68% | 26.9x | 48.7x | 36.9x | 6.9x | 41% | 2019 | 1.0x |
| Cassiopea S.p.A. | Cassiopea S.p.A., a clinical-stage specialty pharmaceutical company, focuses on developing and commercializing medical dermatology products worldwide. | ITA Other, Small molecules | 4 | Swiss - Stock Exchang | 9 | ✓ | 2013 | 2015 | 156 | 293 | 18 | 276 | -52% | -41% | 46.9x | - | nm | 18.8x | 62% | 2022 | 1.3x |
| Celon Pharma S.A. | Celon Pharma S.A., an integrated pharmaceutical company, researches, manufactures, and sells drugs to treat cancers, neurological diseases, diabetes, and other metabolic disorders. | Other, Generics, Nucleic acid drugs Small molecule therapeutics | ·, _ | Warsaw 5 Stock Exchang | е | | - | 2016 | 57 | 337 | 46 | 291 | 6% | 6% | 10.0x | 11.1x | - | - | 36% | Profitable | - |



| | | | | | | | Share | Price Ana | llysis | | | | | | | Share | holding Str | ructure | | | |
|------------------------------------|----------------|------|------|------|---------|----------|--------|----------------------|-------------------|--------------------|--------------|-------------------|-----------|--|------------|--|-------------|--|-------------|-----------------------------|-------------------------------|
| | | 52 V | Veek | 5 | Share F | Price Pe | rforma | nce | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | 1M 3M YTD IPO p.a | # of . Analysts | Buy Hold Sel | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| AC Immune S.A. | 8.0 | 5.2 | 11.9 | -11% | -5% | -25% | -18% | -11% | · II. | 2 | • | 18.3 | 129% | dievini Hopp BioTech holding GmbH & Co. KG | 31% | Varuma AG | 20% | FMR LLC | 10% | 40.2% | - |
| Adaptimmune Therapeutics plc | 10.2 | 3.7 | 12.5 | -10% | 12% | 83% | -32% | -11% | | 6 | | 13.9 | 36% | New Enterprise Associates | 14% | Matrix Capital Management Company, LLC | 15% | Capital Research and Management Company | 7% | 53.0% | 0.29% |
| Amarin Corporation plc | 2.6 | 2.3 | 3.9 | -7% | 8% | -21% | -99% | -18% | | 5 | ♦ | 6.5 | 146% | Baker Bros. Advisors LP | 8% | Consonance Capital Management LP | 6% | OppenheimerFunds, Inc. | 7 3% | 85.0% | 0.44% |
| Autolus Therapeutics plc | 23.0 | 20.6 | 25.7 | - | - | 7% | 57% | 24% | _I. | - | | - | - | Syncona Limited | (7% | Woodford Investment Management Limited | 19% | Arix Bioscience plc | 7% | 0.0% | - |
| Basilea Pharmaceutica AG | 56.9 | 55.0 | 75.1 | -7% | 1% | -12% | -10% | -1% | • - | 5 | | 79.2 | 39% | Credit Suisse, Investment Banking and Securities Investments | 1 06% | Black Creek Investment Management Inc. | 5% | Credit Suisse Asset Management (Switzerland) | 7 4% | 99.9% | 0.74% |
| Bavarian Nordic A/S | 25.3 | 21.3 | 59.6 | -4% | 0% | -16% | 38% | 2% | | 7 | | 39.4 | 56% | The ATP Group | 7% | Johnson & Johnson Innovation - JJDC, Inc. | 6% | OppenheimerFunds, Inc. | 7 2% | 93.9% | 0.88% |
| Biocartis Group N.V. | 12.2 | 9.5 | 15.0 | -3% | 0% | 3% | 6% | 2% | | 4 | • | 17.4 | 42% | Johnson & Johnson Innovation - JJDC, Inc. | 12% | Debiopharm Innovation Fund SA | 8% | RMM S.A. | 8% | 63.3% | 0.21% |
| Biotest AG | 23.4 | 18.1 | 27.7 | -3% | -11% | 18% | 588% | 7% | | 3 | | 22.3 | -5% | Creat Group Company Limited | 45% | J O Hambro Capital Management Limited | 7% | BNY Mellon Service Kapitalanlage- Gesellschaft mbH | 6 % | 54.5% | 0.44% |
| Camurus AB | 9.1 | 8.7 | 14.1 | -12% | -21% | -34% | 48% | 16% | | 2 | → | 10.7 | 18% | Sandberg, Per | 54% | Max Mitteregger Kapitalförvaltning | 5% | Tiberg, Fredrik | 7 4% | 39.0% | 0.19% |
| Cassiopea S.p.A. | 29.3 | 27.2 | 38.0 | -5% | -12% | -1% | -10% | -3% | 11. | 3 | | 50.7 | 73% | Cassiopea SA | 8% | UBS Asset Management | 6% | Heinrich Herz AG | 1 4% | 88.4% | 0.03% |
| Celon Pharma S.A. | 7.5 | 6.4 | 8.8 | 4% | 7% | -13% | 97% | 53% | | 1 | | 8.1 | 9% | Wieczorek, Maciej | 67% | Generali Powszechne Towarzystwo Emerytalne S A | 7% | Investors Towarzystwo Funduszy Inwestycyjnych S.A. | 7 3% | 33.3% | - |



| | | General Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|---------------------------------|---|---|---------------------|--------|-----------------------------|---------------|---------------------|---------|-------|--------------------------|----------------|-----------------|-----|--------------|---------------|--------------|---------|--------|--------|-----|---------------------------------|------|
| | | | Products i | n / on | <u> </u> | | | Yea | ar of | | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Ma | ırket | Primary Exchange | US Listing | Cross- border IP | O Found | | Capital Raised since IPO | Market Cap. | t Cash (LFY) | EV | ROE (LTM) | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | / Expected (Profitability L | |
| Celyad S.A. | Celyad SA, a clinical-stage biopharmaceutical company, focuses on the development of CAR-T cell-based therapies. | Cell therapy, BEL Proteins, Stem cells | 7 | 1 | Euronext Brussels | ✓ | | 2004 | 2013 | 338 | 346 | 23 | 313 | -119% | -38% | 36.8x | 63.8x | nm | 46.0x | 30% | >2022 | 0.4x |
| Circassia Pharmac. plc | Circassia Pharmaceuticals plc, a specialty biopharmaceutical company, focuses on the development and commercialization of products for the treatment of asthma and chronic obstructive pulmonary disease (COPD). | Peptides, Small GBR molecules, Vaccines | 6 | 2 | London Stock Exchange | · · | | 2006 | 2014 | 625 | 317 | 50 | 250 | -44% | -11% | 9.3x | 4.8x | 3.7x | 2.5x | 11% | 2020 | 0.4x |
| DBV Technologies S.A. | DBV Technologies S.A., a clinical-stage biopharmaceutical company, engages in the research and development of epicutaneous immunotherapy products. | FRA Other, Drug delivery, Proteins | 7 | - | Euronext Paris | ✓ | | 2002 | 2012 | 655 | 995 | 138 | 861 | -114% | -102% | nm | 56.9x | 57.6x | 16.0x | 78% | 2021 | 0.9x |
| Genfit S.A. | Genfit SA, a biopharmaceutical company, develops therapeutic and diagnostic solutions to address high unmet patient needs in metabolic and inflammatory diseases, with a particular focus on the liver worldwide. | FRA Small molecules | 1 | - | Euronext Paris | ✓ | | 1999 | 2006 | 294 | 733 | 274 | 623 | -56% | -21% | 93.6x | 80.5x | 86.9x | 56.5x | 93% | 2021 | 4.7x |
| Hansa Medical AB | Hansa Medical AB (publ), a biopharmaceutical company, focuses on developing novel immunomodulatory enzymes for transplantation and autoimmune diseases. | SWE Antibodies | 7 | - | NASDAQ OMX Sweden | ✓ | | 2001 | 2007 | 94 | 737 | 10 | 681 | -30% | -30% | nm | nm | nm | 13.2x | 15% | 2022 | 0.5x |
| InflaRx N.V. | InflaRx N.V., a clinical-stage biopharmaceutical company, focuses on discovering and developing inhibitors using C5a technology primarily in the United States and Europe. | DEU Antibodies | 4 | - | NASDAQ | ✓ | ✓ | 2007 | 2017 | 223 | 709 | 115 | 594 | -27% | -22% | - | nm | nm | nm | 99% | >2022 | 4.8x |
| Innate Pharma S.A. | Innate Pharma S.A., a clinical-stage biotechnology company, discovers and develops therapeutic antibodies for the treatment of cancer in France and internationally. | FRA Antibodies | 17 | - | Euronext Paris | ✓ | | 1999 | 2006 | 120 | 269 | 99 | 159 | -56% | -22% | 2.4x | 2.8x | 2.7x | 1.4x | 39% | 2019 | 2.1x |
| Mabion S.A. | Mabion S.A., a biotechnology company, researches and develops biotechnology and biosimilar drugs to treat cancer, autoimmune, and metabolic diseases in Poland. | POL Antibodies | 1 | - | Warsaw Stock Exchange | • | | 2007 | 2010 | 15 | 358 | 41 | 378 | - | 118% | - | - | 8.7x | 13.7x | 66% | 2018 | 3.0x |
| Medigene AG | Medigene AG, a biotechnology company, develops immunotherapy platforms to treat a range of cancers in various stages. | DEU Cell therapy, Gene therapy, Vaccines | 4 | 1 | Deutsche Börse | ✓ | | 1994 | 2000 | 131 | 284 | 27 | 236 | -16% | -15% | 32.0x | 23.6x | 23.2x | 16.8x | 25% | >2022 | 2.0x |
| Mereo BioPharma Group plc | Mereo BioPharma Group plc, a specialty biopharmaceutical company, acquires, develops, and commercializes therapeutics for the treatment of rare and specialty diseases. | GBR Other | 4 | - | AIM London | | | 2015 | 2016 | 97 | 251 | 56 | 215 | -62% | -52% | - | - | - | - | 52% | >2022 | 1.3x |
| Merus N.V. | Merus N.V., a clinical-stage immuno-oncology company, engages in developing bispecific antibody therapeutics. | NLD Antibodies | 4 | | NASDAQ | ✓ | ✓ | 2003 | 2016 | 448 | 441 | 150 | 258 | -153% | -24% | 94.8x | 21.9x | 18.5x | 11.5x | 76% | >2022 | 2.0x |



| | | | | | | | Share | Price Ana | alysis | | | | | | | | Share | holding Str | ucture | | | |
|---------------------------------|----------------|------|-------|------|---------|---------|---------|----------------------|--------------|--------|------------------|--------------|-------------------|-----------|---|------------|--|-------------|--|-------------|---------------------------------|-----------------------------|
| | | 52 V | leek_ | S | Share P | rice Pe | rforman | ce | | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | 1M 3M YTD IP | O p.a. | # of Analysts | Buy Hold Sel | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / S Shares out. I | Ø3M Sh. Trad. Free Float |
| Celyad S.A. | 25.4 | 22.3 | 56.5 | -3% | -10% | -26% | 53% | 9% | | l_ | 4 | | 50.3 | 98% | Goblet, Serge | 24% | Victory Capital Management Inc. | 7% | Citigroup Inc.,Banking and Securities Investments | 1 % | 83.4% | 0.76% |
| Circassia Pharmac. plc | 1.0 | 0.9 | 1.3 | -9% | -2% | -19% | -74% | -27% | | | 6 | | 1.3 | 37% | Invesco Ltd. | 27% | Woodford Investment Management Limited | 22% | Fresenius SE & Co. KGaA | 14% | 75.4% | 0.72% |
| DBV Technologies S.A. | 33.2 | 32.5 | 86.6 | -14% | -14% | -21% | 274% | 23% | | | 6 | | 76.9 | 132% | Deerfield Management Company, L.P. | 20% | Bpifrance Participations SA | 5% | Perceptive Advisors LLC | 8% | 38.1% | 1.78% |
| Genfit S.A. | 23.5 | 20.1 | 30.6 | -2% | 0% | -2% | 162% | 9% | | | 8 | • | 67.6 | 187% | Biotech Avenir SAS | 6% | Heights Capital Management, Inc. | 7 % | The Vanguard Group, Inc. | 7 2% | 93.9% | 0.93% |
| Hansa Medical AB | 19.3 | 15.1 | 27.7 | -14% | -16% | -24% | 2289% | 34% | | | 5 | | 33.1 | 71% | nxt2b | 25% | Olausson, Thomas | 7 % | Handelsbanken Asset Management | 1 4% | 65.4% | 0.52% |
| InflaRx N.V. | 27.6 | 12.4 | 36.7 | -16% | 18% | 58% | 114% | -11% | | | 6 | | 38.3 | 39% | Staidson (Beijing) BioPharmaceuticals Co., Ltd. | 0 % | RA Capital Management, LLC | 7% | Bain Capital, LP | 8% | 44.3% | - |
| Innate Pharma S.A. | 4.7 | 4.3 | 11.4 | -15% | -19% | -2% | 4% | 0% | II -' | _ | 8 | | 10.9 | 134% | Novo Nordisk Biotech Fund | 15% | Bpifrance Participations SA | 8% | Wellington Management Group LLP | t 6% | 73.8% | 1.03% |
| Mabion S.A. | 26.1 | 20.1 | 31.8 | 13% | 17% | -3% | 608% | 28% | | | 2 | • | 36.7 | 41% | Twiti Investments Limited | 5% | Glatton Sp. z o.o. | 5% | Generali Powszechne Towarzystwo Emerytalne S A | 12% | 67.5% | 0.05% |
| Medigene AG | 11.6 | 8.5 | 19.4 | -17% | -20% | -9% | -95% | -15% | | | 3 | | 19.3 | 67% | TONGYANG Networks Co., Ltd. | 0% | Aviva Investors Global Services Limited | 5% | QVT Financial LP | 10% | 83.0% | 0.31% |
| Mereo BioPharma Group plc | 3.5 | 3.4 | 4.0 | -2% | -1% | -3% | 25% | 11% | | | 1 | | 8.2 | 131% | Woodford Investment Management Limited | 42% | Invesco Ltd. | 27% | Novartis AG | 19% | 75.0% | 0.01% |
| Merus N.V. | 19.5 | 11.4 | 19.7 | 22% | 30% | 21% | 120% | 44% | | | 4 | | 20.4 | 4% | BVF Partners LP | 12% | Incyte Corporation | 16% | Sofinnova Ventures, Inc. | . 10% | 52.3% | 0.30% |



| | | General Information | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|----------------------------------|---|--|-----------------------|------------------------------|---------------|-----------------------|---------|--------|--------------------------|----------------|---------------|-----|-------|---------------|--------|---------|--------|--------|-----|-----------------------------|------|
| | | | Products in | on_ | | | Yea | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Mark | Primary et Exchange | US Listing | Cross- j border IF | O Found | I. IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | / Expected Profitability | |
| Molecular Partners AG | Molecular Partners AG, a clinical-stage biopharmaceutical company, focuses on the discovery, development, and commercialization of various biopharmaceutical products. | CH Antibodies, Proteins | s 9 | Swiss - Stock Exchang | √ | | 2004 | 2014 | 209 | 419 | 112 | 299 | -22% | -20% | 13.9x | 28.4x | 11.9x | 9.0x | 91% | 2020 | 5.2x |
| Nanobiotix S.A. | Nanobiotix SA, a late stage clinical company, develops and sells nanomedicine for the treatment of cancer. | FRA Other | 8 | Euronexi Paris | İ | | 2003 | 2012 | 124 | 271 | 47 | 229 | -60% | -53% | 42.2x | 30.5x | 30.8x | 15.6x | 82% | >2022 | 1.8x |
| Nightstar Therapeutics plc | Nightstar Therapeutics plc, a clinical-stage gene therapy company, focuses on developing and commercializing novel one-time treatments for patients suffering from rare inherited retinal diseases in the United Kingdom. | GBR Gene therapy | 4 | - NASDAC | Q 🗸 | ✓ | 2013 | 2017 | 89 | 396 | 99 | 297 | -34% | -28% | - | - | - | - | 95% | 2022 | 4.0x |
| Nordic Nanovector A.S.A. | Nordic Nanovector ASA, a biopharmaceutical company, develops therapeutics for haematological cancers. | NOR Other, Antibodies | 4 | NASDAC - OMX Norway | Q | | 2009 | 2014 | 120 | 313 | 66 | 246 | -55% | -56% | nm | nm | nm | nm | 96% | 2022 | 2.2x |
| NuCana plc | NuCana plc, a clinical-stage biopharmaceutical company, engages in the development of products for the treatment of cancer. | GBR Nucleic acid drugs, Small molecules | 10 | - NASDAC | Q 🗸 | ✓ | 1997 | 2017 | 215 | 510 | 93 | 417 | -32% | -29% | - | - | - | - | 90% | 2021 | 3.6x |
| ObsEva S.A. | ObsEva SA, a clinical-stage biopharmaceutical company, focuses on the development and commercialization of novel therapeutics for women suffering from reproductive health and pregnancy disorders. | CH Other | 4 | - NASDAC | Q 🗸 | ✓ | 2012 | 2017 | 482 | 555 | 77 | 478 | -68% | -66% | nm | nm | nm | nm | 79% | >2022 | 1.4x |
| Oncopeptides AB | Oncopeptides AB (publ), a clinical development pharmaceutical company, develops anti-cancer drugs. | SWE Peptides | 1 | NASDAC - OMX Sweden | Q | | 2000 | 2017 | 100 | 672 | 54 | 617 | -63% | -62% | - | - | - | 85.4x | 88% | >2022 | 2.2x |
| Oxford BioMedica plc | Oxford BioMedica plc, a biopharmaceutical company, engages in the research, development, and bioprocessing of lentiviral vector and cell therapy products for the treatment of various cancers, Parkinson's and central nervous system disorders. | GBR Cell therapy, Gene therapy, Vaccines | 15 | London 1 Stock Exchange | √ | | 1995 | 1996 | 206 | 733 | 16 | 758 | -147% | -18% | 23.3x | 18.8x | 9.1x | 9.0x | 22% | 2018 | 1.6x |
| Pharma Mar, S.A. | Pharma Mar, S.A., a biopharmaceutical company, engages in the discovery and development of marine-derived anticancer drugs in Spain and internationally. | ESP Peptides | 10 | Madrid 2 Stock Exchang | √ | | 1986 | 2015 | 0 | 337 | 16 | 411 | -118% | -19% | 2.3x | 2.4x | 2.4x | 2.4x | 9% | 2019 | 0.6x |
| Pharming Group N.V. | Pharming Group N.V., a specialty pharmaceutical company, develops and produces human therapeutic proteins for the treatment of rare diseases and unmet medical needs. | NLD Proteins | - | Euronext 2 Amsterd m | | | - | 1999 | 92 | 843 | 58 | 863 | -224% | 24% | 54.4x | 9.8x | 6.4x | 4.7x | 34% | 2018 | 0.7x |
| Polyphor AG | Polyphor Ltd., a clinical stage biopharmaceutical company, focuses on developing macrocycle drugs that address antibiotic resistance and enhance therapy outcomes in cancer. | CH Other, Anti- infectives | 3 | Swiss - Stock Exchange | e | | 1996 | 2018 | 131 | 294 | 21 | 277 | -226% | -114% | 34.4x | - | 36.1x | 22.4x | 61% | 2022 | 0.6x |



| | | | | | | | Share | Price Ana | alysis | | | | | | | Share | holding Str | ucture | | | |
|----------------------------------|----------------|------|------|------|---------|----------|--------|----------------------|--------------------|------------------|--------------|-------------------|-----------|---|----------|--|-------------|--|-------------|-----------------------------|-------------------------------|
| | | 52 V | Veek | 8 | Share P | Price Pe | rforma | nce | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sel | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| Molecular Partners AG | 19.8 | 17.9 | 25.6 | -4% | -11% | -12% | 7% | 2% | ·III'- | 3 | | 33.8 | 71% | Hansjoerg Wyss, Jackson | 10% | Index Ventures | 8% | EW Healthcare Partners | 8% | 48.8% | 0.10% |
| Nanobiotix S.A. | 13.8 | 8.3 | 20.9 | 15% | 9% | -7% | 130% | 16% | | 5 | | 29.0 | 110% | Hydraulique PB S.A. | 7% | J.P. Morgan Asset Management, Inc. | 1 % | Levy, Laurent | 7 3% | 89.6% | 0.56% |
| Nightstar Therapeutics plc | 13.7 | 8.6 | 21.4 | 14% | 18% | 25% | 15% | -4% | | 6 | • | 24.4 | 78% | Syncona Limited | 42% | New Enterprise Associates | 21% | Wellington Managemen Group LLP | t 12% | 81.2% | - |
| Nordic Nanovector A.S.A. | 6.4 | 3.9 | 10.0 | 19% | 24% | -22% | 92% | 17% | <u>.</u> l. | 2 | | 12.4 | 94% | HealthCap | 11% | Folketrygdfondet | 6% | Om Holding As | 1 4% | 75.1% | 0.41% |
| NuCana plc | 16.3 | 8.0 | 27.4 | -30% | 6% | 93% | 28% | -6% | | 3 | ◆ | 27.7 | 70% | Sofinnova Ventures, Inc. | . 28% | Sofinnova Partners | 26% | Capital Research and Management Company | 10% | 23.3% | - |
| ObsEva S.A. | 13.0 | 5.3 | 17.4 | 16% | 18% | 60% | -7% | -5% | | 4 | | 25.9 | 100% | Sofinnova Ventures, Inc. | . 13% | New Enterprise Associates | 13% | Sofinnova Partners | 12% | 26.8% | - |
| Oncopeptides AB | 15.3 | 5.2 | 16.1 | 29% | 99% | 89% | 216% | 132% | Iı | 3 | • | 21.0 | 37% | Industrifonden | 27% | HealthCap | 26% | Max Mitteregger Kapitalförvaltning | 6% | 40.1% | - |
| Oxford BioMedica plc | 11.2 | 4.1 | 12.0 | 48% | 77% | 124% | 1153% | 12% | | 3 | | 13.4 | 21% | Vulpes Investment Management Private Ltd | 18% | M&G Investment Management Limited | 17% | Aviva Investors Global Services Limited | 6% | 75.9% | 0.13% |
| Pharma Mar, S.A. | 1.5 | 1.4 | 4.0 | 6% | -8% | -39% | -61% | -30% | 11- | 3 | | 2.5 | 61% | Fernández Sousa-Faro, José María | 6% | Rosp Corunna Participaciones Empresariales, S.L. | 5% | Andrade Detrell, Montserrat | 5% | 79.3% | 0.30% |
| Pharming Group N.V. | 1.4 | 0.3 | 1.6 | 1% | 18% | 24% | -99% | -20% | | 4 | | 2.2 | 59% | FMR LLC | 71% | Polar Capital Holdings plc | 71% | Hageman, Geja | 2% | 96.6% | 0.26% |
| Polyphor AG | 27.3 | 24.9 | 34.5 | -4% | - | -15% | -15% | -6% | . 11. | 3 | • | 50.1 | 84% | Ingro Finanz AG | 1 | Varuma AG | 7 % | BioMedPartners AG | O % | 0.0% | - |



| | | Gene | ral Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|-----------------------------|---|------|--|------------------|----------|---------------------------------|---------------|-----------------------|--------|--------|--------------------------|----------------|-----------------|-------|--------------|---------------|--------|---------|--------|--------|--------|------------|----------------------|
| | | | | Produ | cts in / | on_ | | | Υ | ear of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ | Subsector | Devel- opment | Market | Primary Exchange | US Listing | Cross- p border II | O Four | d. IPO | Capital Raised since IPO | Market Cap. | t Cash (LFY) | EV | ROE (LTM) | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash / | | Cash / Loss (LFY) |
| Prothena Corporation plo | Prothena Corporation plc, a late-stage clinical biotechnology company, focuses on the discovery, development, and commercialization of novel immunotherapies for the treatment of diseases in the neuroscience and orphan categories. | IRL | Other, Antibodies, Proteins | 4 | | - NASDAQ | · • | ✓ | 2012 | 2012 | 956 | 498 | 348 | 192 | -41% | -29% | nm | 8.4x | nm | 19.1x | 71% | 2022 | 2 2.7x |
| ThromboGenic s N.V. | ThromboGenics NV, an integrated biopharmaceutical company, develops and commercializes medicines that address unmet clinical needs in ophthalmology in Belgium and internationally. | BEL | Antibodies, Small molecules | 5 | | Euronext Brussels | ✓ | | 1991 | 2006 | 211 | 271 | 56 | 166 | 17% | 17% | 23.3x | - | - | - | 37% | Profitable | - |
| TiGenix N.V. | TiGenix NV, a biopharmaceutical company, develops and commercializes therapeutics from its proprietary technology platforms of allogeneic or donor derived stem cells. | BEL | Cell therapy, Stem cells | 5 | | Euronext Brussels | ✓ | | 2000 | 2007 | 184 | 526 | 34 | 533 | -350% | -163% | 19.9x | nm | 18.5x | 86.0x | 42% | 2022 | 2 0.5x |
| Vectura Group plc | Vectura Group plc engages in the design, development, and supply of pharmaceutical products for the treatment of airways-related diseases worldwide. | GBR | Other, Drug delivery, Generics, Small molecule therapeutics | 9 | 2 | London 2 Stock Exchange | √ | | 1997 | 2004 | 92 | 586 | 117 | 473 | -15% | -13% | 2.4x | 2.8x | 2.7x | 2.5x | 14% | 2018 | 3 1.2x |
| Virbac S.A. | Virbac SA produces and sells medicines and vaccines for companion and food-producing animals. | FRA | Veterinary | - | | Euronext Paris | ✓ | | 1968 | 1992 | 0 | 985 | 48 | 1,486 | -1% | 7% | 1.7x | 1.7x | 1.7x | 1.6x | 4% | 2018 | 3 18.8x |
| Zealand Pharma A/S | Zealand Pharma A/S, a biotechnology company, engages in the discovery, design, and development of peptide therapeutics-based medicines in Denmark. | DNK | Peptides | 11 | | NASDAC OMX Copenhac en | 1 | | 1997 | 2010 | 136 | 346 | 65 | 289 | -77% | -57% | 9.1x | 14.7x | 31.5x | 5.6x | 79% | 2022 | 2 1.8x |



| | | | | | | | Share | Price Ana | alysis | | | | | | | Shar | eholding Str | ructure | | | |
|-----------------------------|----------------|-------|-------|------|---------|---------|--------------|----------------------|--------------------|------------------|---------------|-----------------|-----------|---|-------|---|--------------|--|-------------|---------------------------------|-------------------------------|
| | | 52 W | eek | | Share P | rice Pe | rformar | псе | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / S Shares out. I | Ø3M Sh. Trad. / Free Float |
| Prothena Corporation plc | 12.5 | 8.9 | 60.0 | 8% | -58% | -60% | | - | | 7 | | 12.2 | -2% | Woodford Investment Management Limited | 30% | FMR LLC | 15% | Wellington Management Group LLP | 9% | 100.0% | 1.65% |
| ThromboGenic s N.V. | 7.1 | 3.0 | 8.0 | 35% | 67% | 109% | 57% | 4% | .ılı | 1 | | 5.0 | -29% | Clay, Thomas Moragne | 9% | Vlerick, Philippe | 6% | Novartis AG | 6% | 77.7% | 0.10% |
| TiGenix N.V. | 1.8 | 0.8 | 1.8 | 1% | 1% | 83% | -64% | -9% | | 1 | ■ ♦ | 1.8 | 0% | Cormorant Asset Management, LLC | 57% | Bank of America Corporation, Asset Management Arm | 7 | Sand Grove Capital Management LLP | 7% | 25.8% | 0.82% |
| Vectura Group plc | 0.9 | 0.8 | 1.4 | -8% | 0% | -33% | 5% | 0% | | 9 | | 1.5 | 73% | Invesco Ltd. | 10% | HBM Partners Ltd. | 9% | AXA Investment Managers S.A. | 5% | 89.1% | 0.47% |
| Virbac S.A. | 116.8 | 102.1 | 154.2 | -6% | -2% | -5% | 1330% | 10% | | 4 | | 117.5 | 1% | Dick-Madelpuech, Marie Hélène | 50% | Norges Bank Investment Management | | Columbia Management Investment Advisers, LLC | 7 2% | 49.1% | 0.21% |
| Zealand Pharma A/S | 11.3 | 10.5 | 18.9 | -13% | -10% | -1% | -2% | 0% | | 7 | • | 19.3 | 72% | Wellington Managemen | t 11% | Sunstone Capital A/S | 7% | Sunstone Lsv Management A/S | 7% | 91.0% | 0.29% |



Executive Summary
FCF Overview
Market Overview

Sector Analysis

Therapeutics - Micro

Therapeutics - Small

Therapeutics - Medium

Diagnostics

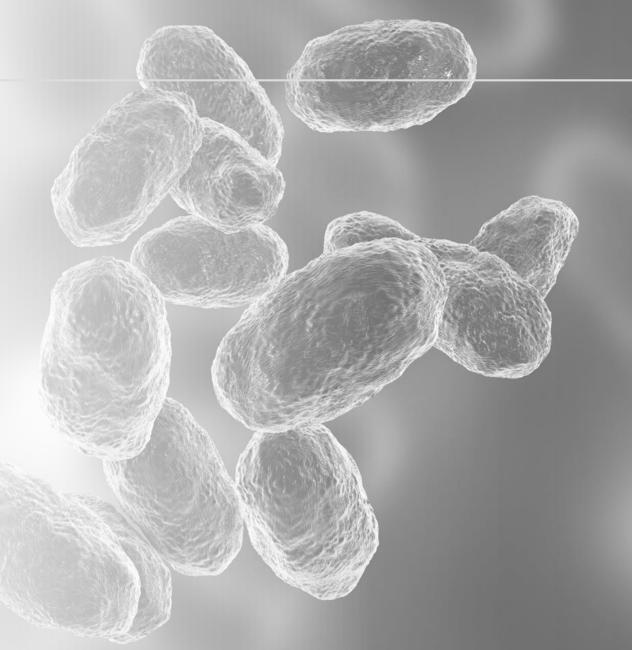
Biotechnology - Others

Services

Health Technology

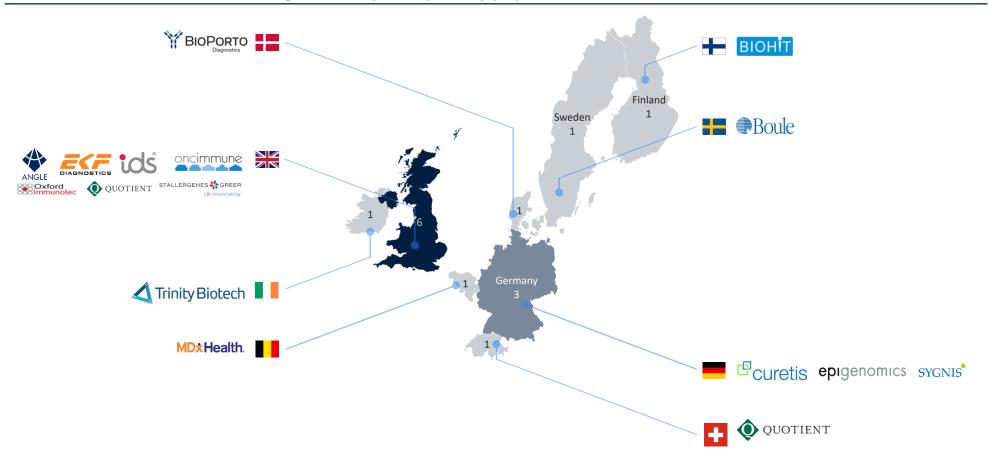
Medical Technology

Supplier & Engineering





Total Number and Distribution of Public Diagnostics Companies by Country (HQ)





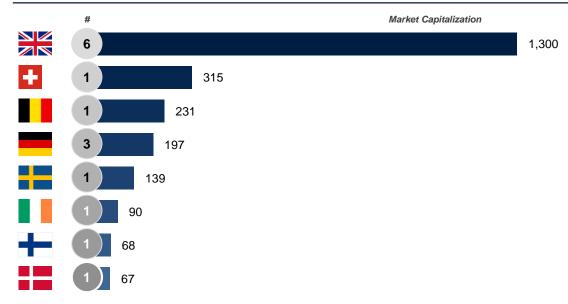
Market Overview

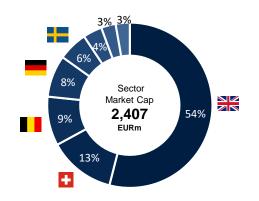
The United Kingdom features by far the highest aggregated market capitalization (EUR 1.3bn) and highest number of public Diagnostic companies (6)

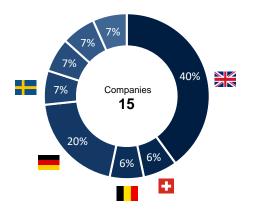
The total market capitalization in the United Kingdom is almost EUR 1bn higher than Switzerland's, ranking on 2nd place

With 3 Diagnostics companies, Germany hosts the second most Diagnostics companies, but ranks on 4th place in terms of total market capitalization (EUR 197m)

Total Number and Market Capitalization of Public Life Science Companies by Country









| | | General Information | | | | | | | | | | | | | | Valua | tion M | etrics | | | | |
|--|---|---|------------------|-----------|---------------------------------|---------------|---------------------|---------|-------|--------------------------|----------------|---------------|-----|-------|---------------|--------|--------|--------|--------|-----|-------------------------------|------|
| | | | Produc | ts in / o | <u>n</u> | | | Yea | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment | Market | Primary Exchange | US Listing | Cross- border IP | O Found | . IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected C Profitability L | |
| ANGLE plc | ANGLE plc, a medical diagnostic company, provides cancer diagnostics and foetal health products. | GBR Diagnostic devices | - | 1 | AIM London | ✓ | | 2004 | 2004 | 86 | 71 | 5 | 66 | -78% | -86% | - | 88.6x | 50.7x | 24.8x | 39% | >2022 | 0.6x |
| Biohit Oyj | Biohit Oyj, a biotechnology company, produces diagnostic tests and analysis systems for use in research institutions and healthcare industries worldwide. | FIN Diagnostic devices | - | 5 | Helsinki Stock Exchange | • | | 1988 | 1999 | 2 | 68 | 1 | 60 | 36% | -9% | 7.3x | - | - | - | 7% | Profitable | - |
| BioPorto A/S | BioPorto A/S, an in-vitro diagnostics company, provides diagnostic tests and antibodies for healthcare professionals in clinical and research settings worldwide. | DNK Other, Diagnostic instrumentation | - | 3 | NASDAC OMX Copenhag en | | | 2000 | 1992 | 27 | 67 | 5 | 62 | -77% | -86% | 22.3x | - | - | - | 63% | >2022 | 1.0x |
| Boule Diagnostics AB | Boule Diagnostics AB (publ), a diagnostics company, develops, manufactures, and markets instruments and consumable products for blood diagnostics. | SWE Diagnostic instrumentation | - | - | NASDAQ OMX Sweden | | | 1956 | 2011 | 7 | 139 | 10 | 136 | 16% | 20% | 3.3x | 3.1x | 3.2x | 2.9x | 25% | Profitable | - |
| Curetis N.V. | Curetis N.V., a commercial-stage molecular diagnostics company, provides solutions for laboratories, pharmacompanies, and public hospitals in Germany, Austria, Switzerland, Western Europe, Asia, and internationally. | DEU Diagnostic instrumentation | 3 | 5 | Euronext Amsterda m | | ✓ | 2007 | 2015 | 44 | 75 | 11 | 74 | -125% | -72% | 56.8x | 61.8x | 27.0x | 11.1x | 38% | >2022 | 0.6x |
| EKF Diagnostics Holdings plc | EKF Diagnostics Holdings plc designs, develops, manufactures, and sells diagnostic instruments, reagents, and other ancillary products in the Americas, Europe, the Middle East, Africa, and internationally. | GBR Other, Diagnostic instrumentation | - | 5 | AIM London | ✓ | | 1990 | 2002 | 72 | 162 | 9 | 154 | 4% | 5% | 3.4x | 3.3x | 3.2x | 3.0x | 11% | Profitable | - |
| Epigenomics AG | Epigenomics AG, a molecular diagnostics company, focuses on developing and commercializing in vitro diagnostic liquid biopsy tests for the screening, early detection, and diagnosis of cancer in Europe, North America, Asia, and internationally. | DEU Molecular diagnostics | - | 2 | Deutsche Börse | ✓ | | 1998 | 2014 | 111 | 53 | 10 | 49 | -144% | -133% | 11.6x | 42.6x | 13.0x | 3.7x | 62% | 2020 | 1.0x |
| Immunodiagno stic Systems Holdings plc | Immunodiagnostic Systems Holdings PLC provides in-vitro diagnostic solutions to the clinical laboratory market in the United Kingdom, the United States, Germany, France, and internationally. | GBR Diagnostic instrumentation | - | 5 | AIM London | | | 1977 | 2004 | 21 | 86 | 33 | 55 | 2% | 2% | 1.2x | - | - | - | 42% | Profitable | - |
| MDxHealth S.A. | MDxHealth SA operates as a molecular diagnostics company in Germany, the Netherlands, Poland, the United States, rest of European Union, and internationally. | BEL Molecular diagnostics | - | 3 | Euronext Brussels | ✓ | | 2003 | 2006 | 135 | 231 | 14 | 218 | -28% | -27% | 7.7x | 6.7x | 6.3x | 4.3x | 29% | 2020 | 1.4x |
| Oncimmune Holdings plc | Oncimmune Holdings Plc, an early cancer detection company, develops and commercializes products to diagnose cancer in the United Kingdom and North America. | Analytical services, GBR Diagnostic instrumentation | - | 2 | AIM London | | | 2015 | 2016 | 31 | 89 | 7 | 82 | -79% | -83% | nm | - | 41.7x | 10.1x | 84% | 2021 | 1.2x |
| Oxford Immunotec Global plc | Oxford Immunotec Global PLC, a diagnostics company, focuses on developing and commercializing proprietary tests for underserved immune-regulated conditions. | Diagnostic GBR instrumentation, Diagnostic services | - | - | NASDAQ | ✓ | ✓ | 2002 | 2013 | 382 | 286 | 63 | 248 | -44% | -25% | 3.0x | 2.9x | 2.6x | 2.3x | 58% | >2022 | 2.3x |



| | | | | | | | Share | Price Ana | llysis | | | | | | | Share | holding Str | ructure | | | |
|--|----------------|------|------|------|---------|---------|--------------|----------------------|--------------------|------------------|---------------|-----------------|-----------|---|--------|---|-------------|---|-------------|-----------------------------|-------------------------------|
| | | 52 W | eek | 8 | Share P | rice Pe | rforma | nce | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| ANGLE plc | 0.6 | 0.4 | 0.9 | 3% | 14% | -2% | -71% | -8% | | 1 | | 1.2 | 104% | Jupiter Asset Management Limited | 14% | Keane, Dermot | 11% | Legal & General Investment Management Limited | 7% | 79.6% | 0.16% |
| Biohit Oyj | 4.6 | 3.6 | 6.4 | -5% | 23% | 22% | 56% | 2% | _1.1_ | - | | - | - | Suovaniemi, Osmo | 38% | Biohit Healthcare (Hefei) Co. Ltd. | 7 % | Härkönen, Matti | 7 2% | 35.3% | 0.14% |
| BioPorto A/S | 0.4 | 0.3 | 0.5 | 1% | -1% | -4% | -98% | -14% | | - | | - | - | Ejendomsselskabet Jano Aps | 11% | Media-Invest Danmark A/S | 8% | Storebrand Kapitalforvaltning As | 5% | 79.9% | 0.35% |
| Boule Diagnostics AB | 7.2 | 5.8 | 8.0 | -4% | 10% | 8% | 34% | 4% | _a.l. | 2 | | 7.6 | 5% | Svolder AB | 11% | Grenspecialisten AB | 10% | Swedbank Robur Fonder AB | 9% | 74.6% | 0.09% |
| Curetis N.V. | 4.6 | 3.2 | 8.5 | 11% | -18% | 16% | -54% | -25% | | 2 | • | 8.6 | 88% | Lsp Curetis Pooling B.V. | 19% | Calibrium AG | 15% | Forbion Capital Partners | 9% | 49.8% | 0.10% |
| EKF Diagnostics Holdings plc | 0.4 | 0.2 | 0.4 | -7% | 15% | 20% | -45% | -4% | | 1 | • | 0.3 | -10% | Harwood Capital LLP | 30% | Lombard Odier Asset Management (Europe) Limited | 11% | Schroder Investment Management Limited | 3 % | 94.6% | 0.24% |
| Epigenomics AG | 2.2 | 1.9 | 7.4 | -14% | -38% | -47% | -75% | -31% | -11- | 2 | • | 5.4 | 143% | Team Curis Group Limited Partnership | 10% | Can Reach International Limited | 6% | Zours, Wilhelm Konrad Thomas | 6% | 71.2% | 0.78% |
| Immunodiagno stic Systems Holdings plc | 2.9 | 2.4 | 3.7 | 0% | 16% | -4% | 308% | 11% | | - | | - | - | FORUM Venture Capita GmbH | al 24% | Schroder Investment Management Limited | 18% | DZ Bank AG, Asset Management Arm | 16% | 76.0% | 0.49% |
| MDxHealth S.A. | 3.9 | 2.9 | 5.2 | 3% | 7% | 20% | -49% | -5% | | 4 | | 6.4 | 66% | Marien, Rudi M. | 13% | Valiance Asset Management Limited | 12% | Capfi Delen Asset Management NV | 6% | 75.0% | 0.22% |
| Oncimmune Holdings plc | 1.4 | 1.1 | 1.7 | 0% | -9% | 22% | -13% | -6% | 1 | 2 | | 1.9 | 32% | Balderton Capital | 11% | Sharp, Richard Simon | 7% | Sharp, Richard S. | 7% | 49.1% | 0.02% |
| Oxford Immunotec Global plc | 11.0 | 8.6 | 16.7 | -11% | 9% | -5% | 25% | 5% | I. | 5 | | 13.9 | 26% | Invesco Ltd. | 12% | Polar Capital Holdings plc | 10% | Redmile Group, LLC | 10% | 64.9% | 0.46% |



| - | | General Information | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|---------------------------|---|---|-----------------------|---------------------|---------------|-----------------------|----------|--------|--------------------------|----------------|---------------|-----|--------------|---------------|---------|---------|--------|--------|--------|-------|----------------------|
| | | | Products in / | on | | | Ye | ear of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Mark | Primary et Exchange | US Listing | Cross- p border II | PO Found | d. IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | ROE (LTM) | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash / | | Cash / Loss (LFY) |
| Quotient Ltd. | Quotient Limited, a commercial-stage diagnostics company, develops, manufactures, and commercializes conventional reagent products used for blood grouping in the transfusion diagnostics market worldwide. | Other, Diagnostic CH instrumentation, Screening | - | - NASDAQ | . 🗸 | ✓ | 2007 | 2014 | 561 | 315 | 16 | 379 | | 72% | 6 18.4x | 19.1x | 17.6x | 14.6x | 16% | >2022 | 2 0.2x |
| Stallergenes Greer plc | Stallergenes Greer plc, a biopharmaceutical company, engages in the diagnosis and treatment of allergies worldwide. | GBR Other | 4 | 2 Euronext Paris | ✓ | ✓ | - | 2015 | 0 | 606 | 51 | 574 | -2% | 5 -1% | 3.1x | 2.2x | 2.1x | 1.9x | 9% | 2018 | 3 5.2x |
| Sygnis AG | SYGNIS AG focuses on the development and marketing of reagents and services for life sciences and diagnostics in the United States, Europe, the United Kingdom, Asia, and internationally. | DEU Other, Genomics | - | 5 Deutsche Börse | · 🗸 | | - | 2012 | 24 | 69 | 5 | 69 | -5% | 5 -4% | 38.8x | 9.1x | 5.0x | 3.5x | 10% | 2019 |) 1.5x |
| Trinity Biotech plc | Trinity Biotech plc acquires, develops, manufactures, and markets medical diagnostic products for the clinical laboratory and point-of-care (POC) segments of the diagnostic market. | IRL Diagnostic instrumentation | - | 5 NASDAQ | . 🗸 | ✓ | 1992 | 1992 | 478 | 90 | 44 | 123 | -63% | 3% | 6 1.3x | 1.5x | 1.4x | 1.4x | 28% | 2018 | 3 1.3x |







Executive Summary
FCF Overview
Market Overview

Sector Analysis

Therapeutics - Micro

Therapeutics - Small

Therapeutics - Medium

Diagnostics

Biotechnology - Others

Services

Health Technology

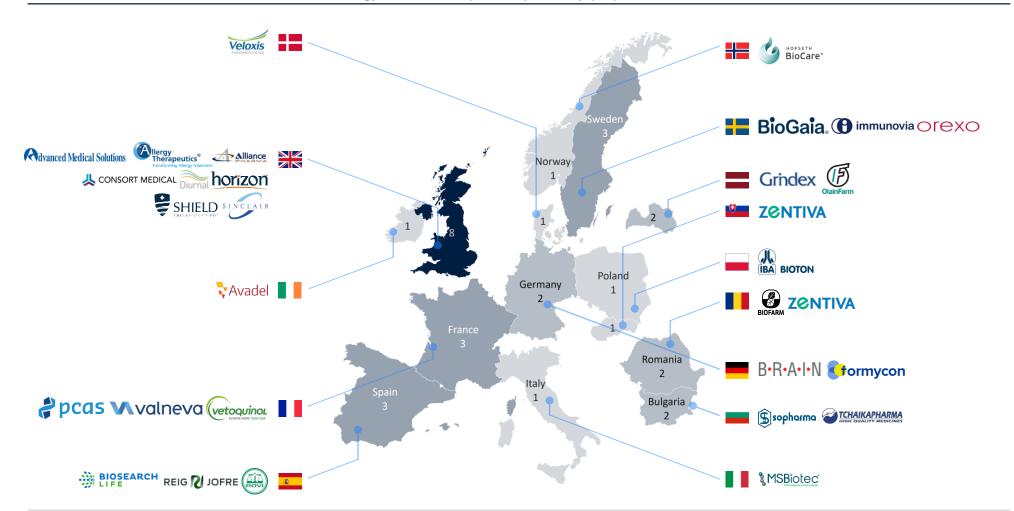
Medical Technology

Supplier & Engineering





Total Number and Distribution of Public Biotechnology - Others Companies by Country (HQ)

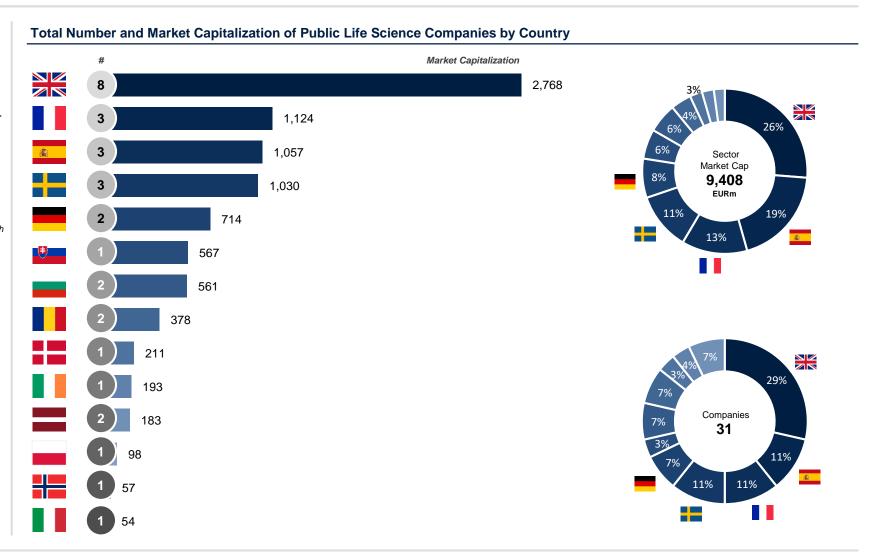




Market Overview

With 8 public companies and an aggregated market capitalization of EUR 2.8bn, the United Kingdom leads by far in the Biotechnology – Others subsector, followed by France, Spain and Sweden

Germany ranks on 5th place only





| | | General Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|---|--|--|------------------|-----------|-------------------------------|---------------|---------------------|---------|-------|--------------------------|----------------|---------------|-----|------|--------------|--------|---------|--------|--------|-----|---------------------------|---------|
| | | | Produc | ts in / c | <u>n</u> | | | Yea | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment | Market | Primary Exchange | US Listing | Cross- border IP | O Found | . IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | |
| Advanced Medical Solutions Group plc | Advanced Medical Solutions Group plc, together with its subsidiaries, designs, develops, manufactures, and distributes products for the advanced wound care, surgical, and wound closure markets worldwide. | GBR Wound care | - | 5 | AIM London | ✓ | | 1991 | 1994 | 102 | 791 | 70 | 720 | 13% | 16% | 7.4x | 6.8x | 6.2x | 5.7x | 37% | Profitable | - |
| Allergy Therapeutics plc | Allergy Therapeutics plc, a specialty pharmaceutical company, focuses on allergy vaccination primarily in Europe. | GBR Other, Vaccines | 1 | 3 | AIM London | ✓ | | 1934 | 2004 | 103 | 190 | 29 | 164 | -9% | -6% | 2.3x | 2.2x | 2.0x | 1.8x | 40% | >2022 | 2 10.3x |
| Alliance Pharma plc | Alliance Pharma plc operates as a specialty pharmaceutical company in the United Kingdom, rest of Europe, and internationally. | GBR Other, Anti- infectives | - | 116 | AIM London | | | 1996 | 2003 | 79 | 569 | 13 | 650 | 14% | 9% | 5.7x | 5.6x | 4.6x | 4.1x | 3% | Profitable | - |
| AS Grindeks | AS Grindeks, a pharmaceutical company, engages in the research, development, manufacture, and sale of generics and active pharmaceutical ingredients primarily in Latvia. | LVA Other, Anti- infectives, Generics | - | 5 | Riga Stock Exchange | e | | 1991 | 1999 | 0 | 70 | 5 | 84 | 7% | 5% | 0.8x | - | - | - | 3% | Profitable | - |
| AS Olainfarm | AS Olainfarm manufactures and distributes chemical and pharmaceutical products primarily in Latvia. | LVA Other, Generics | - | 5 | Riga Stock Exchange | e | | 1972 | 1997 | 4 | 113 | 4 | 136 | 10% | 11% | 1.2x | 1.1x | - | - | 3% | Profitable | - |
| Avadel Pharmac. plc | Avadel Pharmaceuticals plc develops and commercializes pharmaceutical products primarily for treating urology and sleep medicines in the United States, France, and Ireland. | IRL Drug delivery | 4 | | NASDAQ | ✓ | ✓ | 1990 | 2017 | 672 | 193 | 33 | 123 | 35% | 8% | 0.9x | 0.9x | 1.3x | 1.0x | 12% | Profitable | - |
| B.R.A.I.N. AG | B.R.A.I.N. Biotechnology Research and Information Network AG develops enzymes, biocatalysts, and bioactive natural substances for manufacturers in the chemical and consumer goods industries in Germany, the United States, and France. | DEU Other, Industrial Biotechnology | - | | Deutsche Börse | | | 1993 | 2016 | 60 | 397 | 25 | 376 | -26% | -14% | 15.0x | 14.8x | 11.9x | 9.2x | 34% | 2019 | 9 2.6x |
| Biofarm S.A. | Biofarm S.A. develops, manufactures, and markets medicines primarily in Romania. | Other, Generics, ROU Small molecule therapeutics | - | 5 | Buchares Stock Exchange | - | | 1921 | 2005 | 12 | 74 | 10 | 63 | 17% | 20% | 1.9x | - | - | - | 18% | Profitable | - |
| BioGaia AB | BioGaia AB (publ) develops, markets, and sells probiotic products with documented health benefits worldwide. | SWE Other, Nutraceuticals | - | 5 | NASDAQ OMX Sweden | ✓ | | 1990 | 1998 | 0 | 662 | 34 | 629 | 36% | 48% | 11.3x | 10.3x | 9.4x | 8.3x | 56% | Profitable | - |
| Biosearch, S.A. | Biosearch, S.A., a biotechnology company, operates in pharmaceutical, nutraceutical, and functional food sectors in Spain and internationally. | ESP Nutraceuticals | - | 3 | Madrid Stock Exchange | e | | - | 2001 | 0 | 104 | 1 | 108 | 10% | 14% | 4.7x | - | - | - | 2% | Profitable | - |
| BIOTON S.A. | BIOTON S.A., a biotechnological company, develops, manufactures, markets, and sells medicines, pharmaceutical preparations, pharmaceutical substances, and other pharmaceutical products in Poland and internationally. | POL Other | - | 5 | Warsaw Stock Exchange | • | | - | 2005 | 145 | 98 | 7 | 130 | 1% | 3% | 2.1x | - | - | - | 3% | >2022 | 2 4.2x |



| | | | | | | | Shar | e Price Ana | llysis | | | | | | | Share | holding Str | ructure | | | |
|---|----------------|------|------|------|---------|----------|--------------|----------------------|--------------------|------------------|---------------|-----------------|-----------|------------------------------------|-----|---------------------------------------|-------------|--|-------------|-----------------------------|-----------------------------|
| | | 52 V | Veek | 8 | Share P | Price Pe | erforma | ance | | | Consens | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. Free Float |
| Advanced Medical Solutions Group plc | 3.7 | 3.1 | 4.0 | 0% | 3% | 4% | 228% | 5 5% | | 6 | • | 3.6 | -2% | Octopus Investments Limited | 10% | AXA Investment Managers S.A. | 8% | BlackRock, Inc. | 8% | 87.5% | 0.18% |
| Allergy Therapeutics olc | 0.3 | 0.3 | 0.4 | 7% | 7% | 0% | -70% | 5 -8% | I- | 4 | | 0.6 | 103% | Bielsol Investments (1987) Ltd. | 23% | Beagle Partners LLP | 21% | Abbott Laboratories | 17% | 29.0% | 0.04% |
| Alliance Pharma plc | 1.1 | 0.6 | 1.2 | 15% | 42% | 47% | 374% | 5 11% | | 2 | | 1.3 | 22% | Dawson, John | 12% | MVM Partners LLP | 12% | Slater Investments Limited | 7% | 75.8% | 0.24% |
| AS Grindeks | 7.3 | 6.7 | 9.9 | -3% | -4% | 8% | 2169% | 5 17% | | - | | - | - | Lipmans, Kirovs | 33% | AmberStone Group, AS | 23% | Lipmane, Anna | 17% | 27.4% | 0.07% |
| AS Olainfarm | 8.0 | 7.8 | 11.5 | -7% | -10% | -1% | 189% | 5 5% | | 1 | | 9.2 | 15% | Maligins, Valerijs | 69% | AS LHV Varahaldus | 5% | Swedbank leguldijumu Parvaldes Sabiedriba AS | 1 % | 29.8% | 0.02% |
| Avadel Pharmac. plc | 5.3 | 4.8 | 10.2 | -12% | -11% | -23% | -50% | 5 -37% | - II | 4 | | 14.4 | 173% | Brandes Investment Partners, L.P. | 13% | Deerfield Management Company, L.P. | 10% | Broadfin Capital, LLC | 7% | 78.3% | 0.67% |
| 3.R.A.I.N. AG | 22.0 | 16.7 | 27.8 | 6% | -6% | -2% | 144% | 5 44% | | 4 | | 25.2 | 15% | MP Beteiligungs-Gmbh | 35% | Service Innovation Group GmbH | 9% | Sachse, Gabriele | 7 3% | 47.7% | 0.07% |
| Biofarm S.A. | 0.1 | 0.1 | 0.1 | 5% | 13% | 20% | 73% | 5 4% | | - | | - | - | SAI Muntenia Invest SA | 51% | SIF Banat-Crisana | 23% | Societatea de Investitii Financiare Moldova S.A. | 14% | 100.0% | 0.01% |
| lioGaia AB | 38.2 | 26.6 | 44.0 | -1% | -7% | 15% | 1053% | 5 13% | | 2 | ■ ◆ ■ | 42.4 | 11% | Swedbank Robur Fonder AB | 9% | E. Öhman J:or Fonder AB | 8% | Old Mutual Wealth | 7% | 81.0% | 0.16% |
| tiosearch, s.A. | 1.8 | 0.4 | 1.9 | 71% | 45% | 202% | -44% | 5 -3% | •-I <u>-</u> | - | - | - | - | Groupe Lactalis S.A. | 30% | Pescaderías Coruñesas | 10% | Quadriga Asset Managers, Sgiic, S.A | 0 % | 60.4% | 0.18% |
| IOTON S.A. | 1.1 | 0.7 | 1.6 | -22% | 12% | 36% | 67% | 5 4% | | - | | - | - | Cui, Wenjun | 20% | Dezhao, Kong | 12% | Jiman, Zhu | 11% | 39.9% | 0.24% |



| | | General Information | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|---|---|--|------------------------|-------------------------------|---------------|---------------------|---------|-------|--------------------------|----------------|---------------|-----|-------|---------------|--------|---------|--------|--------|-----|---------------------------|----------------------|
| | | | Products in / | <u>on</u> | | | Yea | ar of | | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Marke | Primary t Exchange | US Listing | Cross- border IP | O Found | . IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | Cash / Loss (LFY) |
| Consort Medical plc | Consort Medical plc operates as a one-stop developer and manufacturer of drugs and premium drug delivery devices. | GBR CMO (Contract ManufacturingOrgar ization), Drug delivery | n <u>-</u> | London - Stock Exchange | √ | | 1946 | 1992 | 126 | 660 | 24 | 769 | 7% | 15% | 2.3x | - | 2.1x | 2.0x | 5% | Profitable | - |
| Diurnal Group plc | Diurnal Group plc operates as a specialty pharmaceutical company. | GBR Other | - | - AIM London | | | 2015 | 2015 | 47 | 124 | 5 | 112 | -96% | -98% | - | nm | 83.4x | 16.3x | 26% | >2022 | . 0.5x |
| Formycon AG | Formycon AG engages in the development and marketing of biosimilar products. | DEU Biosimilars | 4 | Deutsche Börse | • | | 1999 | 2010 | 6 | 317 | 5 | 302 | -6% | -6% | 15.4x | 11.3x | 8.5x | 11.1x | 15% | 2018 | 3 2.8x |
| Hofseth BioCare A.S.A. | Hofseth BioCare ASA, a biotech company, develops, manufactures, markets, and sells marine ingredients and finished products for humans and pets in Norway. | NOR Other, Food, Nutraceuticals | - ; | NASDAQ 3 OMX Norway | ! | | 2000 | 2011 | 33 | 57 | 2 | 62 | -445% | -108% | 27.8x | - | - | - | 16% | >2022 | ! 1.5x |
| Horizon Discovery Group plc | Horizon Discovery Group plc, an integrated life science company, designs, manufactures, and applies gene editing and gene modulation to build cell models that harbour the genetics of human disease. | Genomics, GBR Proteomics, Screening | 1 | AIM - London | ✓ | | 2007 | 2014 | 223 | 278 | 32 | 247 | -6% | -5% | 8.8x | 6.0x | 3.6x | 3.2x | 15% | 2019 |) 2.9x |
| Immunovia AB | Immunovia AB (publ) engages in the development of a technology platform based on antibody microarray analysis. | SWE Diagnostic instrumentation | - | NASDAQ - OMX Sweden | 1 | | 2007 | 2015 | 41 | 268 | 16 | 252 | -25% | -25% | 98.6x | 89.1x | 95.4x | 68.1x | 72% | >2022 | ? 3.5x |
| Laboratorio Reig Jofre, S.A. | Laboratorio Reig Jofre, S.A. researches, develops, manufactures, markets, and sells medicines and nutritional supplements. | ESP Other, Anti- infectives | 2 18 | Madrid 3 Stock Exchange | е | | 1929 | 2015 | 0 | 180 | 10 | 190 | 6% | 5% | 1.2x | - | 1.1x | 1.1x | 5% | Profitable | - |
| Laboratorios Farmaceuticos Rovi, S.A. | Laboratorios Farmaceuticos Rovi, S.A. produces and sells pharmaceutical products in Spain and internationally. | Other, Small ESP molecule therapeutics | 4 2 | Madrid 2 Stock Exchange | 9 | | 1946 | 2007 | 167 | 774 | 39 | 776 | 9% | 7% | 2.9x | 2.8x | 2.6x | 2.3x | 13% | Profitable | - |
| Ms Biotech Spa | Ms Biotech Spa, a green biotechnology company, engages in the research, development, production, marketing, and sale of technologies and microbiological products based on natural microorganisms in Italy. | ITA Other, AgBio, Environmental | - | Wiener - Börse | | ✓ | - | 2017 | 0 | 54 | 0 | 54 | - | - | - | - | - | - | - | >2022 | - |
| Orexo AB | Orexo AB (publ), a specialty pharmaceutical company, engages in the development and commercialization of drugs. | SWE Other, Drug delivery | 8 3 | NASDAQ 3 OMX Sweden | 1 ✓ | | 1995 | 2005 | 150 | 99 | 47 | 82 | 22% | 14% | 1.1x | 1.3x | 1.1x | 1.0x | 42% | Profitable | - |
| PCAS S.A. | PCAS SA develops and produces complex molecules for life sciences and technologies worldwide. | FRA Other | - | Euronext Paris | | | 1962 | 1995 | 0 | 237 | 9 | 296 | 6% | 8% | 1.5x | 1.4x | 1.3x | 1.3x | 4% | Profitable | - |



| | | | | | | | Share | Price Ana | llysis | | | | | | | Share | holding Str | ructure | | | |
|---|----------------|------|------|------|---------|---------|--------|----------------------|--------------------|------------------|--------------|-------------------|-----------|---|------------|---|-------------|---|-----|-----------------------------|-------------------------------|
| | | 52 V | Veek | | Share P | rice Pe | rforma | nce | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sel | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| Consort Medical plc | 13.5 | 11.5 | 14.6 | -4% | 6% | 3% | 372% | 6% | | 4 | | 14.9 | 11% | OppenheimerFunds, Inc. | 6% | Schroder Investment Management Limited | 7% | Polar Capital Holdings plc | 5% | 99.0% | 0.21% |
| Diurnal Group plc | 2.1 | 1.5 | 2.4 | -4% | -6% | 29% | 8% | 3% | I | 1 | • | 2.6 | 20% | IP Group Plc | 45% | Development Bank of Wales Plc | 22% | Invesco Ltd. | 12% | 18.5% | 0.01% |
| Formycon AG | 34.9 | 28.5 | 39.2 | 3% | 9% | 8% | 284% | 19% | | 2 | | 54.8 | 57% | MPPM Manfred Piontke Portfolio Management e.K | 2% | Matejka & Partner Asset Management GmbH | 71% | PMG Fonds Management AG | 1% | 80.0% | 0.17% |
| Hofseth BioCare A.S.A. | 0.2 | 0.1 | 0.3 | 20% | 23% | 39% | -52% | -10% | ••• | - | - | - | - | Deep Blue Ventures Holdings SPC - DBVF I Segregated Portfolio Fund | 19% | Hofseth International AS | 18% | Hofseth, Roger | 16% | 21.4% | 1.13% |
| Horizon Discovery Group plc | 1.9 | 1.4 | 3.3 | -2% | 9% | -31% | -13% | -3% | -"թ- | 7 | | 2.7 | 44% | Woodford Investment Management Limited | 21% | Invesco Ltd. | 10% | GE Healthcare Dharmacon, Inc. | 9% | 82.6% | 0.19% |
| Immunovia AB | 13.8 | 7.2 | 19.0 | -17% | 15% | 54% | 590% | 109% | | - | | - | - | Borrebaeck, Carl Arne Krister | 10% | Wingren, Christer | 5% | Andersson Ek, Sara | 5% | 62.8% | 0.18% |
| Laboratorio Reig Jofre, S.A. | 2.8 | 2.2 | 3.4 | -1% | 9% | 20% | -25% | -8% | | 2 | | 3.3 | 17% | Reig Jofre Investments SL | 73% | Natra, S.A. | 12% | Carafal Investment, S.L.U. | 1% | 13.7% | 0.10% |
| Laboratorios Farmaceuticos Rovi, S.A. | 15.7 | 14.2 | 17.8 | 0% | -8% | 0% | 64% | 5% | | 7 | • | 16.9 | 8% | Norbel Inversiones S.L. | 71% | J O Hambro Capital Management Limited | 8% | Alantra Asset Management, SGIIC, S.A. | 5% | 29.4% | 0.07% |
| Ms Biotech Spa | 0.5 | 0.3 | 0.5 | 0% | 2% | 0% | 65% | -14% | _ [| - | - | - | - | - | 0 % | - | 0% | - | 0% | 0.0% | - |
| Orexo AB | 2.9 | 2.5 | 5.0 | -13% | -24% | -31% | -69% | -9% | -" | 2 | | 4.2 | 48% | Novo Holdings A/S | 28% | HealthCap | 11% | The ATP Group | 6% | 50.9% | 0.34% |
| PCAS S.A. | 17.0 | 15.1 | 20.0 | -2% | -10% | -6% | 520% | 8% | | 2 | | 18.8 | 11% | NOVACAP SASU | 18% | INOCAP Gestion | 7% | Eximium S.A.S. | 7% | 7.0% | 1.01% |



| | | General Information | | | | | | | | | | | | | | Valu | ation Me | etrics | | | | |
|-------------------------------|---|--|--------------------|----------|---------------------------------|---------------|------------------------|--------|------|--------------------------|----------------|---------------|-----|-------|---------------|--------|----------|--------|--------|--------|---------------------------|-------|
| | | | Products | in/o | <u>n</u> | | | Yea | r of | | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment M | // Arket | Primary Exchange | US Listing | Cross- g border IPO | Found. | | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash / | Expected Profitability | |
| Shield Therapeutics plc | Shield Therapeutics plc, a specialty pharmaceutical company, in the development and commercialization of hospital-focused pharmaceuticals to treat unmet medical needs. | GBR Other | 3 | - | AIM London | | | 2008 | 2016 | 192 | 52 | 15 | 37 | -48% | -51% | nm | 36.0x | 8.6x | 2.4x | 30% | >2022 | 0.7x |
| Sinclair Pharma plc | Sinclair Pharma plc, a specialty pharmaceutical company, engages in the manufacture, commercialization, and sale of dermatological products worldwide. | GBR Other | - | 5 | AIM London | ✓ | | 1971 | 2003 | 79 | 104 | 2 | 108 | 0% | -4% | 3.0x | 2.1x | 1.8x | 1.4x | 1% | 2019 | 47.1x |
| Sopharma AD | Sopharma AD researches and develops, produces, and trades in medicinal substances, finished drug forms, veterinary vaccines, infusion solutions, and medical disposable products for human and veterinary medicine, and food supplements. | BGR Other, Anti- infectives | - | 5 | Bulgarian Stock Exchange | • | | 1933 | 2008 | 0 | 262 | 18 | 402 | 7% | 9% | 0.9x | 0.8x | 0.7x | 0.6x | 4% | Profitable | - |
| a High Quality | Tchaikapharma High Quality Medicines AD engages in the development and manufacture of generic and in-licensed medicines in Bulgaria. | BGR Other, Anti- infectives, Generics | - | 5 | Bulgarian Stock Exchange | • | | 1999 | 2015 | 14 | 299 | 0 | 305 | 11% | 12% | 18.0x | - | - | - | 0% | Profitable | - |
| Valneva SE | Valneva SE, an integrated commercial stage biotech company, focuses on developing lifesaving vaccines. | FRA Other, Anti- infectives, Vaccines | 3 | 2 | Euronext Paris | ✓ | | - | 2007 | 156 | 275 | 36 | 305 | -9% | 2% | 3.1x | 2.8x | 2.6x | 2.3x | 19% | 2019 | 3.2x |
| Veloxis Pharmac. A/S | Veloxis Pharmaceuticals A/S, a biopharmaceutical company, identifies, develops, and commercializes products that are used in transplantation and adjacent therapies. | DNK Other | - | 2 | NASDAC OMX Copenhag en | 1 | | - | 2006 | 185 | 211 | 29 | 230 | -319% | -10% | 26.4x | 9.3x | 7.8x | 5.4x | 51% | 2020 | 3.6x |
| Vetoquinol S.A. | Vetoquinol SA, a veterinary pharmaceutical company, designs, develops, and sells veterinary drugs and non-medicinal products in Europe, the Americas, and the Asia Pacific region. | FRA Other | - | 5 | Euronext Paris | | | 1933 | 2006 | 34 | 612 | 113 | 514 | 10% | 13% | 1.5x | 1.4x | 1.4x | 1.4x | 25% | Profitable | - |
| Zentiva S.A. | Zentiva S.A. produces and trades in human drugs and medication in Romania, the Czech Republic, Slovakia, and rest of Europe. | ROU Generics | - | 5 | Bucharest Stock Exchange | | | 1962 | 1999 | 0 | 305 | 37 | 268 | 23% | 24% | 2.9x | - | - | - | 32% | Profitable | - |
| Zentiva, a.s. | Zentiva, a.s. develops, manufactures, and sells generic medicinal products, primarily used in primary care sector. | SVK Generics | - | 5 | Bratislava Stock Exchange | | | 1941 | 1993 | 0 | 567 | 0 | 567 | 15% | 21% | 6.8x | - | - | - | 0% | Profitable | - |



| | | | | | | | Share | Price A | nalysis | | | | | | · | | Share | holding Str | ructure | | | |
|--|----------------|-------|-------|-----|---------|---------|---------|---------------------|---------|------------|------------------|--------------|-------------------|-----------|---|-----|--------------------------------|-------------|--|------------|-----------------------------|-----------------------------|
| | | 52 V | leek | ; | Share F | rice Pe | erforma | nce | | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualize (p.a.) | |) IPO p.a. | # of Analysts | Buy Hold Sel | Target I Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. Free Float |
| Shield Therapeutics plc | 0.4 | 0.2 | 1.8 | 48% | 138% | -65% | -77% | -46% | -1 | | 1 | | 2.4 | 432% | Inventages Venture Capital Investment Inc. | 48% | Sterritt, Carl | 9% | Schweiger, Christian | 5% | 26.7% | 0.11% |
| Sinclair Pharma plc | 0.2 | 0.2 | 0.4 | 5% | -10% | -30% | -88% | -13% | | | 4 | | 0.6 | 175% | Toscafund Asset Management LLP | 29% | Lansdowne Partners Limited | 12% | UBS Asset Management | 1 % | 46.7% | 0.21% |
| Sopharma AD | 2.1 | 2.0 | 2.6 | 0% | -1% | -5% | -22% | -2% | | | 2 | • | 2.6 | 27% | Donev Investments Holding AD | 27% | Telekomplekt Invest AD | 22% | Telecomplect AD | 229 | 42.4% | 0.00% |
| Tchaikapharm a High Quality Medicines AD | 4.1 | 3.4 | 4.2 | 1% | 10% | 15% | 177% | 38% | | | - | | - | - | Kamenov, Tihomir D. | 96% | Nikolov, Ivan Boychev | 79% | Georgiev, Biser Rosenov | 7 % | 4.2% | 0.01% |
| /alneva SE | 3.5 | 2.6 | 4.2 | -9% | 0% | 28% | -66% | -9% | | | 6 | • | 5.1 | 43% | Groupe Grimaud La Corbière SA | 16% | Bpifrance Participations SA | 10% | MVM Partners LLP | 8% | 67.1% | 0.51% |
| /eloxis Pharmac. A/S | 0.1 | 0.1 | 0.2 | 1% | -2% | 6% | -98% | -28% | | ľ | 1 | • | 0.1 | 3% | Lundbeckfond Invest A/S | 41% | Novo Holdings A/S | 41% | Xact Kapitalförvaltning AB | 7 % | 17.2% | 0.87% |
| /etoquinol S.A. | 51.6 | 260.0 | 65.2 | 3% | -7% | -15% | 146% | 8% | | | 3 | • | 60.3 | 17% | Soparfin SCA | 63% | Frechin, Étienne | 7 4% | FMR LLC | 4% | 33.0% | 0.07% |
| Zentiva S.A. | 0.7 | 0.5 | 0.8 | -3% | -2% | -1% | 3685% | 20% | | | - | _ | - | - | Sanofi | 75% | Erste Asset Management Ltd. | 79% | Eurobank Asset Management Mutual Fund Management Company S.A. | 0% | 25.1% | 0.00% |
| Zentiva, a.s. | 350.0 | ### | 370.0 | 5% | 6% | 0% | 10% | 0% | | | - | | - | - | Sanofi | 0% | Nationwide Fund Advisors | 0% | Aberdeen Asset Management PLC | 7% | 0.0% | - |



Executive Summary
FCF Overview
Market Overview

Sector Analysis

Therapeutics - Micro

Therapeutics - Small

Therapeutics - Medium

Diagnostics

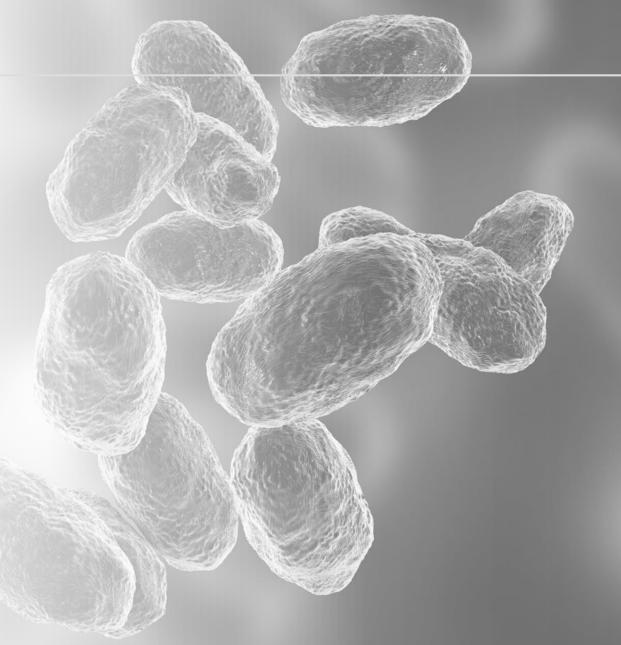
Biotechnology - Others

Services

Health Technology

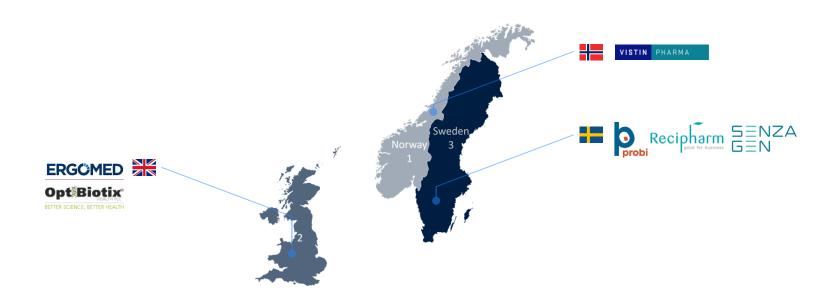
Medical Technology

Supplier & Engineering





Total Number and Distribution of Public Services Companies by Country (HQ)



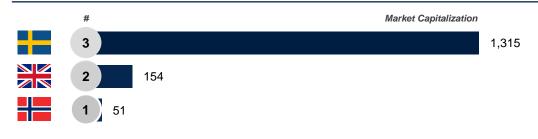


Services

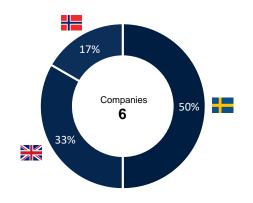
Market Overview

Sweden features with 3 public Life Science Service companies by far the highest market capitalization in Europe, which is more than EUR 1bn higher than the United Kingdom with the second most hosted companies

Total Number and Market Capitalization of Public Life Science Companies by Country









Services

| | | Gene | eral Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|--------------------------|--|------|--|-----------------|------------|-------------------------|---------------|--------------------------|-------|------|--------------------------|----------------|---------------|-------|--------------|---------------|--------|---------|--------|-------|--------------|------------|------------------------|
| | | | | Produ | cts in / o | <u>n</u> | | _ | Year | of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ | Subsector | Devel- opmen | t Market | Primary Exchange | US Listing | Cross- p border IPO F | ound. | | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | ROE (LTM) | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY202 | Cash 0 TA | | Cash / / Loss (LFY) |
| Ergomed plc | Ergomed plc provides clinical research, and drug development and safety services in the United Kingdom and rest of Europe, the Middle East, Africa, North America, Asia, and Australia. | GBR | CRO (Contract ResearchOrganizati on), Drug delivery | 3 | - | AIM London | | 1 | 997 | 2014 | 39 | 91 | 4 | 88 | -13% | 6 0% | 2.6x | 1.8x | 1.4x | 1.3x | 5% | 2018 | 3 0.7x |
| OptiBiotix Health plc | Optibiotix Health Plc, a life sciences company, engages in the research and development of microbiome modulators primarily in the United Kingdom. | GBR | Other, Food, Nutraceuticals | - | - | AIM London | ✓ | 2 | 012 | 2014 | 12 | 62 | 1 | 61 | 27% | -29% | s nm | - | - | | 16% | Profitable | - |
| Probi AB | Probi AB (publ), a bioengineering company, researches, develops, manufactures, markets, and sells probiotics for food, health, and pharmaceutical companies. | SWE | Food, Nutraceuticals | - | - | NASDAC OMX Sweden | · 🗸 | 1 | 991 | 2004 | 62 | 395 | 16 | 397 | 3% | 5 7 % | 8.6x | 6.4x | 6.6x | 5.7x | 14% | Profitable | - |
| Recipharm AB | Recipharm AB (publ) provides contract development and manufacturing solutions to the pharmaceutical industry in Sweden, Italy, France, India, Portugal, Germany, Spain, and internationally. | SWE | Analytical services, CMO (Contract ManufacturingOrgan ization), Fill & finish | - | - | NASDAC OMX Sweden | ! | 1 | 995 | 2014 | 337 | 864 | 46 | 1,247 | -3% | 3% | 2.5x | 2.3x | 2.1x | 1.9x | 4% | 2018 | 3 2.6x |
| SenzaGen AB | SenzaGen AB market, sells, and performs in vitro genomic allergen rapid detection (GARD) sensitization tests for the screening of pharmaceutical candidates, and safety assessment of chemicals and cosmetic ingredients. | SWE | Diagnostic services, Genomics, Screening | - | - | NASDAC OMX Sweden | ! | 2 | 010 | 2017 | 9 | 56 | 8 | 48 | -13% | 5 -16% | s nm | - | - | - | 76% | >2022 | 2 6.4x |
| Vistin Pharma A.S.A. | Vistin Pharma ASA, through its subsidiary, Vistin Pharma AS, produces and sells metformin HCL active pharmaceutical ingredients, direct compressible granulates, tablets, and finished dose formulation for the pharmaceutical industry worldwide. | NOR | CMO (Contract ManufacturingOrgan ization) | - | - | NASDAC OMX Norway | ! | 2 | 015 | 2015 | 51 | 51 | 6 | 45 | 57% | 5 49 | 2.4x | 2.5x | 2.3x | 2.1x | 27% | Profitable | - |



Services

| | | | | | | | Share | Price An | alysis | | | | | | | Share | eholding Str | ructure | | | |
|--------------------------|----------------|------|-------|------|---------|---------|--------------|----------------------|--------------------|------------------|---------------|-----------------|-----------|---------------------------------|-----|---------------------------------------|--------------|--------------------------------------|------------|---------------------------------|-------|
| | | 52 W | leek_ | 5 | Share P | rice Pe | rforma | nce | | | Consens | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Ø Shares out. F | |
| Ergomed plc | 2.0 | 1.8 | 2.8 | -24% | -2% | -1% | 1% | 0% | | 3 | | 3.4 | 66% | Reljanovic, Miroslav | 34% | Slater Investments Limited | 10% | Octopus Investments Limited | 6% | 55.9% | 0.06% |
| OptiBiotix Health plc | 0.7 | 0.6 | 0.9 | -6% | 15% | 2% | 258% | 38% | | - | | - | - | O'Hara, Stephen Patrick | 13% | Enterprise Ventures Limited | 12% | McGeever, Michael | 0 % | 70.7% | 0.41% |
| Probi AB | 34.7 | 27.7 | 55.8 | -13% | -19% | 0% | 933% | 18% | | - | | - | - | Symrise AG | 51% | Swedbank Robur Fonder AB | 12% | AP Fonden 4 | 8% | 47.8% | 0.17% |
| Recipharm AB | 12.8 | 7.9 | 13.1 | 8% | 38% | 28% | 48% | 9% | | 6 | | 14.4 | 12% | Eldered, Thomas | 20% | Backsell, Lars | 12% | Lannebo Fonder AB | 7% | 58.6% | 0.14% |
| SenzaGen AB | 3.6 | 2.5 | 5.0 | -10% | 15% | 5% | 78% | -15% | | - | | - | - | Borrebaeck, Carl Ame Krister | 11% | Lindstedt, Malin | 10% | 3Rs Management And Consulting Aps | 5% | 59.4% | - |
| Vistin Pharma A.S.A. | 1.2 | 1.1 | 2.9 | -2% | -4% | -12% | 2% | 1% | | 1 | ■ ◆ | 1.2 | 1% | Pactum AS | 16% | State Street Global Advisors, Inc. | 14% | Saga Tankers ASA | 12% | 52.4% | 0.05% |



Executive Summary
FCF Overview
Market Overview

Sector Analysis

Therapeutics - Micro

Therapeutics - Small

Therapeutics - Medium

Diagnostics

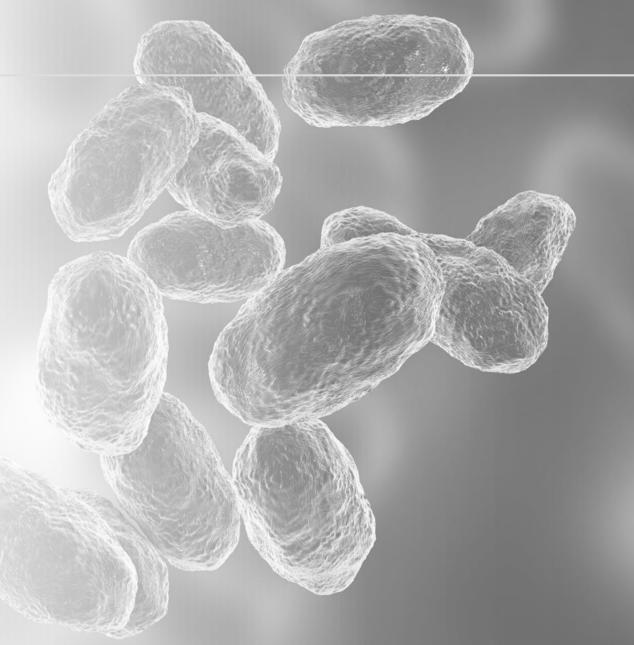
Biotechnology - Others

Services

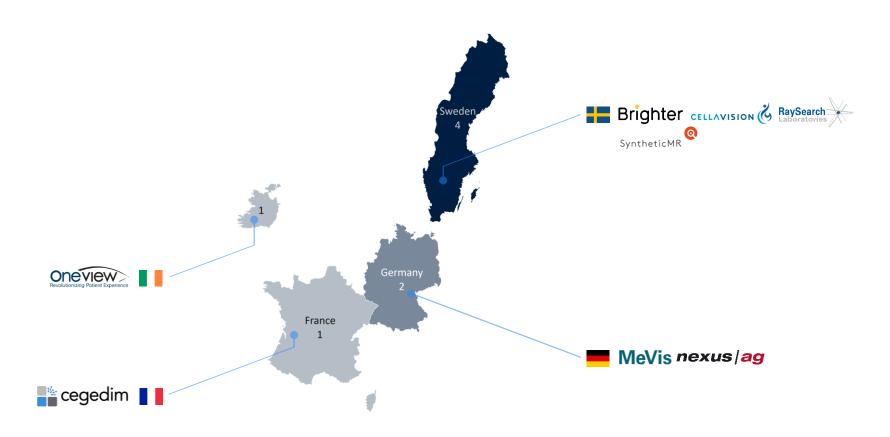
Health Technology

Medical Technology

Supplier & Engineering



Total Number and Distribution of Public Health Technology Companies by Country (HQ)



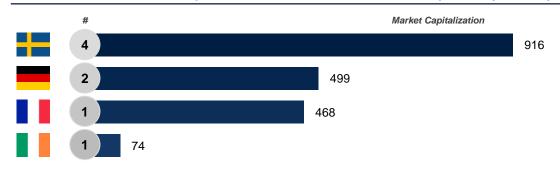


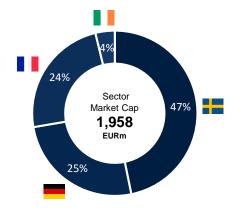
Health Technology

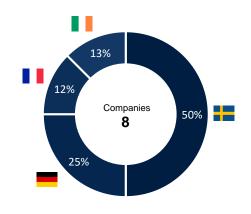
Market Overview

Sweden hosts 3
Health Technology
companies with a
total market
capitalization of EUR
916m, followed by
Germany (1), France
(1) and Ireland (2)

Total Number and Market Capitalization of Public Life Science Companies by Country









Health Technology

| | | General Information | | | | | | | | | | | | | | Valua | ation Me | etrics | | | | |
|---------------------------------|--|---|-----------------|-------------|----------------------------|---------------|------------------------|-------|-------|--------------------------|----------------|---------------|-----|------|---------------|--------|----------|--------|--------|--------|------------------------|----------------------|
| | | | Produ | icts in / o | <u>n</u> | | | Yea | ar of | _ | | | | | | | EV/S | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opmen | t Market | Primary Exchange | US Listing | Cross- g border IPO | Found | | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash / | Expected Profitability | Cash / Loss (LFY) |
| Brighter AB | Brighter AB (publ) develops solutions for data-driven and mobile healthcare services in Sweden. | SWE Other, Healthcare Mobile Communication, Telehealth | - | | NASDAQ OMX Sweden | | | 2007 | 2012 | 4 | 52 | 0 | 52 | -39% | -32% | 20.0x | - | nm | 26.2x | 2% | >2022 | 2 0.1x |
| Cegedim S.A. | Cegedim SA operates as a technology and services company in the digital flows of the healthcare ecosystem and in B2B marketing, and in the design of enterprise software for healthcare and insurance professionals worldwide. | Other, Electronic Medical Record / Electronic Health Record | - | - | Euronext Paris | | | 1969 | 1995 | 921 | 468 | 19 | 705 | 6% | 7% | 1.6x | 1.5x | 1.5x | 1.4x | 3% | Profitable | F |
| CellaVision AE | CellaVision AB (publ) develops and sells digital solutions for blood and body fluids analysis in health care services sector. | Other, Diagnostic SWE devices, Reusable instruments | - | 6 | NASDAQ OMX Sweden | ✓ | | 1994 | 2007 | 0 | 408 | 14 | 398 | 28% | 35% | 14.4x | 12.6x | - | - | 46% | Profitable | - |
| | MeVis Medical Solutions AG develops, markets, and sells software for analyzing and evaluating image data to equipment manufacturers of medical devices and providers of medical IT platforms in the United States and Europe. | DEU Software / eHealth | - | - | Deutsche Börse | | | 1992 | 2007 | 37 | 67 | 7 | 60 | 13% | 22% | 3.4x | 3.4x | 4.3x | 5.4x | 16% | Profitable | - |
| Nexus AG | Nexus AG develops and sells software and hardware solutions, and provides IT services worldwide. | Electronic Medical DEU Record / Electronic Health Record | - | - | Deutsche Börse | | | - | 2000 | 38 | 433 | 37 | 396 | 10% | 9% | 3.5x | 3.4x | 3.0x | 2.8x | 21% | Profitable | - |
| Oneview Healthcare plc | Oneview Healthcare PLC, a software and solutions company, designs, develops, implements, and sells software and related consultancy services for the healthcare sector in Ireland, the United States, Australia, and the Middle East and North Africa. | Other, Electronic Medical Record / Electronic Health Record | - | - | - | | | 2012 | 2016 | 90 | 74 | 29 | 46 | -86% | -78% | 5.0x | 6.7x | 2.6x | 1.4x | 81% | >2022 | ? 1.1x |
| RaySearch Laboratories AB | RaySearch Laboratories AB (publ) operates as a medical technology company in Sweden, North America, Asia, rest of Europe, and internationally. | SWE Software / eHealth | - | - | NASDAQ OMX Sweden | ✓ | | 2000 | 2003 | 0 | 344 | 11 | 341 | 17% | 21% | 6.1x | 5.9x | 5.6x | 4.5x | 13% | Profitable | - |
| Synthetic MR AB | Synthetic MR AB (publ) develops and markets software solutions for magnetic resonance imaging (MRI) in Sweden and internationally. | Other, Medical SWE devices, Software / eHealth | - | - | Nordic Growth Market | ✓ | | 2007 | 2013 | 2 | 112 | 2 | 110 | 25% | 35% | 47.6x | 32.6x | 20.9x | 12.0x | 50% | Profitable | - |
| | | | | | | | | | | | | | | | | | | | | | | |



Health Technology

| | | | | | | | Share | Price Ana | alysis | | | | | · | | Share | eholding Str | ructure | | | |
|---------------------------------|----------------|------|-------|------|---------|---------|---------|----------------------|--------------------|------------------|--------------|-----------------|-----------|---------------------------------|-----|--|--------------|--|------------|-----------------------------|-------------------------------|
| | | 52 W | leek_ | 8 | Share P | rice Pe | rformar | псе | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sel | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| Brighter AB | 0.8 | 0.4 | 1.2 | 1% | 17% | -25% | 114% | 12% | | 1 | | 0.9 | 20% | Avanza Fonder AB | 13% | Sjöstedt, Truls | 9% | Alandsbanken Asset Management Limited | 9% | 77.0% | 1.54% |
| Cegedim S.A. | 33.6 | 29.5 | 44.5 | -7% | -10% | 1% | -13% | -1% | " | 4 | → | 40.2 | 20% | FCB SAS | 53% | FMR LLC | 11% | DNCA Finance | 6% | 46.9% | 0.05% |
| CellaVision AB | 17.1 | 11.9 | 18.2 | 6% | 28% | 17% | 1065% | 24% | | - | | - | - | Fåhraeus, Christer | 10% | Swedbank Robur Fonder AB | 9% | Capital Research and Management Company | 5% | 82.5% | 0.71% |
| MeVis Medical Solutions AG | 36.8 | 35.8 | 40.6 | 0% | 3% | -6% | -33% | -4% | | 1 | → | 38.0 | 3% | Varian Medical Systems, Inc. | 74% | HANSAINVEST Hanseatische Investment-GmbH | 6% | Greiff Capital Management AG | 5% | 23.3% | 0.18% |
| Nexus AG | 27.5 | 21.0 | 29.8 | 2% | 8% | 6% | 175% | 6% | | 4 | | 31.5 | 15% | FMR LLC | 10% | Allianz SE, Insurance Investments | 5% | Allianz Asset Management AG | 0 % | 95.5% | 0.07% |
| Oneview Healthcare plc | 1.1 | 1.1 | 3.2 | -12% | -14% | -16% | -54% | -28% | | 2 | • | 2.4 | 120% | Vicars, James William | 19% | McCloskey, Mark | 10% | FIL Limited | 9% | 54.5% | 0.07% |
| RaySearch Laboratories AB | 10.0 | 9.9 | 22.6 | -8% | -16% | -42% | nm | 40% | | 3 | → | 11.5 | 14% | Löf, Johan | 20% | Lannebo Fonder AB | 9% | Swedbank Robur Fonder AB | 8% | 68.6% | 0.29% |
| Synthetic MR AB | 27.7 | 10.0 | 35.7 | -1% | -2% | -6% | 933% | 63% | | 2 | | 38.1 | 37% | Persson, Staffan | 35% | Warntjes, Bertus Marcel | 9% | State Street Global Advisors, Inc. | 7% | 38.9% | 0.04% |



Executive Summary
FCF Overview
Market Overview

Sector Analysis

Therapeutics - Micro

Therapeutics - Small

Therapeutics - Medium

Diagnostics

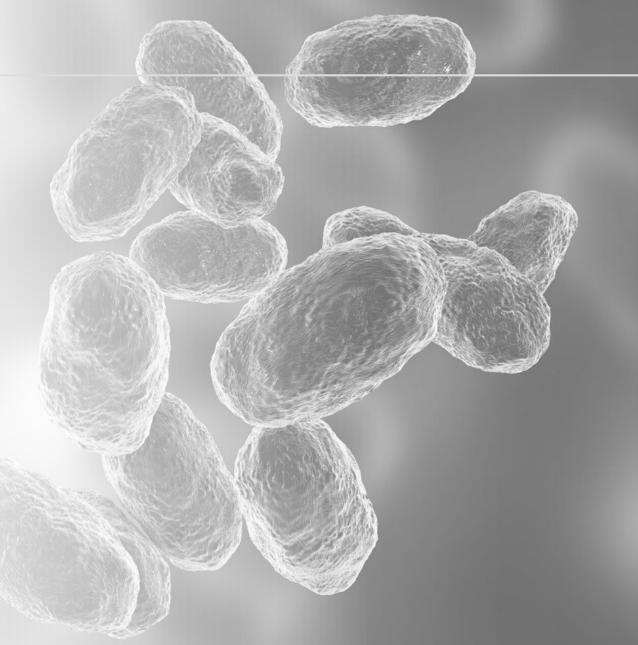
Biotechnology - Others

Services

Health Technology

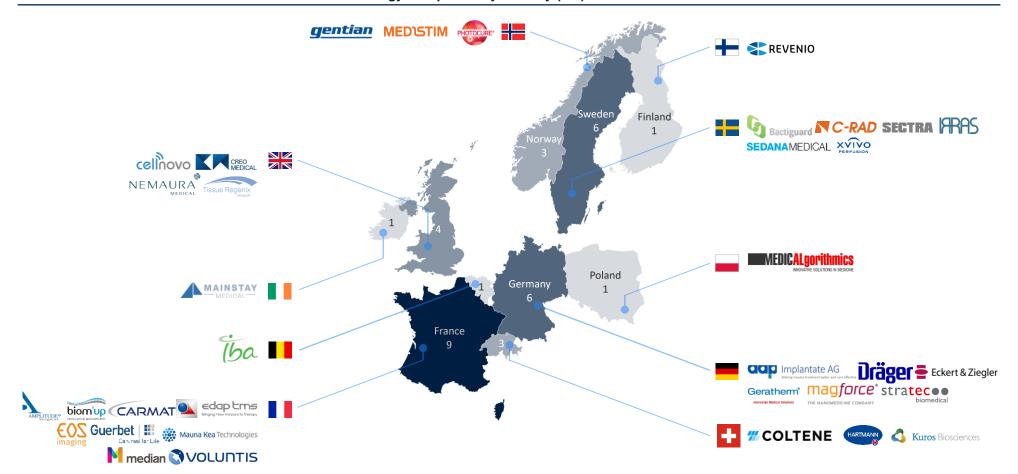
Medical Technology

Supplier & Engineering





Total Number and Distribution of Public Medical Technology Companies by Country (HQ)





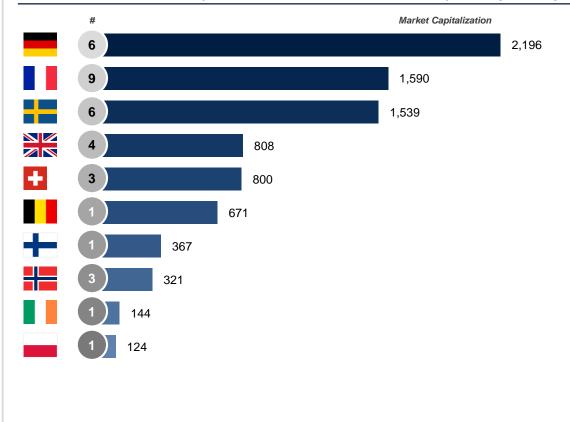
Medical Technology

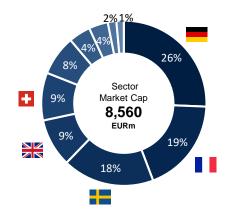
Market Overview

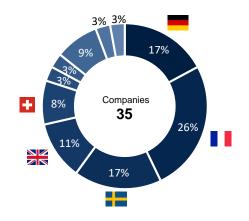
The 6 German Medical Technology companies feature the highest market capitalization (EUR 2.2bn) in Europe

France hosts the most public Medical Technology companies (9), followed by Germany (6) and Sweden (6)

Total Number and Market Capitalization of Public Life Science Companies by Country









| | | General Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|---|---|--|------------------|----------|----------------------------|---------------|---------------------|---------|--------|--------------------------|---------------|-----------------|-----|------|--------------|--------|---------|--------|--------|-----|---------------------------|------|
| | | | Product | s in / o | <u>n</u> | | | Yea | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment | Market | Primary Exchange | US Listing | Cross- border IP | O Found | i. IPO | Capital Raised since IPO | Marke Cap. | t Cash (LFY) | EV | | ROCE LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | |
| aap Implantate AG | aap Implantate AG, a medical device company, develops, manufactures, and markets trauma products for orthopedics in Germany and the United States. | DEU Biomaterials, Non- active implantable devices, Wound care | - | 5 | Deutsche Börse | | | 1990 | 1999 | 0 | 55 | 11 | 42 | -23% | -16% | 3.4x | 3.5x | 3.1x | 2.6x | 24% | >2022 | 1.2x |
| Amplitude Surgical S.A. | Amplitude Surgical SA develops and markets products for orthopedic surgery. | FRA Other, Non-active implantable devices | - | 5 | Euronext Paris | | | 1997 | 2015 | 165 | 147 | 34 | 237 | -16% | 0% | 2.7x | 2.4x | 2.1x | 1.9x | 13% | 2019 | 2.8x |
| Bactiguard Holding AB | Bactiguard Holding AB (publ), a medtech company, develops and provides infection prevention solutions. | SWE Other, Coatings, Single use devices | - | 4 | NASDAQ OMX Sweden | | | 2005 | 2014 | 95 | 91 | 1 | 108 | -4% | -2% | 8.3x | - | 7.5x | 6.5x | 1% | >2022 | 1.8x |
| Biom'Up S.A. | Biom'Up S.A. designs, develops, manufactures, and sells collagen-based absorbable medical devices for biosurgery primarily in France. | Other, Biomaterials, FRA Non-active implantable devices | - | 2 | Euronext Paris | | | 2005 | 2017 | 59 | 124 | 33 | 102 | -72% | -32% | 33.1x | 41.7x | 12.8x | 5.6x | 54% | >2022 | 1.1x |
| Carmat S.A. | Carmat SA engages in the development of bioprosthetic artificial heart organs for the treatment of heart failure patients. | FRA Other, Active implantable devices | 1 | - | Euronext Paris | ✓ | | 2008 | 2010 | 148 | 182 | 61 | 125 | -51% | -51% | nm | - | nm | 62.3x | 87% | >2022 | 2.1x |
| Cellnovo Ltd. | Cellnovo Limited, a medical technology company, develops and markets mobile diabetes management systems. | GBR Other, Delivery devices, Electro mechanical medical devices | - | 1 | Euronext Paris | ✓ | ✓ | - | 2015 | 54 | 60 | 13 | 53 | -82% | -71% | 37.1x | 42.5x | 18.0x | 5.6x | 43% | >2022 | 0.7x |
| COLTENE Holding AG | COLTENE Holding AG develops, manufactures, and sells consumables and small equipment for dental practitioners in Europe, the Middle East, Africa, Asia, Latin America, South America, North America, and internationally. | CH Dental devices | - | 5 | Swiss Stock Exchange |) | | 2005 | 2006 | 0 | 370 | 19 | 358 | 16% | 19% | 2.4x | 2.5x | 2.4x | 2.3x | 13% | Profitable | - |
| C-Rad AB | C-RAD AB (publ), together with its subsidiaries, develops, manufactures, and sells systems with applications in radiation therapy for the treatment of cancer worldwide. | SWE Medical devices | - | - | NASDAQ OMX Sweden | | | 2004 | 2007 | 16 | 92 | 1 | 91 | -15% | -13% | 10.6x | - | - | - | 5% | >2022 | 0.5x |
| Creo Medical Ltd. | Creo Medical Limited develops and sells instruments for surgical endoscopy in the United Kingdom. | GBR Electro mechanical medical devices, Reusable instruments | - | 2 | AIM London | | | 2003 | 2016 | 24 | 114 | 10 | 104 | -68% | -84% | - | - | nm | - | 68% | >2022 | 1.1x |
| Drägerwerk AG & Co. KGaA | Drägerwerk AG & Co. KGaA develops equipment and solutions in the fields of medical and safety technology in Europe, Americas, Africa, Asia, and Australia. | Other, Anaesthetic DEU and respiratory devices | - | 5 | Deutsche Börse | ✓ | | 1889 | 1992 | 105 | 989 | 204 | 979 | 7% | 6% | 0.4x | 0.4x | 0.4x | 0.4x | 9% | Profitable | - |
| Eckert & Ziegler Medizintechnik AG | Eckert & Ziegler Strahlen- und Medizintechnik AG, through its subsidiaries, provides isotope technology components for medical, scientific, and industrial use worldwide. | DEU Other | - | 3 | Deutsche Börse | | | 1992 | 1999 | 25 | 193 | 53 | 146 | 11% | 9% | 1.2x | 1.0x | 1.0x | 0.9x | 25% | Profitable | - |



| | | | | | | | Share | Price An | alysis | | | | | | | | Share | holding Str | ucture | | | |
|---|----------------|------|-------|------|---------|----------|---------|----------------------|--------|--------------|------------------|--------------|--------------------|-----------|---|-----|--|-------------|--------------------------------|-------------|------------------------------|-------------------------------|
| | | 52 V | Veek | S | Share P | Price Pe | rformar | nce | | | | Conser | isus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | | YTD IPO p.a. | # of Analysts | Buy Hold Sel | Target II Price | Potential | #1 | % | #2 | % | #3 | % | Free float / & Shares out. F | Ø3M Sh. Trad. / Free Float |
| aap Implantate AG | 1.9 | 1.3 | 2.3 | -6% | -1% | 8% | -67% | -6% | | - | 1 | | 2.4 | 24% | Ratio Capital Management B.V. | 16% | Noes baheer B.V | 12% | Krebs, Jürgen W. | 12% | 63.9% | 0.04% |
| Amplitude Surgical S.A. | 3.1 | 2.9 | 5.1 | -13% | -19% | -12% | -37% | -14% | | ľ | 3 | | 4.7 | 49% | Apax Partners France | 34% | Jallabert, Olivier | 10% | Apax Partners Midmarket SAS | 9% | 48.0% | 0.19% |
| Bactiguard Holding AB | 2.7 | 1.8 | 2.9 | 3% | 11% | 17% | -34% | -10% | _= | | - | | - | - | KK Invest AB | 28% | Bactiguard B.V. | 28% | Ståhlberg, Jan | 6% | 30.4% | 0.23% |
| Biom'Up S.A. | 9.8 | 8.4 | 13.9 | 11% | 5% | -27% | -7% | 2% | - | • | 2 | | 14.8 | 51% | Bpifrance Participations SA | 16% | GIMV NV | 10% | Bpifrance Investissement | 9% | 64.3% | - |
| Carmat S.A. | 20.2 | 19.5 | 28.3 | -1% | 0% | -7% | 7% | 1% | | | 1 | | 35.0 | 74% | Bastid, Pierre | 14% | Truffle Capital | 8% | Santé Holdings S.r.l. | 8% | 63.5% | 0.11% |
| Cellnovo Ltd. | 3.6 | 2.4 | 5.3 | 25% | 18% | 8% | -66% | -30% | | -1- | 1 | | 3.5 | -3% | Forbion Capital Partners | 11% | Andera Partners | 10% | Advent Venture Partners | 7% | 79.2% | 0.05% |
| COLTENE Holding AG | 87.6 | 74.8 | 89.7 | 5% | 13% | 8% | 159% | 8% | | | 3 | → | 81.7 | -7% | Huwa Finanz- und Beteiligungs AG, Asset Management Arm | 26% | Ratikon Privatstiftung | 11% | Tweedy, Browne Company LLC | 7% | 83.9% | 0.12% |
| C-Rad AB | 3.0 | 1.9 | 3.8 | -10% | 0% | 4% | 131% | 8% | | | - | | - | - | Svea Ekonomi AB, Asset Management Arm | 10% | Kling, Lars | 9% | Nyberg, Lars Gunnar | 8% | 65.0% | 0.28% |
| Creo Medical Ltd. | 1.4 | 0.8 | 1.7 | -6% | 8% | 79% | 56% | 32% | | | - | | - | - | Development Bank of Wales Pic | 16% | Hargreave Hale Limited, Asset Management Arm | 16% | Hancock, Christopher Paul | 6% | 56.9% | - |
| Drägerwerk AG & Co. KGaA | 61.7 | 59.0 | 102.0 | 2% | -19% | -15% | 631% | 8% | | | 9 | | 63.3 | 3% | Dr. Heinrich Dräger GmbH | 38% | Norges Bank Investment Management | 4% | Franklin Resources, Inc. | 2% | 57.8% | 0.40% |
| Eckert & Ziegler Medizintechnik AG | 37.4 | 32.3 | 41.3 | 4% | 8% | 3% | 154% | 5% | | | 2 | | 41.5 | 11% | Eckert Wagniskapital und Frühphasenfinanzierung GmbH | 31% | Loys Investment S.A. | 73% | Axxion S.A. | 7 3% | 68.5% | 0.19% |



| | | General Information | | | | | | | | | | | | | | Valua | tion Me | trics | | | | |
|---|--|---|---------------------|--------|----------------------------|---------------|---------------------|---------|-------|--------------------------|----------------|---------------|-----|------|---------------|--------|---------|--------|--------|-----|------------------------|--------|
| | | | Products i | n / on | - | | | Ye | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Ma | ırket | Primary Exchange | US Listing | Cross- border IF | O Found | | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | |
| EDAP TMS S.A. | EDAP TMS S.A., together with its subsidiaries, develops, produces, markets, distributes, and maintains a portfolio of minimally-invasive medical devices for the treatment of urological diseases worldwide. | Diagnostic and FRA therapeutic radiation devices | n - | 5 | NASDAQ | ✓ | ✓ | 1979 | 1997 | 155 | 75 | 0 | 60 | -9% | - | 1.7x | 1.7x | 1.6x | 1.5x | - | >2022 | ? 0.0x |
| EOS imaging S.A. | EOS imaging SA designs, develops, markets, and sells medical imaging devices for osteo-articular conditions and orthopedics, and related applications. | FRA Other, Imaging | - | 3 | Euronext Paris | ✓ | | 1989 | 2012 | 47 | 110 | 7 | 119 | -34% | -13% | 3.6x | 3.1x | 2.6x | 2.0x | 12% | 2019 | 0.9x |
| Gentian Diagnostics AS | Gentian Diagnostics AS develops and manufactures in vitro diagnostic (IVD) products for the detection and quantification of specific markers for use in clinical chemistry analyzers. | NOR Diagnostic devices | - | 5 | NASDAQ OMX Norway | | | 2001 | 2016 | 0 | 97 | 14 | 83 | -7% | -8% | 24.4x | - | - | - | 69% | >2022 | - |
| Geratherm Medical AG | Geratherm Medical AG operates as a medical technology company in Germany. | Other, Anaesthetic DEU and respiratory devices | - | 5 | Deutsche Börse | | | - | 2000 | 4 | 53 | 9 | 45 | 2% | 4% | 2.1x | 1.8x | 1.7x | - | 30% | Profitable | - |
| Guerbet S.A. | Guerbet SA engages in the research, development, production, and sale of contrast media products for medical imaging, interventional radiology and theranostics, and delivery systems. | FRA Other, Imaging | - | 5 | Euronext Paris | √ | | 1926 | 1992 | 0 | 718 | 75 | 996 | 14% | 12% | 1.3x | 1.2x | 1.3x | 1.2x | 8% | Profitable | - |
| Ion Beam Applications S.A. | Ion Beam Applications SA, a medical technology company, focuses on providing solutions for the diagnosis and treatment of cancer in Belgium, the United States, and internationally. | BEL Diagnostic and therapeutic radiation devices, Diagnostic devices | | 2 | Euronext Brussels | ✓ | | 1986 | 1998 | 6 | 671 | 27 | 687 | -36% | -8% | 2.1x | 2.0x | 2.2x | 1.9x | 8% | 2018 | 3 0.7x |
| IRRAS AB | IRRAS AB, a commercial stage medical technology company, develops and sells cutting-edge medical equipment for a range of brain pathologies in Sweden and internationally. | SWE Other, Delivery devices, Diagnostic devices, Single use devices | | - | NASDAQ OMX Sweden | | | 2011 | 2017 | 29 | 56 | 9 | 42 | -22% | -24% | - | 37.1x | - | - | 29% | >2022 | ? 1.4x |
| IVF Hartmann Holding AG | IVF Hartmann Holding AG provides medical consumer goods in Switzerland and internationally. | Other, Ophthalmic andOptical devices, Single use devices, Wound care | - | 5 | Swiss Stock Exchange | , | | 1874 | 1992 | 0 | 364 | 24 | 327 | 14% | 16% | 2.6x | - | - | - | 20% | Profitable | - |
| Kuros Biosciences AG | Kuros Biosciences AG, a biopharmaceutical company, engages in the discovery, development, and commercialization of biopharmaceutical products for the treatment and prevention of chronic diseases. | Biomaterials, Denta CH devices, Non-active implantable devices | 6 | 3 | Swiss Stock Exchange | • | | 2000 | 2016 | 18 | 67 | 14 | 52 | -23% | -20% | 52.9x | - | 87.3x | 20.4x | 19% | >2022 | ? 1.0x |
| MagForce AG | MagForce AG operates in the field of nanotechnology-based cancer treatment in Germany. | DEU Other | - | 3 | Deutsche Börse | ✓ | | 1997 | 2007 | 37 | 119 | 1 | 123 | -57% | -49% | nm | nm | 44.0x | 18.3x | 3% | 2021 | 0.1x |
| Mainstay Medical International plc | Mainstay Medical International plc, together with its subsidiaries, operates as a medical device company in Europe, the United States, and Australia. | Active implantable devices, Electro mechanical medica devices | ı - | 1 | Euronext Paris | | ✓ | 2008 | 2014 | 78 | 144 | 8 | 148 | - | -518% | - | 87.1x | 24.4x | 11.2x | 75% | >2022 | 2 0.3x |



| | | | | | | | Share | Price Ana | alysis | | | | | | | Share | holding Str | ructure | | | |
|---|----------------|-------|-------|------|---------|---------|---------|----------------------|------------------------|---------------------|-------------|--------------------|-----------|---|-----|---|-------------|---|----------------|-----------------------------|-------------------------------|
| | | 52 W | leek | S | Share P | rice Pe | rforman | се | | _ | Conse | nsus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized [p.a.) | I 1M 3M YTD IPO p.a | # of a. Analysts | Buy Hold Se | Target II Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| EDAP TMS S.A. | 2.6 | 1.8 | 3.6 | 35% | 38% | 9% | -69% | -5% | | . 1 | | 5.6 | 114% | Bruce & Co., Inc. | 7% | Archon Capital Management LLC | 7 4% | PSM Vermögensverwaltung GmbH Langen v.d. Goltz & Partner | 2% | 99.8% | 0.18% |
| EOS imaging S.A. | 4.9 | 4.0 | 5.9 | -4% | -4% | 2% | -29% | -5% | 1 | 3 | • | 6.3 | 29% | Bpifrance Investissement | 10% | Financiere De l'Echiquier | 5% | Financiere Arbevel | 5% | 86.1% | 0.31% |
| Gentian Diagnostics AS | 6.9 | 3.6 | 8.2 | 20% | 74% | 67% | 141% | 75% | | - - | | - | - | Holta Life Sciences AS | 14% | Jorgensen, Espen Tidemann | 14% | Vatne Equity AS | > 5% | 0.0% | - |
| Geratherm Medical AG | 10.8 | 10.7 | 13.7 | -8% | -10% | -11% | 112% | 4% | | 1 | • | 13.4 | 24% | GMF Beteiligungsberatung GmbH, Frankfurt am Main | 43% | Universal-Investment- Gesellschaft mbH | 79% | Sparta AG | 0% | 56.9% | 0.13% |
| Guerbet S.A. | 57.2 | 50.0 | 87.7 | 4% | -12% | -28% | 839% | 9% | | 6 | → | 64.0 | 12% | Guerbet, Michel | 56% | Norges Bank Investment Management | 7 3% | Guerbet S.A., ESOP | 7 2% | 41.9% | 0.24% |
| lon Beam Applications S.A. | 22.9 | 15.8 | 48.7 | 2% | 40% | -4% | -31% | -2% | _ | . 3 | → | 21.8 | -5% | Belgian Anchorage S.A. | 21% | Capfi Delen Asset Management NV | 7% | Institut National des Radioéléments | 5% | 74.0% | 0.49% |
| IRRAS AB | 2.4 | 2.2 | 4.2 | 0% | -13% | -19% | -48% | 8% | | - | - | - | - | Lexington Holding Assets Ltd | 14% | Serendipity Group AB | 6% | Serendipity Ixora AB (publ) | 7 3% | 76.8% | - |
| IVF Hartmann Holding AG | 153.1 | 144.9 | 185.5 | -3% | 0% | -1% | nm | 41% | | - | | - | - | Paul Hartmann AG | 67% | AMG Fondsverwaltungs AG | 8% | Credit Suisse Asset Management (Switzerland) | 0 % | 32.9% | 0.06% |
| Kuros Biosciences AG | 8.1 | 145.4 | 12.7 | 12% | -14% | -20% | -70% | -38% | | 1 | | 24.8 | 206% | Aldabra B.V | 16% | Incubation B.V | 16% | Life Sciences Partners BV | 9% | 27.0% | 0.16% |
| MagForce AG | 4.5 | 4.5 | 8.4 | -24% | -21% | -31% | -93% | -21% | | 4 | • | 13.3 | 196% | Avalon capital one GMBH | 24% | Skagen AS | 7 3% | M&G Investment Management Limited | 7 2% | 75.7% | 0.22% |
| Mainstay Medical International plc | 16.4 | 12.6 | 17.0 | 0% | 9% | 6% | -22% | -6% | •• | l ₁ | | 28.0 | 71% | Sofinnova Partners | 28% | KCK Ltd. | 18% | Fountain Healthcare Partners | 11% | 22.2% | 0.11% |



| | | General Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|-----------------------------------|--|---|------------------|-----------|-------------------------------|---------------|---------------------|---------|-------|--------------------------|----------------|---------------|-----|------|---------------|--------|---------|--------|--------|-----|---------------------------|----------|
| | | | Produc | ts in / c | <u>n</u> | | | Yea | ar of | _ | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment | Market | Primary Exchange | US Listing | Cross- border IP | O Found | . IPO | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | | Expected Profitability | |
| Mauna Kea Technologies S.A. | Mauna Kea Technologies SA, a medical device company, develops and sells endomicroscopy and optical biopsy for the diagnosis and treatment of cancer and other diseases. | FRA Imaging, Reusable instruments | - | 1 | Euronext Paris | ✓ | | 2000 | 2011 | 58 | 62 | 17 | 52 | -61% | -41% | 5.4x | 6.4x | 6.6x | 3.8x | 63% | >2022 | 2 1.7x |
| Median Technologies S.A. | Median Technologies SA operates in the field of medical imaging in France and internationally. | Other, FRA Bioinformatics, Diagnostic services | - | - | Euronext Paris | | | 2002 | 2011 | 59 | 81 | 28 | 53 | -69% | -64% | 8.3x | - | - | - | 83% | >2022 | 2 1.7x |
| Medicalgorith mics S.A. | Medicalgorithmics S.A. operates as a cardiac monitoring company. | POL Diagnostic devices | - | 1 | Warsaw Stock Exchange | e | | 2005 | 2011 | 11 | 124 | 6 | 140 | 14% | 18% | 4.8x | 2.9x | 2.5x | 2.2x | 9% | Profitable | · - |
| Medistim A.S.A. | Medistim ASA develops, produces, services, leases, and distributes medical devices for cardio-vascular surgery in the Unites States, Europe, Asia, and internationally. | NOR Electro mechanical medical devices, Imaging, Reusable instruments | - | 5 | NASDAQ OMX Norway | | | 1984 | 2004 | 0 | 153 | 6 | 148 | 24% | 32% | 5.1x | 4.8x | 4.2x | 3.6x | 22% | Profitable | - |
| Nemaura Medical Inc. | Nemaura Medical Inc., a medical technology company, discovers, develops, and commercializes specialty medical devices. | GBR Diagnostic devices, Single use devices | 1 | - | NASDAQ | ✓ | ✓ | 2009 | 2014 | 2 | 492 | 5 | 487 | -44% | -35% | - | - | - | - | 92% | >2022 | 2 3.2x |
| PhotoCure A.S.A. | Photocure ASA, a specialty pharmaceutical company, engages in the research, development, production, distribution, marketing, and sale of pharmaceutical products and related technical medical equipment. | NOR Other, Imaging, Diagnostic devices | 2 | 1 | NASDAQ OMX Norway | ✓ | | 1997 | 2000 | 25 | 71 | 11 | 59 | -15% | -20% | 3.8x | 3.9x | 3.0x | 2.1x | 44% | 2019 | 9 3.2x |
| Revenio Group Oyj | Revenio Group Oyj designs, manufactures, and sells medical instruments used for measuring intraocular pressure and bone density in Finland, other Europe, and internationally. | Electro mechanical FIN medical devices, Diagnostic devices | - | - | Helsinki Stock Exchange | e | | - | 2001 | 0 | 367 | 4 | 363 | 64% | 75% | 15.4x | 13.7x | 11.6x | 9.7x | 28% | Profitable | · - |
| Sectra AB | Sectra AB (publ) provides IT systems for managing medical images and patient information. | Other, Diagnostic SWE and therapeutic radiation devices | - | - | NASDAQ OMX Sweden | | | 1978 | 1999 | 0 | 866 | 27 | 845 | 33% | 37% | 6.9x | 6.8x | 6.4x | 6.0x | 23% | Profitable | . |
| Sedana Medical AB | Sedana Medical AB (publ), a medical technology company, develops, markets, and sells medical devices in Sweden. | SWE Other, Anaesthetic and respiratory devices, Hospital hardware | - | 5 | NASDAQ OMX Sweden | | | - | 2017 | 10 | 145 | 8 | 138 | -3% | -4% | 39.1x | 33.8x | 22.2x | 19.2x | 61% | 2020 | 0 19.5x |
| STRATEC Biomedical AG | STRATEC Biomedical AG designs and manufactures automation and instrumentation solutions in the fields of in-vitro diagnostics and life sciences in Germany and internationally. | DEU Other, Diagnostic instrumentation | - | - | Deutsche Börse | ✓ | | 1979 | 1998 | 0 | 786 | 31 | 806 | 15% | 10% | 4.4x | 3.8x | 3.6x | 3.3x | 12% | Profitable | ÷ - |
| Tissue Regenix Group plc | Tissue Regenix Group plc, a medical technology company, develops and commercializes platform technologies in the field of tissue engineering and regenerative medicine in the United States and internationally. | Other, Regenerative GBR Medicine, Wound care | 4 | 1 | AIM London | ✓ | | 2006 | 2010 | 106 | 142 | 18 | 124 | -23% | -24% | 67.1x | 21.3x | 8.8x | 5.6x | 36% | >2022 | 2 1.8x |



| | | | | | | | Share | Price Ana | alysis | | | | | | | Sharel | holding St | ructure | | | |
|-----------------------------------|----------------|------|-------|------|---------|---------|--------|----------------------|--------------------|------------------|---------------|-----------------|-----------|---|-------------|--|-------------|--|-------------|-----------------------------|-------------------------------|
| | | 52 V | leek_ | 8 | Share P | rice Pe | rforma | nce | | | Consen | sus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Sell | Target Price | Potential | #1 | % | #2 | % | #3 | % | Free float / Shares out. | Ø3M Sh. Trad. / Free Float |
| Mauna Kea Technologies S.A. | 2.5 | 1.9 | 5.5 | -17% | -18% | -48% | -81% | -21% | | 4 | → | 3.2 | 28% | INOCAP Gestion | 1 4% | Capital Research and Management Company | 7 3% | Loiseau, Alexandre | 2% | 96.5% | 0.23% |
| Median Technologies S.A. | 6.9 | 6.5 | 12.5 | -14% | -26% | -24% | -32% | -5% | ЧŤ | - | | - | - | Shanghai Furui Science & Technology Co., Ltd. | 13% | ePlanet Capital | 12% | Abingworth LLP | 11% | 20.1% | 0.04% |
| Medicalgorith mics S.A. | 34.3 | 22.8 | 69.9 | 16% | 20% | -28% | 677% | 35% | | 2 | • | 49.8 | 45% | Nationale-Nederlanden Powszechne Towarzystwo Emerytalne S.A. | 13% | Dziubinski, Marek | 11% | AEGON Powszechne Towarzystwo Emerytalne S.A. | 5% | 88.7% | 0.11% |
| Medistim A.S.A. | 8.4 | 6.9 | 9.5 | -3% | -3% | 15% | 968% | 18% | | 1 | → | 8.3 | -1% | Brøymer, Øyvin Anders | 22% | Salvesen & Thams AS | 10% | Swedbank Robur Fonder AB | 1 6% | 57.8% | 0.16% |
| Nemaura Medical Inc. | 2.4 | 2.2 | 6.0 | 0% | -35% | -44% | 1079% | 99% | | - | | - | - | Chowdhury, Dewan Fazlul Hoque | (7% | Timol, Bashir | 79% | Ismail, Sufyan | 0 % | 87.1% | 0.00% |
| PhotoCure A.S.A. | 3.3 | 2.3 | 3.6 | 15% | 16% | 19% | -83% | -9% | | 1 | | 3.9 | 19% | KLP Kapitalforvaltning AS | 17% | High Seas AS | 10% | Fondsfinans Kapitalforvaltning ASA | 8% | 79.1% | 0.10% |
| Revenio Group Oyj | 15.3 | 11.0 | 15.7 | 12% | 19% | 28% | 1272% | 17% | | 1 | | 14.2 | -7% | Evli Fund Management Company Ltd. | 5% | Joensuun Kauppa Ja Kone Oy | 1 % | Gerako Oy | 7 4% | 55.9% | 0.20% |
| Sectra AB | 22.7 | 12.4 | 23.5 | 7% | 36% | 30% | 1532% | 15% | | 3 | • | 18.4 | -19% | Nordea Investment Management AB | 14% | Sampo Oyj, Asset Management Arm | 10% | Kronander, Torbjörn | 8% | 65.9% | 0.03% |
| Sedana Medical AB | 7.7 | 1.9 | 9.0 | 8% | 42% | 98% | 284% | 265% | | 1 | | 11.1 | 45% | Gibeck, Sten | 12% | Linc AB | 11% | Magnusson, Ola G. | 9% | 38.4% | - |
| STRATEC Biomedical AG | 66.0 | 49.1 | 79.3 | -2% | -8% | 1% | 1573% | 15% | | 6 | ■ | 70.4 | 7% | Dinter, Tanja Van | 10% | Herdor GmbH & Co. KG | 10% | Leistner, Ralf | 10% | 58.7% | 0.14% |
| Tissue Regenix Group plc | 0.1 | 0.1 | 0.1 | -4% | 42% | 19% | 14% | 2% | I. | 1 | • | 0.2 | 48% | Invesco Ltd. | 29% | Woodford Investment Management Limited | 26% | Techtran Group Limited | 9% | 80.9% | 0.02% |



| | | General Information | | | | | | | | | | | | | | Valu | ation M | etrics | | | | |
|-----------------------|---|--|---------------------|---------|-------------------------|---------------|----------------------|--------|------|----|----------------|---------------|-----|--------------|---------------|--------|---------|--------|--------|------------|------------|------------------------|
| | | | Products in | in / on | | | | Year | of | - | | | | | | | EV/ | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Ma | | | US Listing | Cross- border IPO | Found. | | | Market Cap. | Cash (LFY) | EV | ROE (LTM) | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash TA | | Cash / / Loss (LFY) |
| Voluntis S.A. | Voluntis S.A. develops digital therapeutic solutions for diabetes, oncology, and other therapeutic areas in France and the United States. | FRA Other | 1 | 2 | Euronext Paris | | | 2001 | 2018 | 30 | 92 | 2 | 94 | | - nm | 9.2x | - | 10.0x | 5.3x | 23% | >2022 | 2 0.2x |
| Xvivo Perfusion AB | Xivo Perfusion AB (publ), a medical technology company, provides solutions for organ, tissue, and cell preservation and perfusion in connection with transplantation. | Reusable SWE instruments, Single use devices | - | 5 | NASDAQ OMX Sweden | ✓ | | 1998 | 2012 | 0 | 288 | 19 | 269 | 2% | 2% | 18.7x | 17.9x | 14.6x | 10.1x | 36% | Profitable | · - |







Executive Summary
FCF Overview
Market Overview

Sector Analysis

Therapeutics - Micro

Therapeutics - Small

Therapeutics - Medium

Diagnostics

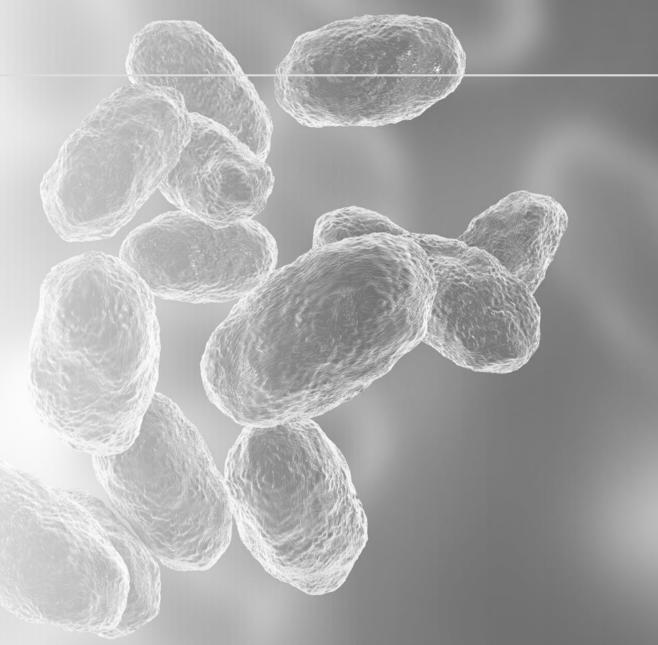
Biotechnology - Others

Services

Health Technology

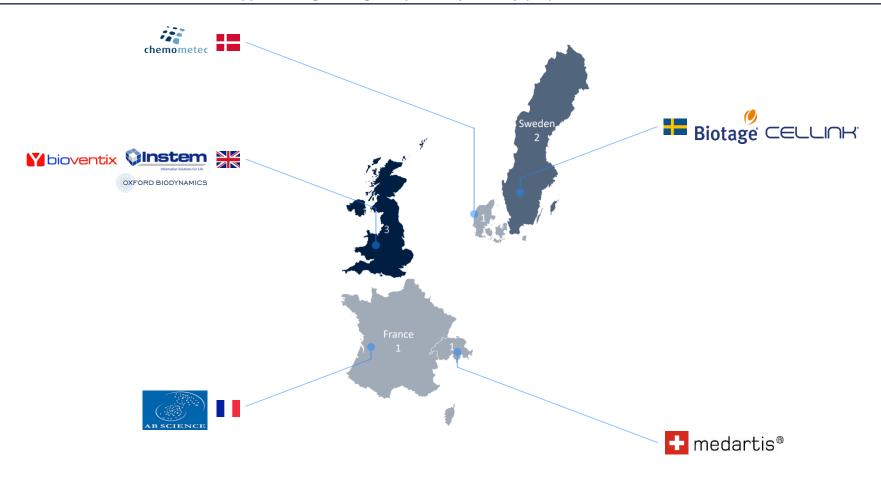
Medical Technology

Supplier & Engineering





Total Number and Distribution of Public Supplier & Engineering Companies by Country (HQ)

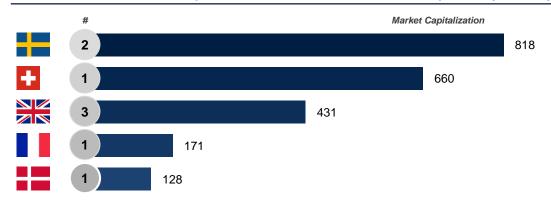


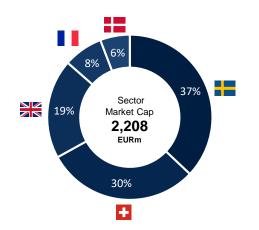


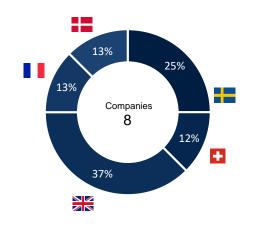
Market Overview

Sweden features with 2 Supplier & Engineering companies the highest total market capitalization of EUR 818m, followed by Switzerland (EUR 660m) and the United Kingdom (EUR 431m)

Total Number and Market Capitalization of Public Life Science Companies by Country









| | | General Information | | | | | | | | | | | | | Valu | ation Me | trics | | | | |
|------------------------------|--|--|-------------------------|---------------------------------|---------------|------------------------|--------|-------|--------------------------|----------------|---------------|-----|-------|---------------|--------|----------|--------|--------|--------------|------------|----------------------|
| | | | Products in / o | <u>n</u> | | | Yea | ır of | _ | | | | | | | EV/S | Sales | | _ | | |
| Name | Business Description | HQ Subsector | Devel- opment Market | Primary Exchange | US Listing | Cross- g border IPO | Found. | | Capital Raised since IPO | Market Cap. | Cash (LFY) | EV | | ROCE (LTM) | CY2017 | CY2018 | CY2019 | CY2020 | Cash / TA | | Cash / Loss (LFY) |
| AB Science S.A. | AB Science S.A., a pharmaceutical company, engages in the discovery, development, and commercialization of protein kinase inhibitors for use in human and veterinary medicines. | FRA Other | 15 - | Euronext Paris | ✓ | | 2001 | 2010 | 73 | 171 | 39 | 143 | -253% | -89% | 94.8x | 89.3x | 1.9x | 0.8x | 77% | 2020 |) 1.4x |
| Biotage AB | Biotage AB (publ), a life science company, provides solutions, knowledge, and experience in the areas of analytical chemistry, medicinal chemistry, peptide synthesis, separation, and purification. | Instrumentation, SWE Laboratory equipment | | NASDAQ OMX Sweden | ✓ | | - | 2000 | 5 | 711 | 9 | 712 | 26% | 19% | 10.2x | 9.2x | 8.1x | 7.3x | 10% | Profitable | - |
| Bioventix plc | Bioventix PLC, a biotechnology company, manufactures and supplies sheep monoclonal antibodies (SMAs) for use in diagnostics applications. | GBR Other, Synthesis services | | AIM London | | | 2003 | 2010 | 0 | 171 | 6 | 165 | 61% | 71% | 22.5x | 19.2x | 18.2x | - | 55% | Profitable | - |
| Cellink AB | Cellink AB (publ) develops a range of bioinks for various applications. | SWE Other, Cell culture | | NASDAQ OMX Sweden | ✓ | | - | 2016 | 12 | 107 | 1 | 102 | 2% | 2% | - | - | - | - | 13% | Profitable | - |
| CHEMOMETE C A/S | ChemoMetec A/S designs, develops, and produces instruments for a range of applications in cell counting and evaluation areas in Denmark and internationally. | Instrumentation, DNK Laboratory equipment | | NASDAC OMX Copenhag en | | | 1997 | 2006 | 1 | 128 | 1 | 130 | 19% | 21% | 11.4x | - | - | - | 9% | Profitable | - |
| Instem plc | Instern plc provides information technology solutions to the life science market worldwide. | GBR Software / eHealth | | AIM London | ✓ | | 1969 | 2010 | 19 | 53 | 3 | 50 | 8% | 7% | 2.3x | 2.0x | 1.9x | 1.7x | 10% | Profitable | - |
| Medartis Holding AG | Medartis Holding Ag, a medical device company, develops, manufactures, and sells implant solutions for internal surgical fixation worldwide. | Other, Dental CH devices, Non-active implantable devices | | Swiss Stock Exchange | | | 1997 | 2018 | 106 | 660 | 2 | 722 | 5% | 10% | 8.4x | - | 6.9x | 5.9x | 2% | Profitable | - |
| Oxford BioDynamics plc | Oxford BioDynamics Plc, a biotechnology company, discovers and develops biomarkers for use within the pharmaceutical and biotechnology industry primarily in the United Kingdom and Malaysia. | Other, Diagnostic services, Genomics, Screening | | AIM London | | | 2007 | 2016 | 24 | 207 | 11 | 196 | -21% | -23% | nm | - | - | - | 81% | >2022 | 2.5x |



| | | | | | | | Share | Price Ana | alysis | | | | | - | | Share | holding St | ructure | | | |
|------------------------------|----------------|------|------|-----|---------|----------|--------------|----------------------|--------------------|------------------|-------------|--------------------|-----------|---|-----|--|------------|---------------------------------|-------------|---------------------------------|-------------------------------|
| | | 52 V | Veek | 5 | Share P | Price Pe | rforma | nce | | | Conse | nsus | | | | | | | | | |
| Name | Share Price | Low | High | 1M | 3M | YTD | since IPO | annualized (p.a.) | 1M 3M YTD IPO p.a. | # of Analysts | Buy Hold Se | Target II Price | Potential | #1 | % | #2 | % | #3 | % | Free float / S Shares out. I | Ø3M Sh. Trad. / Free Float |
| AB Science S.A. | 4.1 | 4.1 | 11.2 | -6% | -50% | -51% | -68% | -13% | _III]. | 1 | | 10.0 | 143% | AMY SAS | 30% | Bioparticipations | 5% | Moussy, Alain | 1 3% | 50.6% | 0.56% |
| Biotage AB | 11.0 | 5.1 | 11.0 | 8% | 58% | 29% | 40% | 2% | _lu_ | 1 | | 12.0 | 10% | Swedbank Robur Fonder AB | 8% | Vind LV AS | 8% | AP Fonden 4 | 5% | 81.0% | 0.29% |
| Bioventix plc | 33.2 | 0.3 | 33.7 | 9% | 12% | 19% | 2030% | 44% | | 1 | | 30.0 | -10% | Castlefield Investment Partners LLP | 10% | Hargreave Hale Limited, Asset Management Arm | 10% | Harrison, Peter J. | 10% | 82.4% | 0.09% |
| Cellink AB | 12.9 | 8.1 | 15.3 | 1% | -1% | 10% | 391% | 158% | | - | _ | - | - | Gatenholm, Erik | 33% | Martinez, Hector | 22% | Fore C Investment Holding AB | 9% | 32.3% | - |
| CHEMOMETE C A/S | 8.2 | 3.4 | 9.3 | 40% | 88% | 132% | 631% | 19% | | - | | - | - | ChemoMetec Holding A/S | 34% | Glensbjerg, Hans Martin | 12% | Eising, Michael | 6% | 46.1% | 0.59% |
| Instem plc | 3.3 | 1.6 | 3.8 | -5% | 19% | 106% | 66% | 7% | lı_ | - | | | - | Lombard Odier Asset Management (Europe) Limited | 25% | Liontrust Investment Partners LLP | 10% | Sherwin, David M. | 9% | 62.8% | 0.06% |
| Medartis Holding AG | 56.2 | 46.2 | 67.0 | 0% | -6% | - | 37% | 7% | _ . I. | 2 | • | 53.6 | -5% | Straumann, H. C. Thomas | 48% | NexMed Holding AG | 8% | Miesch, Willi | 6% | 38.2% | - |
| Oxford BioDynamics plc | 2.4 | 1.6 | 3.2 | -2% | 16% | 23% | 26% | 16% | ulli | - | | - | - | Millar, Christian Gurth Hoyer | 14% | Vulpes Investment Management Private Ltd | 13% | Odey Asset Management LLP | 10% | 33.8% | - |

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