

Study on investment in the health sector in Catalonia 2024

April 2025



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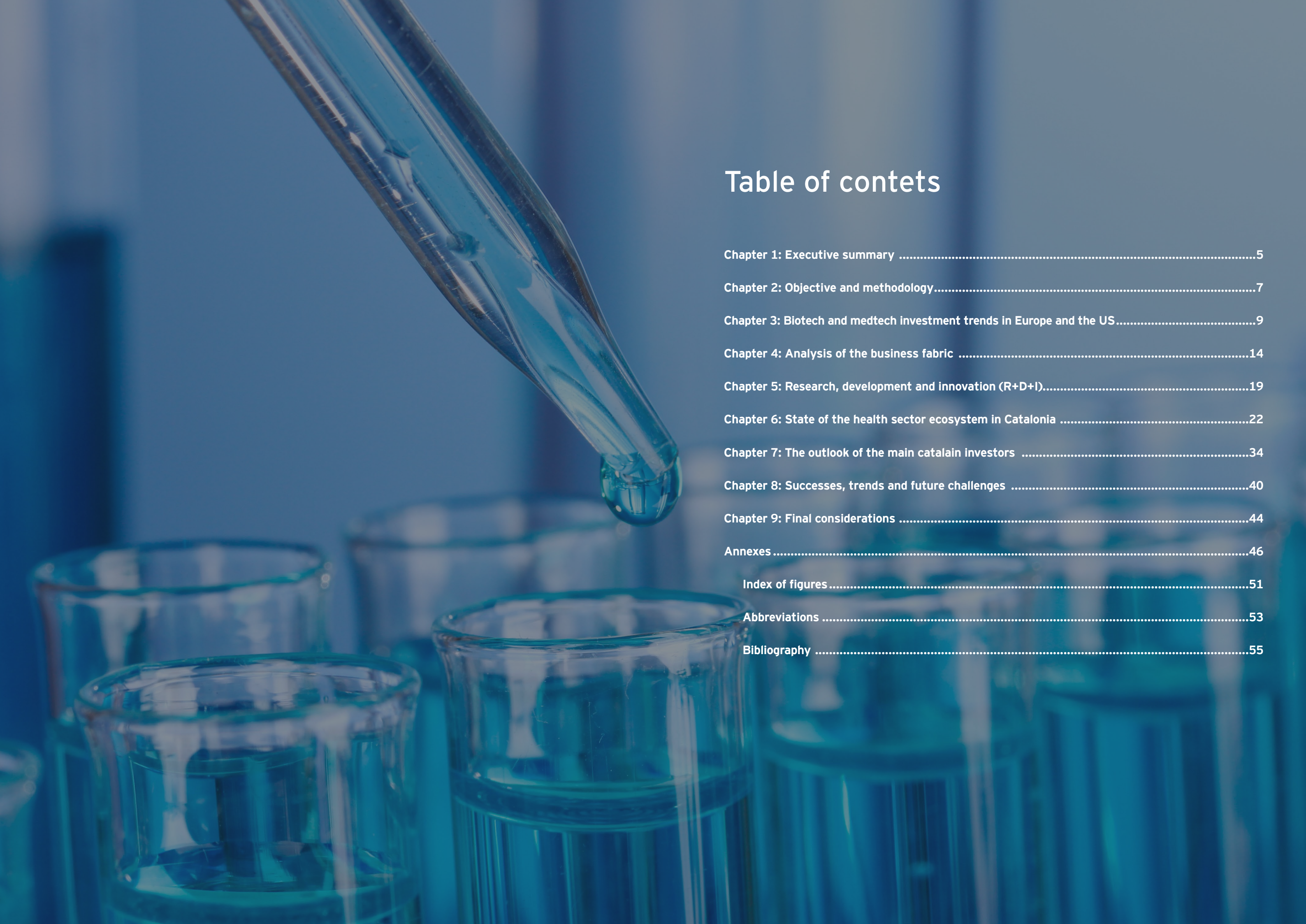


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Executive Summary

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“The Study on Investment in the Health Sector in Catalonia 2024, prepared by Catalonia.health with the support of EY, offers a detailed and holistic analysis of the Life Sciences and Health ecosystem in Catalonia. This year’s edition has gathered key data and testimonials to reflect the vision of the main players in the sector: on the one hand, investors, whose financial support is driving the sector’s growth”.

2024 has been a year of calibration for the sector: international capital has become more selective, competition has intensified and local hubs have had to demonstrate that they can transform research into market value.

In biotechnology, global investment (Europe + US) fell by 10% to 72,466 million dollars. In medical technologies, on the other hand, the correction has been more marked (36%, to 20,908 million dollars globally). However, Europe shows resilience: within this total, the continent only fell by 0.4% and retained \$8.568 billion in MedTech thanks to a growing volume of follow-on and late-stage venture capital deals.

This more stringent risk screening has raised the value of ecosystems that foster public-private partnerships and seek to speed innovations to market.

Catalonia exemplifies this dynamic. Despite the cautious environment, the territory displays a unique combination of proximity between research and market: 17% of start-ups are already commercialising products or services and 57% of companies have reached breakeven; (2024), with a distribution that prioritises biotech projects and fast-validation medical devices.

Talent is a major asset: women now account for 53% of the sector workforce and 44% of executive positions. Despite this progress in parity, which far exceeds the European average of 35% in management, the study detects a need for more experienced and strategically mature leadership to turn the science base into solid business models, especially in the early stages of start-ups.

The prioritisation of R&D in oncology reinforces the value proposition: almost 25% of companies allocate resources and investment is growing by 6.4% year-on-year.

Looking ahead to 2025, the competitive agenda is defined around three levers:

1. Transforming regulation from a potential brake to a driver of differentiation:

Consolidate a common agenda between the public sector, clinical centres and the entrepreneurial fabric that reads the new European frameworks in advance (health AI, data, devices) and adapts its projects from the outset. A unified and proactive stance towards regulators can shorten authorisation times, reduce compliance costs and attract capital that seeks environments where regulation is managed in a predictable and agile way.

2. Scalability-oriented public-private partnerships:

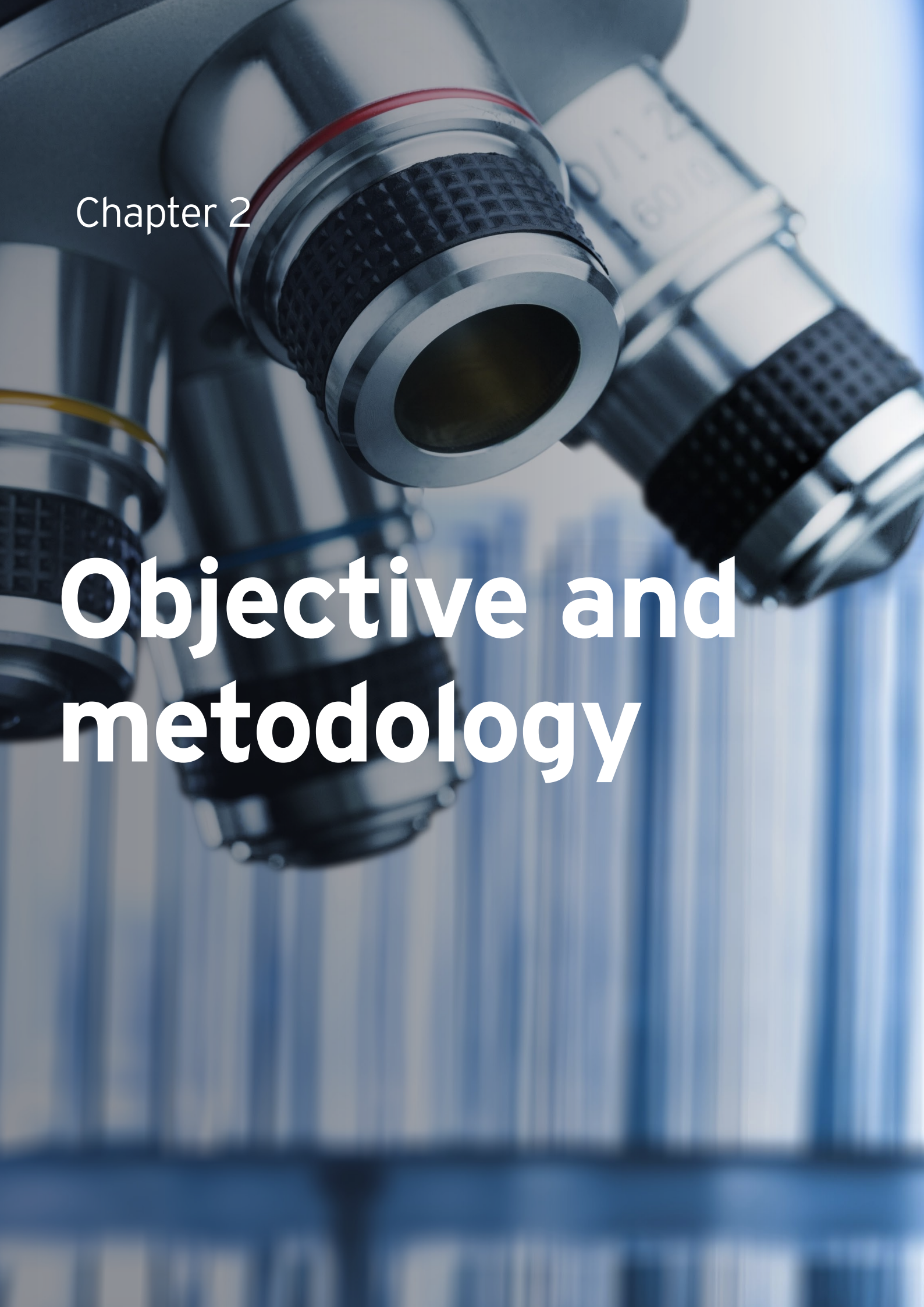
Convergence between healthcare institutions and entrepreneurs is the fastest way to reduce time-to-market and maximise clinical impact.

3. Consolidation of expert leadership:

Strengthening executive coaching and upskilling programmes will reinforce the maturity of start-ups, increasing their capacity to absorb capital and scale technologies with a guaranteed return.

4. In short, the Catalan ecosystem is emerging as a relevant player on the European chessboard:

Mature enough to compete with consolidated capitals and flexible enough to occupy the spaces left free by global caution. The key will be to turn this window of opportunity into a sustainable advantage through a rigorous development of projects and growth strategies, a systematic collaboration of the entire ecosystem and a value narrative clearly oriented towards clinical results and social impact.



Chapter 2

Objective and methodology

The aim of this report is to carry out a study of the economic-financial dynamics of the health sector in 2024, defined as the ecosystem that encompasses all agents in the Life Sciences and Health sector in Catalonia.

In preparing this report, various sources of information and methodologies of analysis have been used, adopting a holistic approach that combines data from companies in the health sector, perspectives from Catalonia's main investors, EY's global databases and secondary research.

The procedures used for data collection are detailed below:

▪ **Survey of companies in the health sector (2024)**

83% of the 190 companies associated with Catalonia.health participated in the survey. The main objective was to analyse the current economic situation of the sector, investment strategies, challenges and emerging trends, as well as specific key aspects such as the distribution of talent and research and development (R&D) activity.

▪ **Survey of investors in the health sector (2024):**

Information was collected on the activity of the main investment funds in the sector based in Catalonia. A total of 15 investment funds participated, including the analysis of aspects such as investment volumes, operations carried out, the type of companies financed, as well as the factors that have influenced investment activity and future prospects.

▪ **Working session with investors in the healthcare sector:**

A working session was held with leading healthcare investment fund managers to discuss in depth the

challenges of the sector, emerging trends, the impact of tax regulations and opportunities for collaboration and development in healthcare.

▪ **Database consultation and secondary research:**

To complement the research, the order to carry out the analysis, internal Catalonia.health and EY databases were consulted, as well as external sources, both public and private, with the aim of obtaining a global and updated vision of the health sector at an international level. The following table details the different sources used:

Table 1 | Sources consulted secondary data focused on R&D investment

Source	Contribution
Catalonia.health database	▪ Historical database that collects the indicators evaluate in previous editions of this study since 2017, especially in relation to the financing of companies (including shareholders, distribution of investors, need or new financing, etc.), business performance (investments in R&D, licenses and number of collaborations), as well as data related to investors (such as committed and disbursed capital, and the number and type of operations)
EY internal database	▪ International investment data in the biomedical and medical technology sectors ▪ European and international trends in the field of Life Sciences and Health
Secondary data	▪ Online search or research, reports and official websites to obtain complementary data on the sector

For a clearer understanding, the following table sets out the sub-sectors analysed in the study:

Table 2 | Definition o the sub-sectors under study

Subsector	Definition
Pharmaceuticals	Companies with a consolidate business model, covering the entire drug development cycle, from initial research to large-scale production and commercialization. They have their own industrial capacity, distribution networks and international presence. In addition to internal innovation, they usually complement their therapeutic pipeline through strategic alliances o acquisitions of emerging companies, especially in the biotechnology field
Biotechnologicals	Companies highly oriented towards research and innovation, specialized in the development of treatments based on biological technologies. They tend to focus on the initial phases of clinical and regulatory development, with a high need for capital to advance their pojects. They represent a key area for investment in disruptive innovation within the healthcare sector
Medical technologies (MedTech)	Companies that combine technology and medicine to develop medical devices, diagnostic system an therapeutic platforms. This subsector stands out or its scalability and direct access to the market, with high investment and transactional activity
Digital Health	Companies focused on the development and deployment of digital solutions for the management and provision of health services. They include mobile applications, telemedicine platforms, artificial intelligence and remote monitoring systems, with high potential for growth and transformation of the healthcare model
Scientific services	Companies that provide specialized research, development or custom manufacturing services (such as CRO and CDMO), providing technical an operational support to other actors in the healthcare sector. This subsector plays a key role in the efficiency and agility of biomedical innovation, with growing interest from strategic and industrial investors
Other services	Companies and entities that offer complementary services related to the health sector, such as consulting, logistics, data management or professional services. Despite their diversity, they can play a relevant role in the value chain and in certain investment operations



Chapter 3

Biotech and medtech investment trend in Europe and the US

This third chapter of the report presents investment data for the biotechnology and medical technology sectors in the United States and Europe, as these are the two most capital-intensive sub-sectors.

The year 2024 was marked by a slight downward trend in total combined international (US and EU) investment in the biotech sector, with a 10% decrease. Investment amounted to 72,466 million dollars (M\$). Despite this aggregate reduction, it is worth noting that in the European context, an increase of 5% compared to 2023 has been observed, reaching \$12.175 billion during 2024. Despite the increase in investment in Europe, investment in the US biotech sector is still almost 5 times that of Europe.

In addition, it is crucial to underline that the continent has not yet managed to regain pre-pandemic levels of investment. This is due to the impact of various macroeconomic and geopolitical factors, including rising interest rates, inflation and geopolitical tensions. As a result, capital flows have been constrained, leading investors to hold back some resources with a view to deploying them at a more favourable time.

3.1 | Biotechnology sector

Figure 1 | Capital raised in the US and Europe by the biotech sector (in US M\$) (EY, Capital IQ and VentureSource)

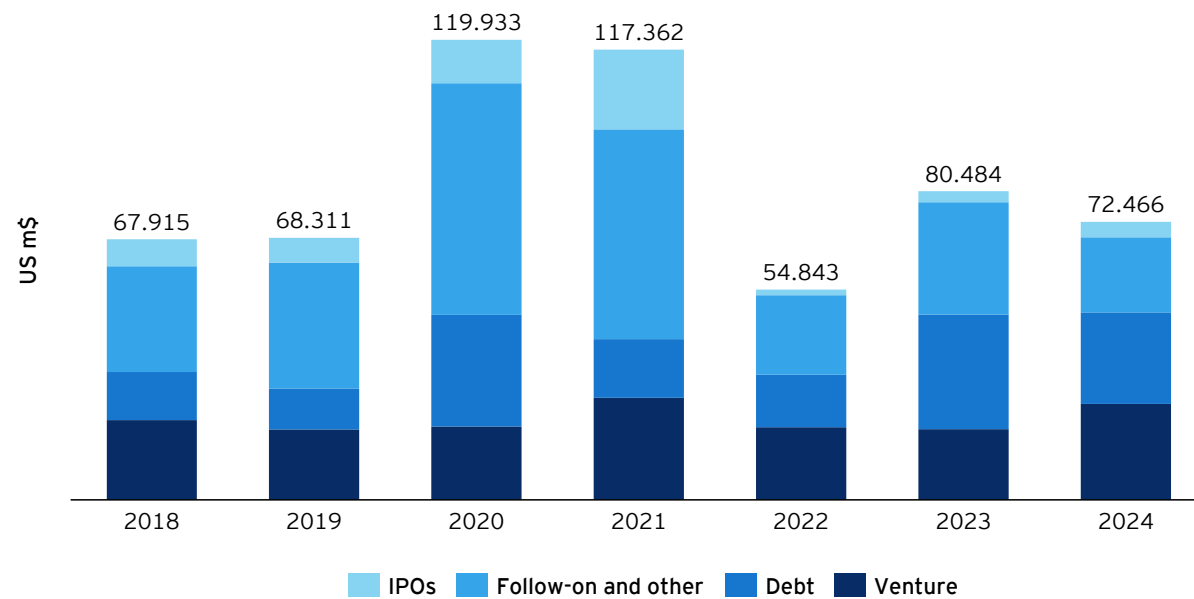


Figure 2 | Capital raised in Europe by th biotech sector (in US M\$) (EY, Capital IQ and VentureSource)

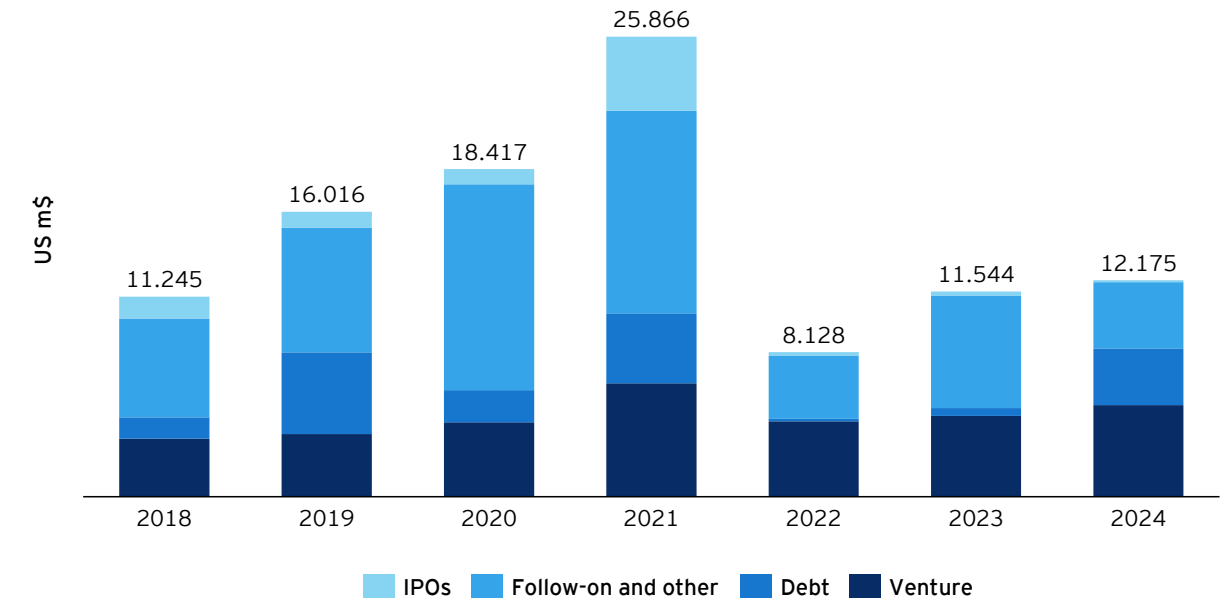
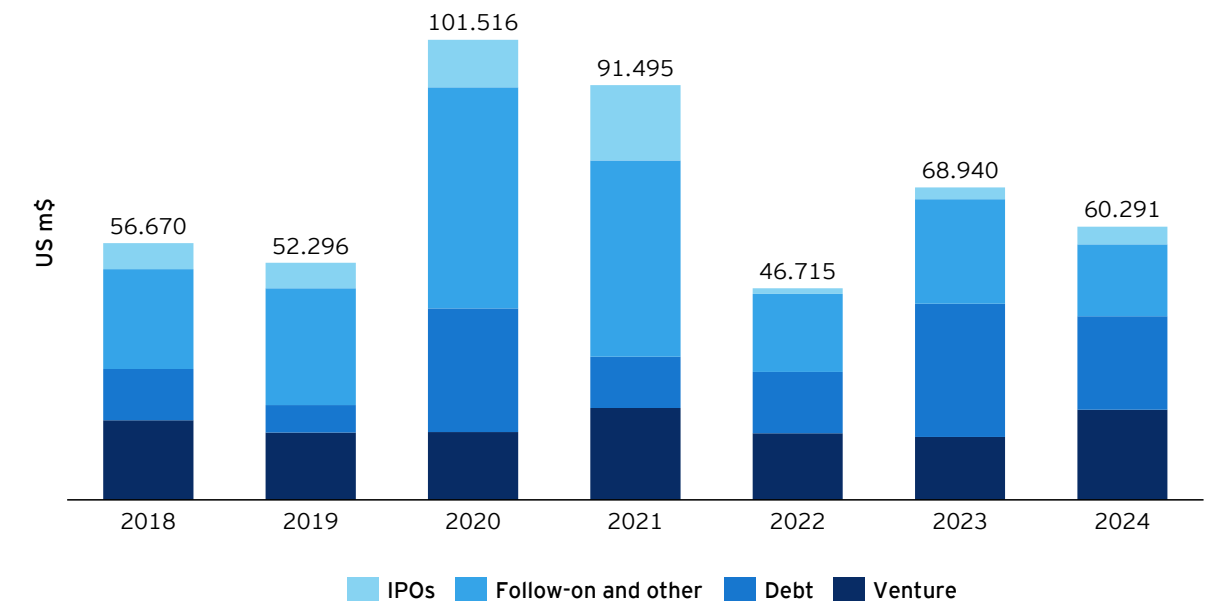


Figure 3 | Capital raised in the United States by the biotech secto (in US M\$) (EY, Capital IQ and VentureSource)



As can be seen in the charts above (Figure 3, 4 and 5), the European investment landscape in 2024 has been mainly driven by follow-on and venture capital deals.

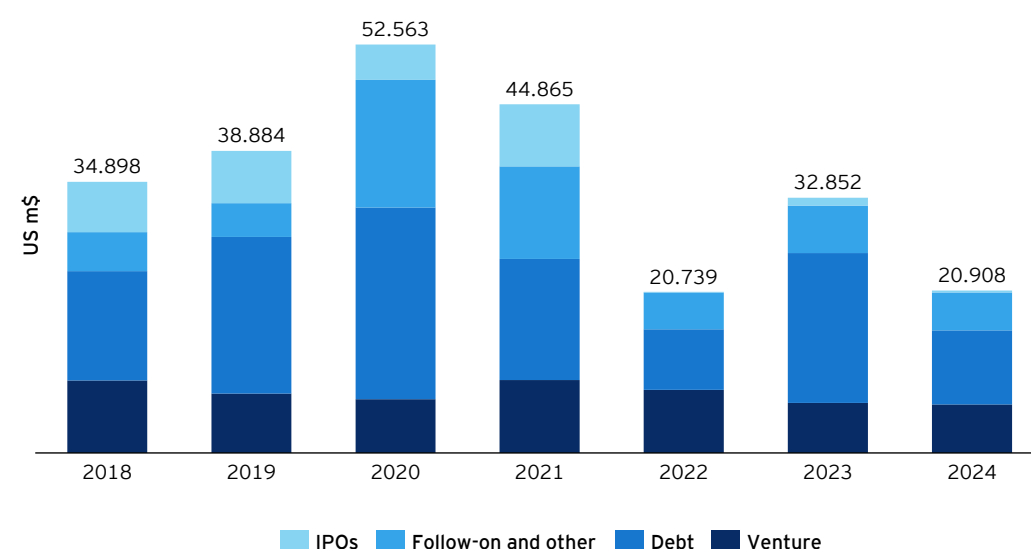
First, follow-on transactions, involving the raising of investments in additional shares issued by already listed companies, accounted for 30.6% of capital in Europe. This percentage reflects persistent investor confidence and demand for capital in established companies, thus concentrating investment in their portfolio. On the other hand, it is important to note that there have been numerous internal investment rounds that have gone publicly unnoticed and have therefore not been included in the report.

In Europe, the positive trend of venture capital investments in the biotech sector has been observed for another year, representing 42.3% of the investment in the continent. Although investment in the EU is 5 times lower than in the US, the return is the same.

On the other hand, this year in Europe 26% more debt has been used as a method of financing for the biotech sector. Compared to Europe, the use of debt in the United States remains higher, as historically this method has been used more frequently, and many companies have opted for this resource to meet their financing needs. By 2024, US non-financial corporations have managed to reduce their debt issuance by 30%. This decrease comes after a 2023 where the effects of the pandemic increased debt by 117%, compared to 2022.

3.2 | Medical technology sector

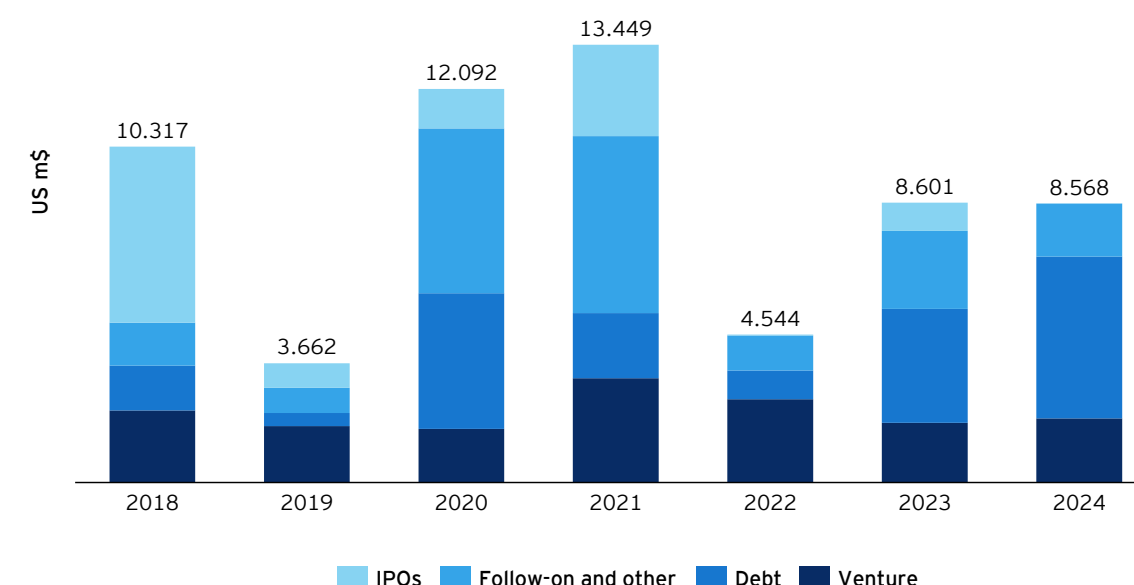
Figure 4 | Capital raised in the US and Europe by the Medtech sector (in US M\$)
(EY, Capital IQ and VentureSource)



In 2024, inflation showed signs of moderation, with an annual growth rate of around 2.8% reflecting a decline from the higher levels of the previous year. This decline should be seen, in part, as a result of central banks' efforts and measures taken to mitigate price increases. However, factors such as high capital costs and some market volatility continue to present challenges in the global economic environment.

In terms of IPOs, this situation of economic caution directly influenced the reduction in IPO activity, both in Europe and in the US. Investors, affected by global uncertainty, preferred to adopt a more cautious stance, which reduced the appetite for new listings. Moreover, the real estate crisis in some European countries and the economic slowdown in the United States added further pressure on the financial market, causing many companies to postpone their IPOs or to seek private financing alternatives. This context has resulted in a year with fewer IPOs compared to previous periods. Specifically, between 2018 and 2024, the Compound Annual Growth Rate (CAGR) was -6.4%.

Figure 5 | Capital raised in Europe by the Medtech sector (in US M\$) (EY, Capital IQ and VentureSource)



Continuing with the medical technology sector, a global investment of 20.908 billion USD has been reached in 2024, representing a slowdown compared to the previous year of 36% in the United States and Europe combined. Especially in Europe, the investment in this sector followed the global trend with a slight decrease of 0.4% to USD 8.568 billion.

Before analysing the sector, it is essential to understand its nature and context. Although often considered part of the life sciences industry, the medical technology sector differs significantly from the biotechnology sector. While biotechnology requires large investments in research and development, with long regulatory processes and lengthy clinical trials, the medical technology sector focuses on creating innovative devices and solutions with shorter development cycles and lower costs, although the new medical device regulation has significantly reduced this difference.

This structural difference favours greater responsiveness to market needs and more agile product commercialisation. In addition, the medical technology sector is characterised by a constant adaptability to technological advances and the demands of healthcare professionals, driving dynamic growth and rapid revenue generation compared to other segments of the healthcare industry.

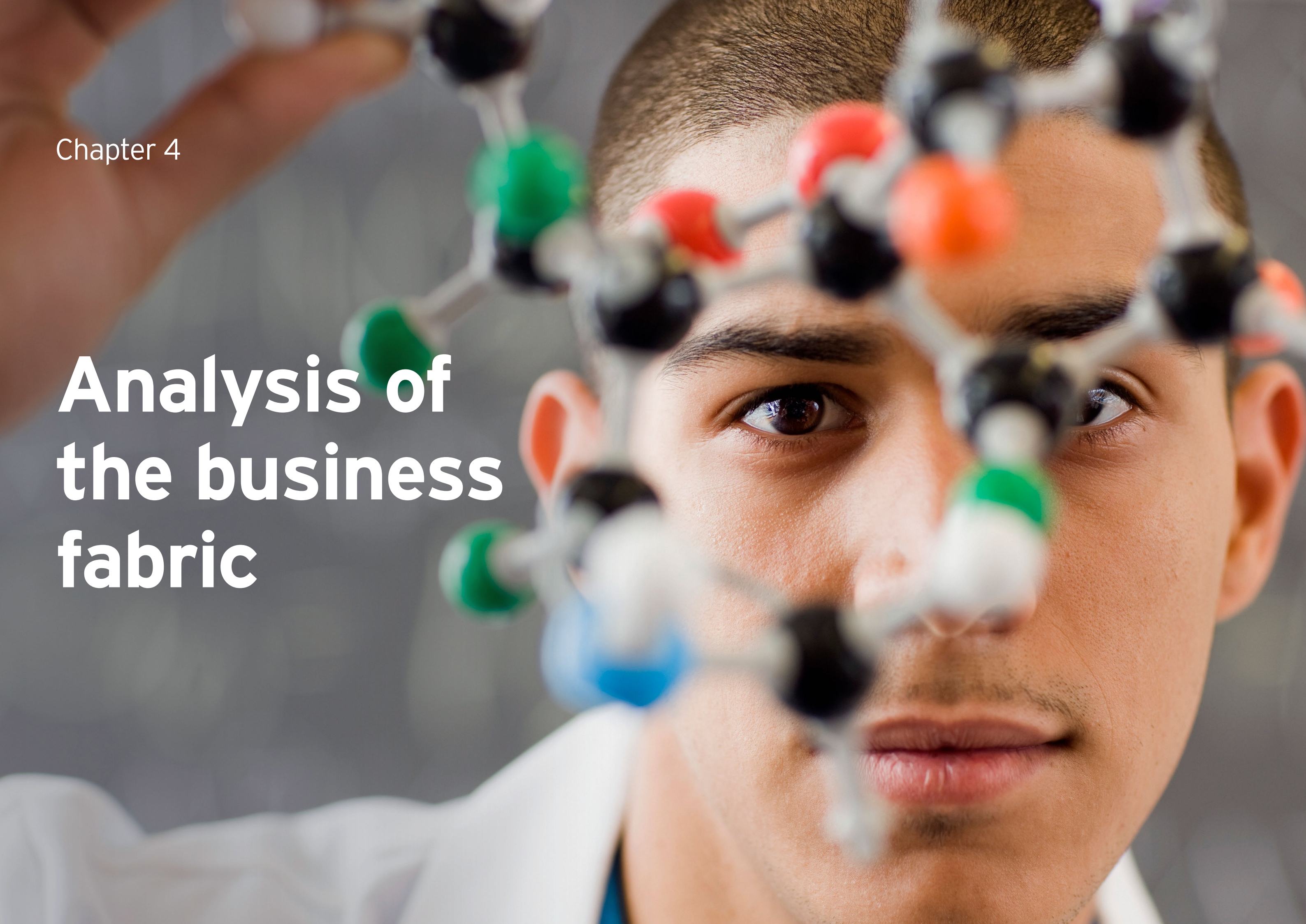
Despite the global context marked by economic and political uncertainty, the biotechnology sector continues to attract a higher volume of investment than medical technologies. Its ability to generate disruptive innovations, especially in areas such as gene therapy and precision medicine, keeps it a strategic and highly attractive sector for investors. However, 2024 has seen a reduction in investment in both sectors compared to the previous year, reflecting a general trend of financial restraint in the life sciences industry.

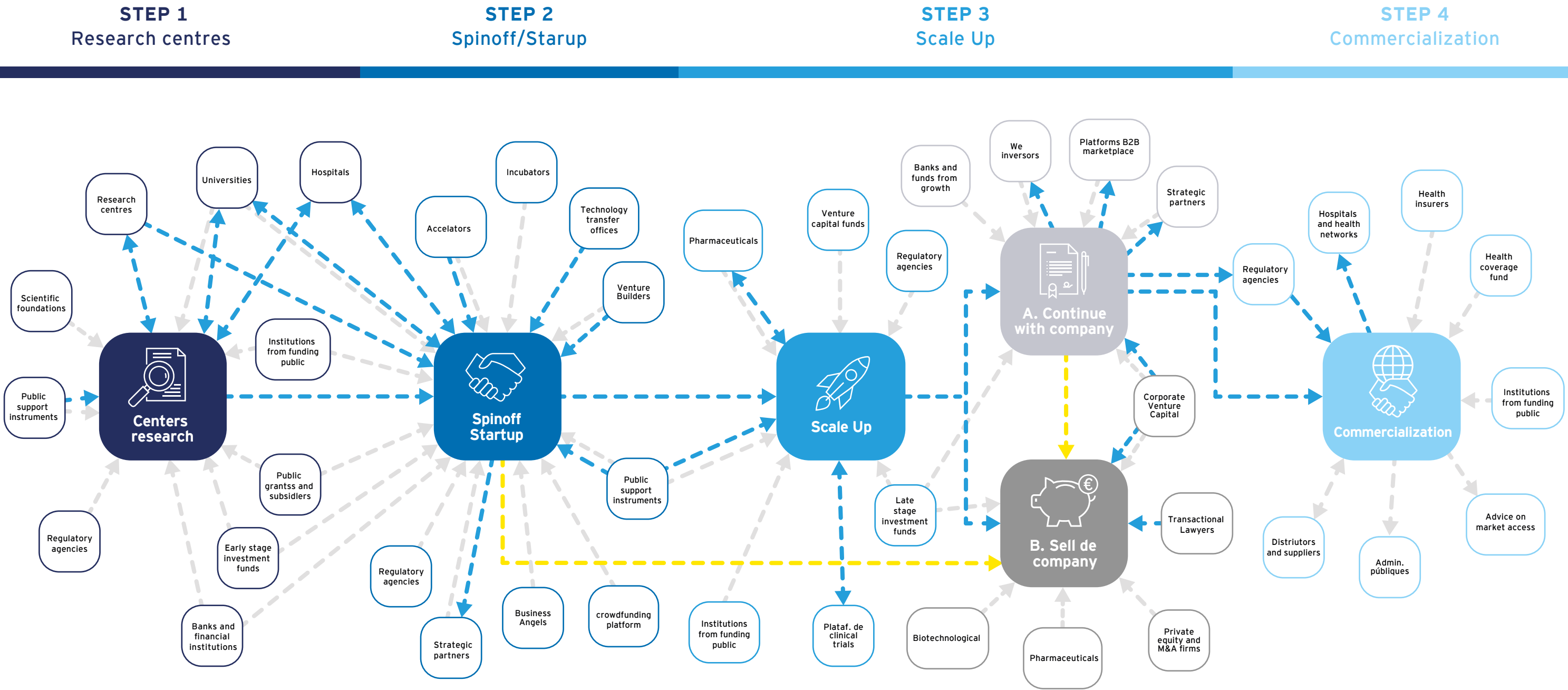
The investment dynamics in the MedTech sector in Europe in 2024 have been marked by a clear preference for debt transactions, which accounted for 58% of the total at European level and 45.6% if the United States is also taken into account. IPOs, on the other hand, have followed the opposite trend: as was also the case in the BioTech sector, they have been drastically reduced to \$2 million in Europe, a figure well below that recorded before the pandemic and representing only 0.019% of the total.

This focus on debt is partly due to the lack of specialised MedTech funds and the nature of the MedTech business model, which tends to have a shorter time to market, favouring this type of financing.

Chapter 4

Analysis of the business fabric





The health sector is one of the most dynamic and innovative sectors, with an ecosystem that encompasses a wide variety of sub-sectors, from biomedical research, to health services and medical technology, to the development of new drugs. This diversity not only makes the business fabric rich, but also makes it a sector with great challenges and opportunities. Every year, trends evolve, whether due to the emergence of new diseases, advances in treatments such as advanced therapies or the digital transformation of the healthcare system. This is why it is essential to analyse it on an ongoing basis, to understand how changes in consumer behaviour, technological innovations and socio-economic factors impact companies and the way they operate. In this way, the key players and resources necessary for the growth and evolution of the sector can be identified.

In this sense, the health sector in Catalonia is characterised by a dynamic and highly specialised business structure, in which innovation and technological development play a fundamental role. The territory has a solid ecosystem made up of more than 1,500 companies and 93 research entities dedicated to the sector, which cover the entire value chain: from knowledge generation to its clinical and commercial application. Specifically, there are 386 biotech companies, 239 digital health companies, 225 medical technology companies, 127 pharmaceutical companies, 209 service providers, 78 investors, 41 research centres, 44 hospitals (21 of which are university hospitals) and 12 universities, which interact constantly in a collaborative and innovation-oriented environment.

In order to properly assess the results of the survey, it is essential to have a global vision of the ecosystem in which the service is inserted. This is why it is necessary to understand at a high level the process that a service follows from its ideation to its commercialisation:

1. Research: the basis for innovation

The origin of many healthcare solutions lies in this initial phase, which includes both basic research, which generates fundamental scientific knowledge, and clinical research, which is more oriented towards patient applications. It is often carried out in universities, research centres, hospitals or public institutes.

4. Commercialisation: reaching the market

The last stage of the value chain is commercialisation, where the product or service reaches healthcare professionals and patients. This process may include distribution to hospitals, clinics, pharmacies or directly to consumers, depending on the type of technology developed.

At this stage, it is essential to manage aspects such as:

- Obtaining regulatory approvals from competent authorities such as the EMA (European Medicines Agency) or the FDA (Food and Drug Administration of the United States of America) or from notified bodies granting CE marking in the case of medical devices.
- The establishment of the necessary production capacity to be able to supply the market efficiently.
- The establishment of marketing and sales strategies to achieve effective market penetration.
- The financial sustainability of the company, since at this point a return on the investment made in the previous phases begins to be generated.

Business world

2. Spinoffs and startups: the move from science to business

In this phase, research results are transformed into entrepreneurial projects, either through spinoffs (companies derived from research centres or universities) or startups (independent initiatives with innovative ideas). The first technical validations and business models are initiated.

3. Scale up: growth and market strategy

Phase of entering into B investment series or entering into alliances or licensing agreements with large companies capable of completing and leading the development and market access.

Chapter 5

Research, development and innovation (R+D+i)

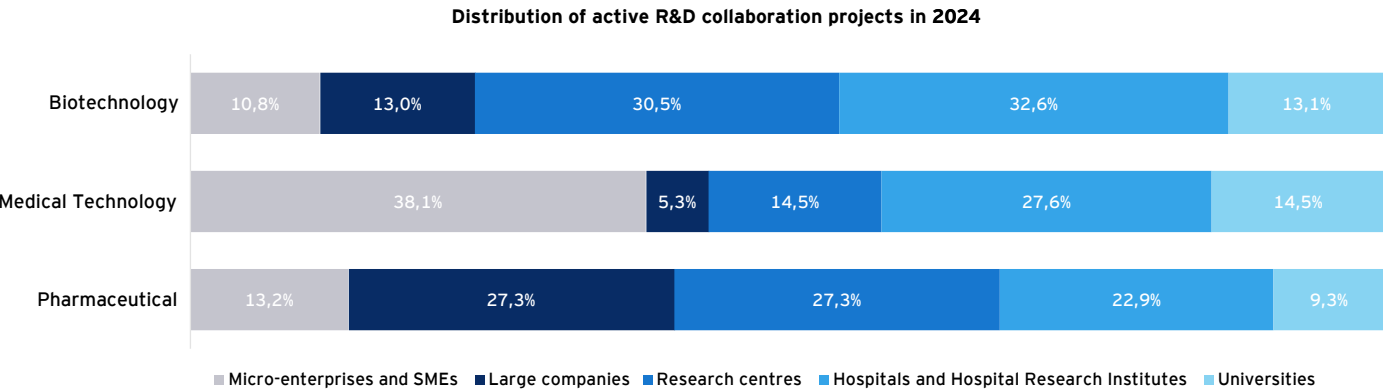
This chapter begins with a current radiography of the health sector in Catalonia, based on an exclusive survey carried out in many of the companies that form part of Catalonia.health, in collaboration with EY. This consultation has allowed us to obtain a detailed and up-to-date view of the activity, resources and trends that define the current state of the sector.

Investment in research, development and innovation (R&D&I) is essential to generate scientific knowledge and drive progress in the sector, improving both treatments and the efficiency of healthcare systems.

In Catalonia, there is a dynamic ecosystem made up of hospitals, research centres, universities, technology centres and start-ups and more consolidated innovative companies that work to develop innovative solutions with a strong scientific, technological and economic impact in an environment that favours collaboration.

This chapter analyses how collaboration between companies in R&D&I in the field of health has evolved during 2024, with a special focus on funding strategies and the impact on the economic development of the territory.

Figure 6 | Distribution of active collaborative R&D projects in 2024



The chart presents the various entities with which the biotechnology, pharmaceutical and medical technology sectors have collaborated in their research and development activities.

Activity in the biotechnology sector is concentrated in hospitals and hospital research institutes with 32.6% of projects. This trend responds to the need for access to clinical infrastructures and specialised medical equipment to validate new technologies and facilitate knowledge transfer. In this sense, many hospitals have Innovation Support Units, which act as a bridge between research and the private sector, facilitating the transformation of scientific discoveries or innovations into real applications.

As far as medical technologies are concerned, this sub-sector shows a large activity developed by small companies (38.1%), a trend that has been increasing since 2018. Hospitals and research institutes associated with hospitals also play a

relevant role in this type of innovation, where knowledge of patients' needs plays a very important role. In fact, their share has increased by 11.6% compared to 2023.

The pharmaceutical sector is characterised by the activity of large companies (27.3%) and research centres (27.3%). In this context, large-scale research projects with a long-term focus are favoured due to the large investments required for the development of new drugs and the need to obtain an economic return on the investments made (). In this context, clinical studies are often conducted in large hospitals, where a high level of clinical and biomedical expertise is available, as well as access to the number of patients needed to ensure the safety and efficacy of the drugs under development. This model reinforces and projects the innovative capacity of the sector in Catalonia and its competitiveness at international level.

Figure 7 | Companies seeking partners or the development or commercialisation of their innovations

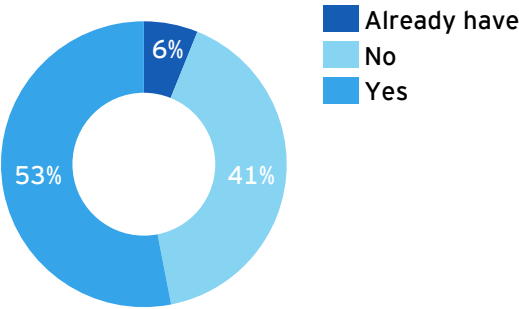
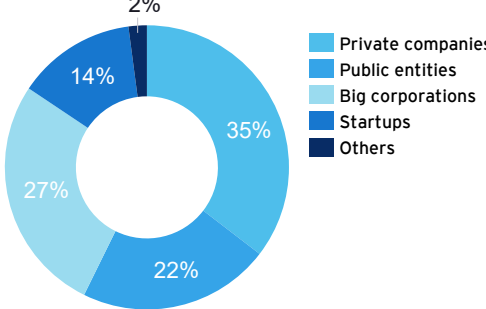


Figure 8 | Areas of collaboration: Current and potential partners in strategic partnerships



The majority of companies in the sector are still looking for partners for the development and commercialisation of their innovations, despite a slight decrease of 3% compared to 2023, but around the average of recent years. An analysis of the responses shows that biotech companies lead this trend (80%), followed by medical technology companies (75%). One of the most significant changes occurs in the pharmaceutical sector, which falls to third place with 50%, a far cry from the 75% of the previous year, when it occupied first place. This decline indicates a possible change in strategy, towards more in-house development models or alternative alliances.

These data reflect the growing importance of external collaboration in the biotech and medtech sectors, where access to shared resources, specialised expertise and advanced infrastructures is key to accelerating innovation and bringing it to market. In 2024, the most frequent alliances are between private companies and large corporations, which are consolidating their position as preferred strategic partners. These collaborations provide financing, distribution networks and production capacity, essential elements for scaling up R&D projects and ensuring their commercial viability.

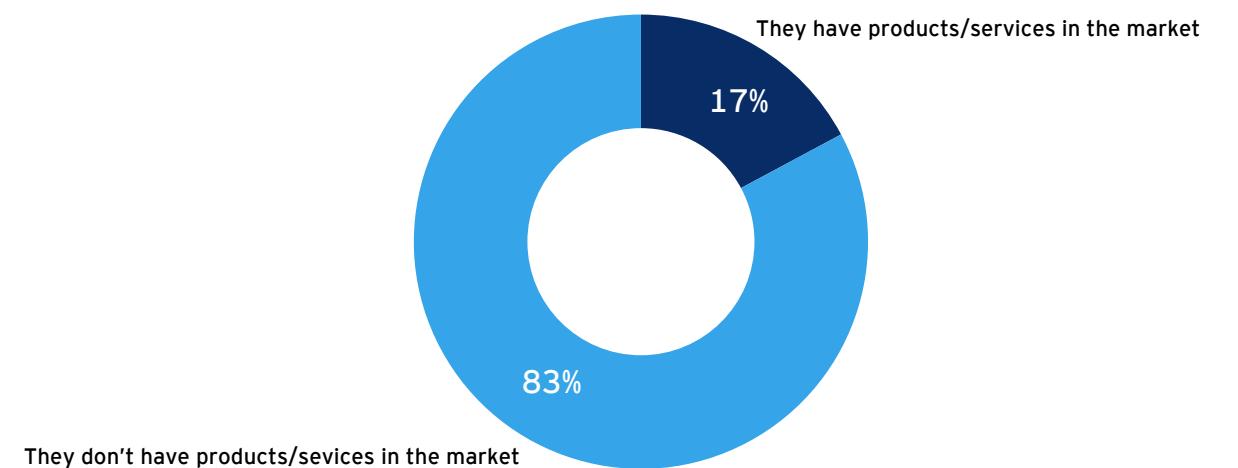


State of the health sector ecosystem in Catalonia

Following the flow described above, after research (R&D&I), start-ups take centre stage, followed by the consolidated business fabric. The former act as a driving force for innovation and experimentation, while the consolidated companies allow these solutions to be scaled up and brought to the market in an efficient and sustainable manner.

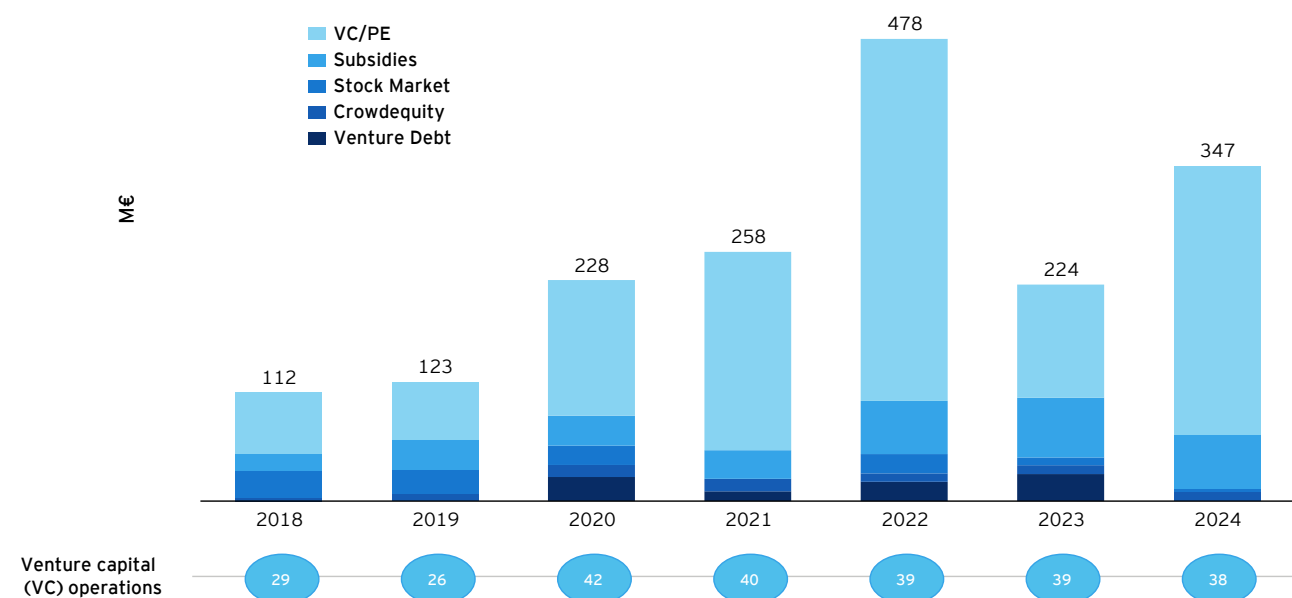
In the working session with investors, it became clear that today the creation of start-ups is of growing interest and has established itself as a recurring trend among innovative profiles. However, many of these initiatives are launched without a solid strategic base or consolidated teams. This proliferation of immature projects, often developed without a clear market vision or consolidation of leadership and a clear business orientation, makes it difficult for them to have a real impact. In addition, the lack of connection with the needs of the healthcare system limits the ability of many startups to grow and establish themselves.

Figure 9 | Percentage of Catalan startups that have products/services on the market



According to the data obtained from the survey, 17% of start-ups in the health sector in Catalonia have already launched products or services on the market.



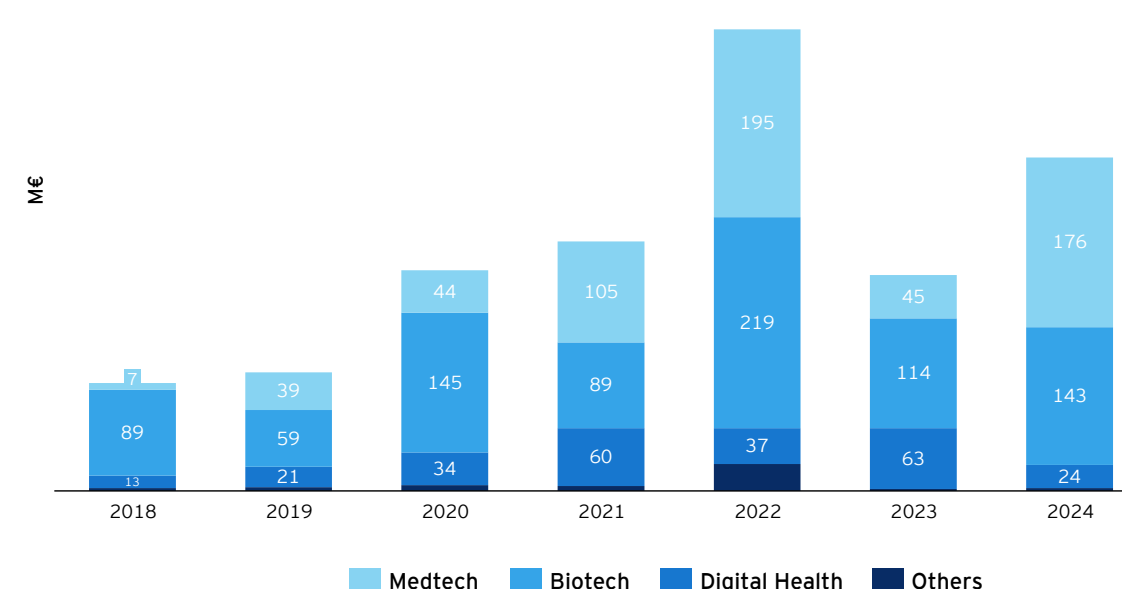
Figure 10 | Investment in health startups (2018-2024) (Bioregion Report , 2024)

In a general context in which the amount of investment in the international market has decreased during 2024, the data for Catalonia show a contrary evolution, where a positive trend is recovered, surpassing the data prior to the pandemic. As we have seen previously, between 2022 and 2023 there was a significant increase in capital raised in the United States and Europe. This global trend of increased investment is now reflected in Catalonia, which historically shows a certain lag with respect to international dynamics, where it tends to observe international trends or absorb global impacts with a delay of approximately one year.

Thus, in 2024 Catalonia has recorded a 55% increase in investment in healthcare startups compared to the previous year, reaching €347 million, the second highest figure since 2018. Catalan companies have mainly relied on the support of venture capital (VC) investment funds, which

have accounted for 80%. Specifically, €277.9 million were mobilised through 38 investment rounds. Three large deals accounted for almost 70% of the total volume: Impress, which closed a second mega-round of €110m; INBRAIN Neuroelectronics, with €46.2m; and Heura, with a €40m round.

Apart from private capital, European competitive aid, in the forms of grants, has also played a fundamental role, providing more than €55m and consolidating itself as a key tool for boosting the scalability of entrepreneurial initiatives. Within this framework, public aid has been essential to support the development of innovative start-ups and to reinforce Catalonia's position as a pole of attraction for investment and innovation in the field of health .

Figure 11 | Investment in the health sector by sub-sector (2018-2024) (Bioregion Report, 2024)

Historically, biotechnology and medical technology have been the most attractive subsectors for investors. However, in recent years, Digital Health had experienced significant growth in funding, reaching its historical maximum in 2023 with 63 million euros, after an increase of 61.5% over the previous year. However, in 2024, the trend has slowed down, with investment decreasing to 24 million euros, indicating a return of capital invested towards the Biotech sector (+29%) and very significantly towards MedTech (+290%). Investment in Digital Health has suffered a contraction of 62%, which remains to be seen whether this is a one-off or structural reduction in the future. This suggests a stabilisation of the market after the post-pandemic growth peak and evidence of scalability or clinical impact limitations of some of the models.

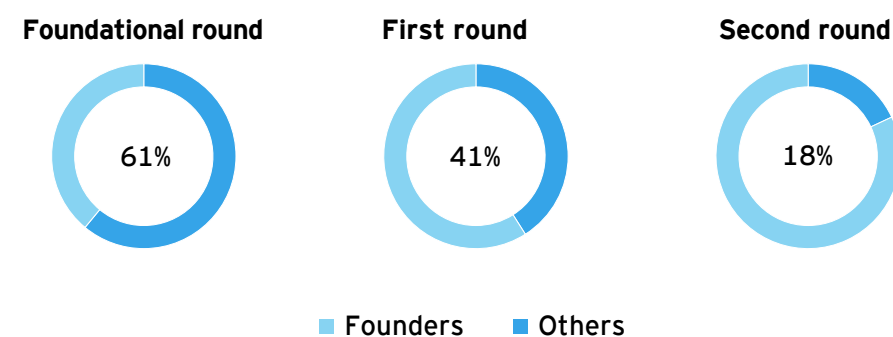
Looking back, the MedTech figures in 2022 were strongly influenced by Impress' €122m investment round. Similarly, in the BioTech sector, the €50m deals of Minoryx Therapeutics and SpliceBio each had a significant impact on that year's figures.

Thus, in 2023 there was a significant decline in investment in both sectors, while in 2024 it has shown a significant recovery.

Looking at the evolution between 2021 and 2024, investment in biotech startups has grown by 61%, that in medical technologies by 68%, and that in Digital Health, despite the boom in recent years, has experienced a decline of 60% in 2024.

The following results have been extracted from the information provided by the actors in the sector through surveys, as indicated at the beginning of the chapter.



Figure 12 | Evolution of founders' shareholdings through financing rounds

The data collected show how founder dilution occurs more progressively as the company moves through the early stages of the life cycle and progresses through the financing rounds. During the founding round, founders retain a significant position with an average 61% ownership. However, this balance begins to be diluted as early as the first investment round, where the founders' stake is reduced to 41%, reflecting the entry of new investors who drive the growth of the project.

It is from the second round onwards that this process of dilution intensifies most markedly. The average shareholding of the founders falls to 18%, leaving 82% of the capital in the hands of new partners and investors. This transition accelerates the loss of shareholder weight of the founding teams, which may see their influence and decision-making capacity limited if an appropriate financing strategy is not designed.

While this pattern has remained fairly stable over the last few editions of the study, 2024 is notable for a particularly pronounced dilution in the biotech sector, with founders retaining only 13.7% of equity in the second round. This behaviour could be related to a one-off increase in the valuations of some recent deals, which would have favoured capital inflows in exchange for a higher percentage. In any case, it again reflects the capital intensity required by certain business models and underlines the importance of entrepreneurial teams planning their growth and capitalisation strategy in advance to avoid losing control of the project in the early stages.



As for the percentage of shares in relation to geographical distribution, 78% of the shares come from Catalonia, a figure that remains stable with respect to the previous year. On the other hand, the participation of other areas of Spain has experienced a slight reduction, from 8% in 2023 to 7% in 2024. The presence of investments from other continents, meanwhile, remains stable, unchanged from last year.

In terms of sectoral distribution, the medical technology sector stands out as the segment with the highest presence of Catalan shareholders, reaching 91%, an increase of 2% compared to 2023. As for biotechnology companies, Catalan representation stands at 70%, a decrease of 9 points compared to the year. For its part, the pharmaceutical sector has suffered a reduction, going from 74% to 42% this year. This drop could indicate a greater diversification of investments or an increase in the presence of foreign capital in this segment.

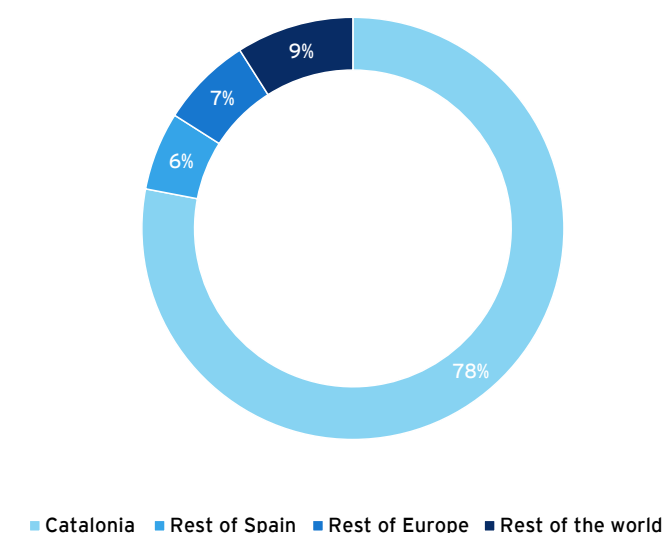
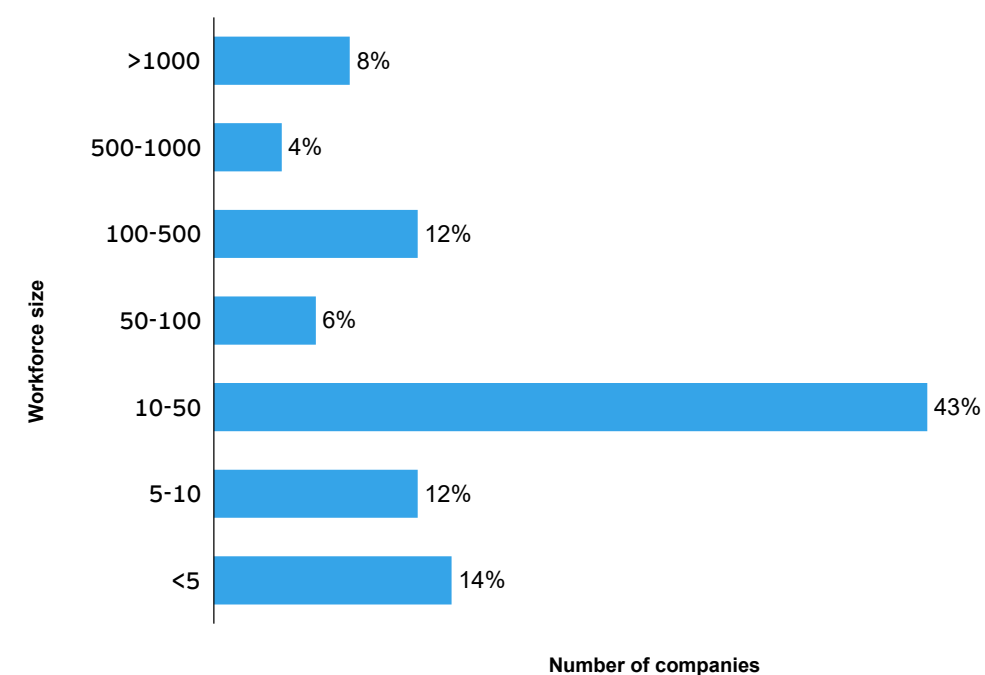
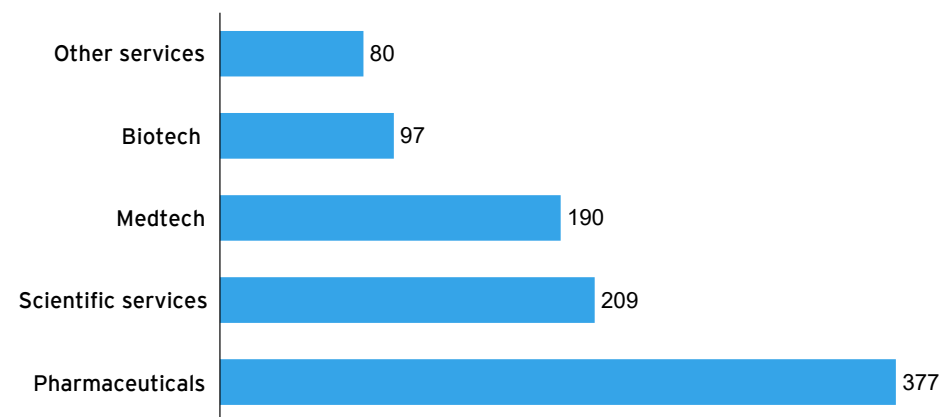
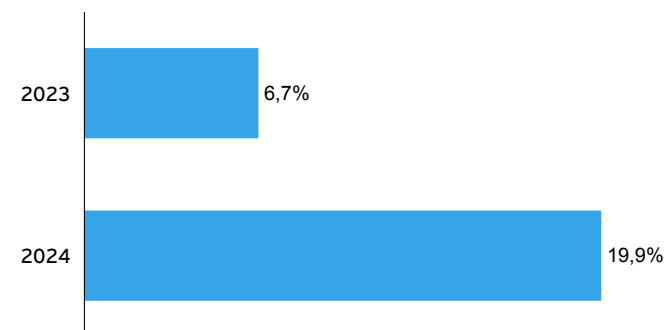
Figure 13 | Percentage of investor's shares by geographical distribution**Figure 14** | Percentage of enterprises according to size of workforce

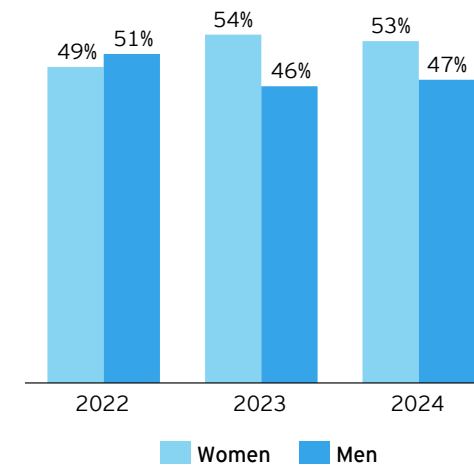
Figure 15 | Average workforce size by sub-sector

The health sector in Catalonia is characterised by the notable presence of small and medium-sized companies, 57% of which have fewer than 15 employees. In this context, biotechnology and medical technology companies have an average of 97 and 190 employees, respectively, while the pharmaceutical sector, with more consolidated companies, has more than 377 employees on average. This diversity in the size of the workforce reflects the different operational requirements: while the biotech and medtech sectors can operate with smaller teams, the pharmaceutical sector requires a larger structure to manage the multiple stages of production, distribution and quality control of medicines, which also reflects its level of maturity.

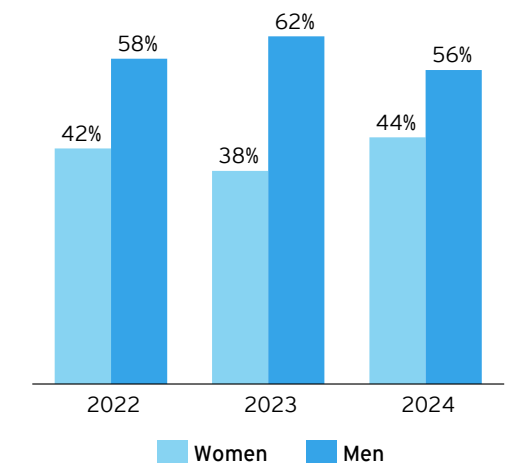
Figure 16 | Percentage of employee turnover leavers during 2023 - 2024

The turnover rate has increased significantly from 7% in 2023 to 20% in 2024. Analysis of the main reasons for employees leaving indicates that the most frequent reason for leaving is moving to other companies, suggesting a dynamic of active labour mobility within the sector. Secondly, moving abroad

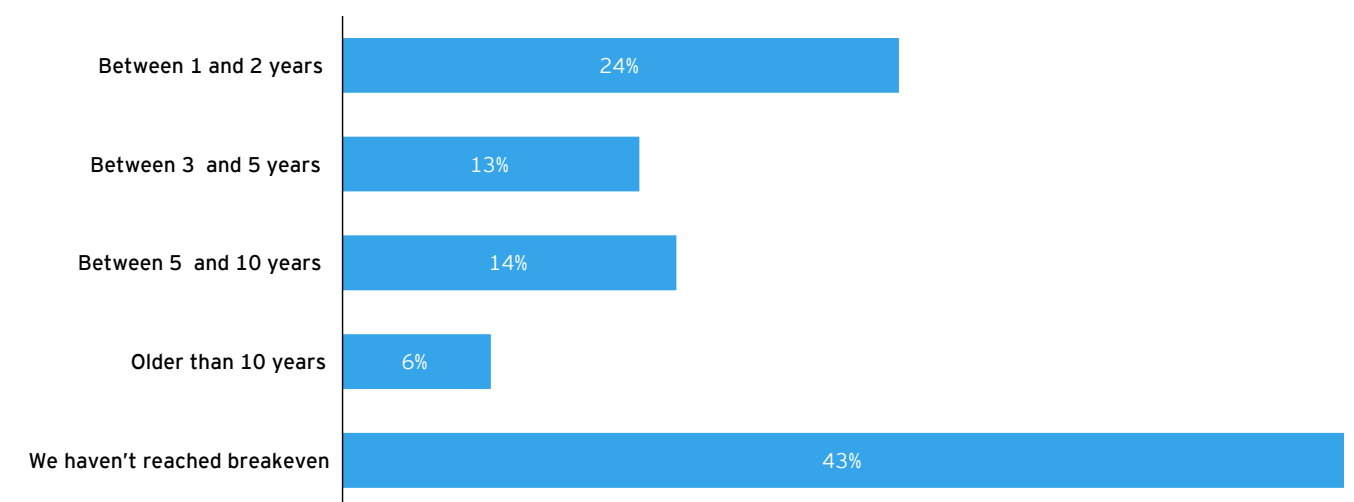
has been the most cited reason, reflecting a growing trend of professionals seeking opportunities outside the country, possibly motivated by better working conditions or career growth opportunities.

Figure 17 | Gender distribution of employees

The presence of women in the health sector remains stable at 53% of the total number of professionals. In terms of management positions, female representation has made slight progress: 44% of frontline executive positions are now held by women, six percentage points higher than in 2023 (+15%). from 42% in 2022.

Figure 18 | Gender distribution of employees in managerial activities

If we analyse the evolution since 2022, there has been a shift from a higher male presence to a higher female presence in the professional field, with an increase of 4%. This change is evidence of a steady progress in the incorporation of women in the sector, reflecting an important step towards greater gender equity.

Figure 19 | Time taken by firms to reach break-even point

Achieving breakeven point is a key indicator of financial sustainability. According to available data, 57% of companies have managed to break even, with a significant proportion (24%) doing so in the first or second year of their foundation.

On the other hand, with regard to the companies that have not yet reached the break-even point, it is worth noting that almost half (41%) are newly created, less than five years old. This suggests that time is a determining factor in the financial viability of these organisations.

Looking at graph 20, we can see that in 2024 the percentage of companies that have not reached the break-even point has decreased from 55% on average to 43%. This improvement, with a decrease of 12%, reflects a positive trend in the financial stabilisation of the sector, indicating that the market is becoming more mature.

Figure 20 | History of companies that have not reached break-even point

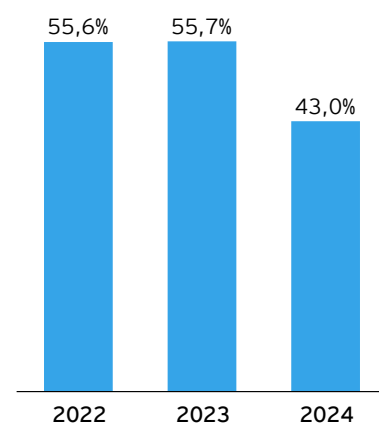
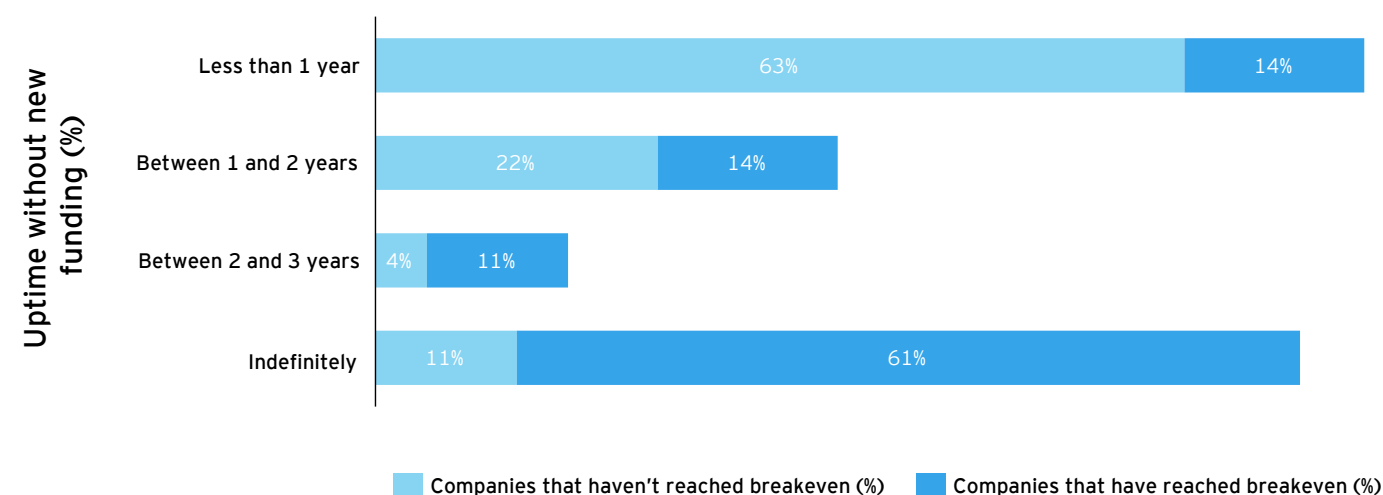


Figure 21 | Operating time without new financing vs. proportion of firms that have reached breakeven

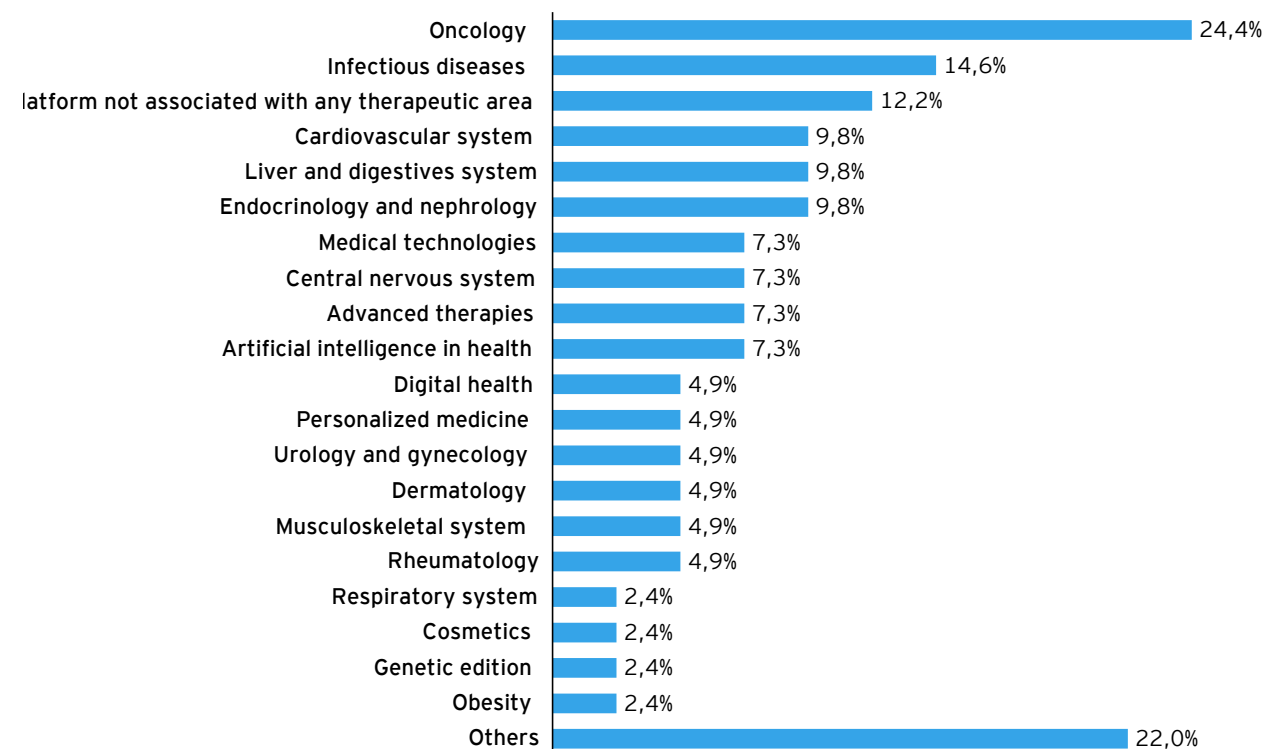


The previous graph analyses the financing needs of companies, differentiating between those that have managed to cover all their operating and production costs (breakeven) and those that have not yet reached breakeven.

Within the break-even group, 61% say they could operate indefinitely without the need for new financing.

On the other hand, among the companies that have not yet reached breakeven, almost two thirds (63%) would not be able to sustain themselves for more than one year without new financing, which shows their high dependence on external capital to stay in business

Figure 22 | Areas of R+D investment focus



As Figure 22 shows (areas where R&D investment is focused), oncology remains the top investment priority, with almost 25% of healthcare companies allocating resources to this area. This trend has allowed oncology to remain the top area of investment since 2018. However, 2024 has been a year of notable growth: since 2023, this figure has increased by 6.4%, highlighting an intensification of the sector's commitment to research in cancer, one of the most complex diseases and one with the largest number of patients.

In second place, 14.6% of companies have invested in infectious diseases, doubling the percentage of the previous year (7.3%) and making it the area with the second highest R&D&I investment. Until now, this position was occupied by the

nervous system, which has suffered a 5% decrease this year.

In addition, 9.8% of the companies have invested in the respiratory, cardiovascular and hepatic and digestive systems, consolidating them as relevant areas in biomedical research.

Lastly, investment in technology platforms not associated with any specific therapeutic area is the third most important investment in the sector. This trend is evidence of a clear strategy on the part of companies towards cross-cutting and innovative solutions, which could have a major impact on multiple areas of healthcare in the future.

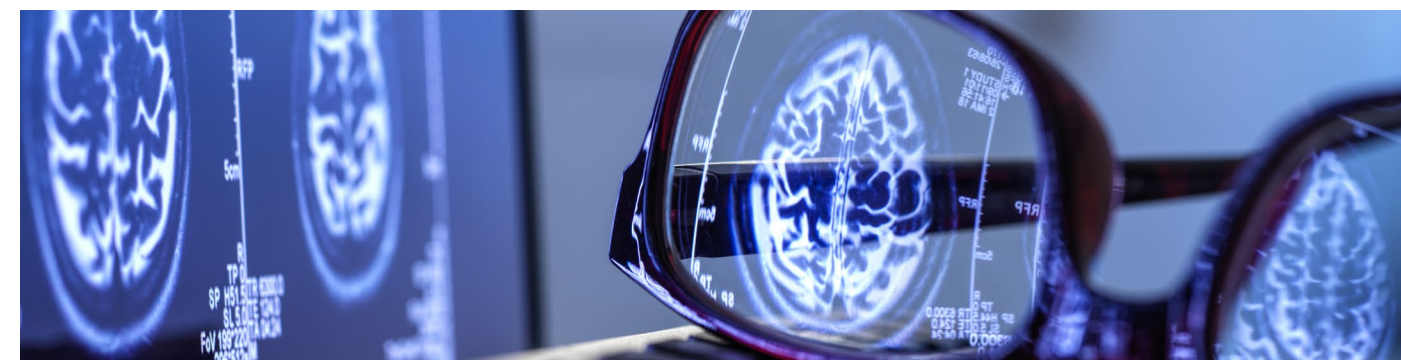
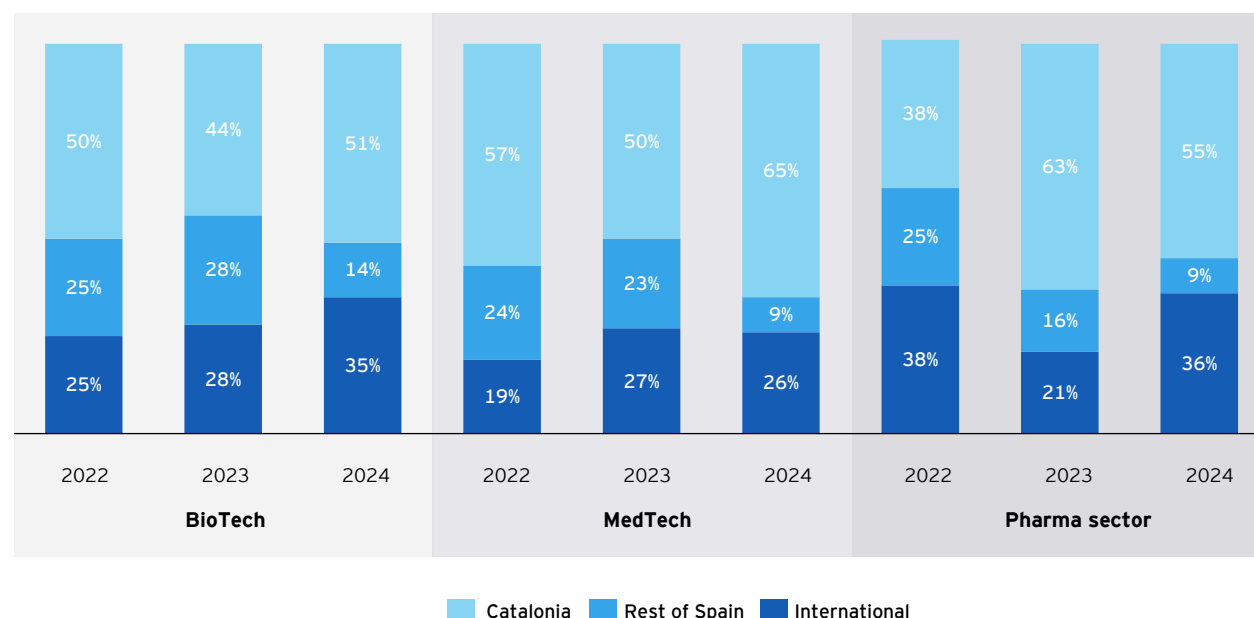


Figure 23 | Distribution of R&D investment by geographical destination and sub-sector

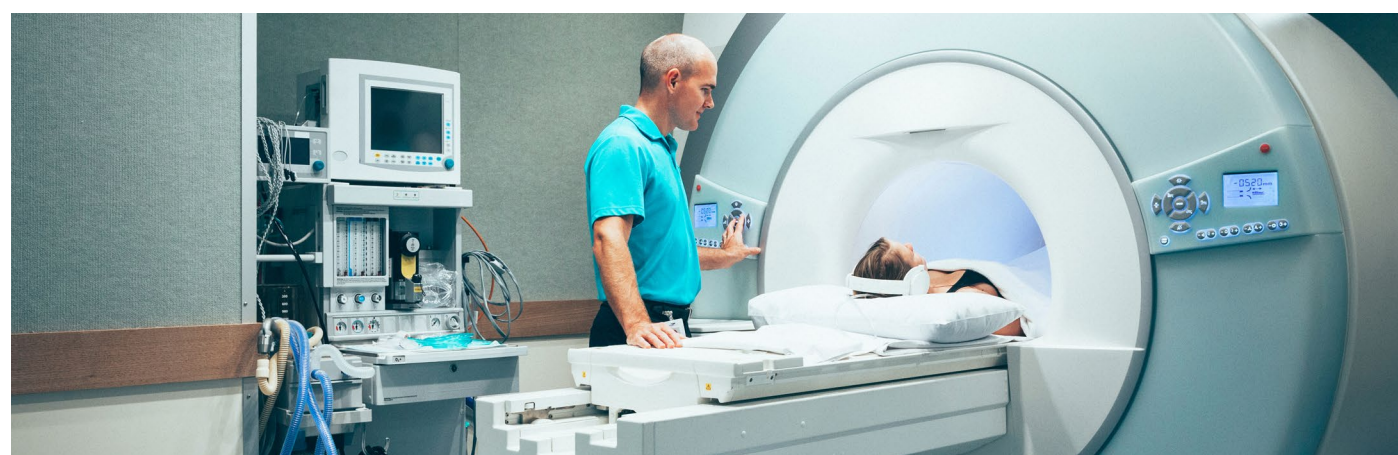
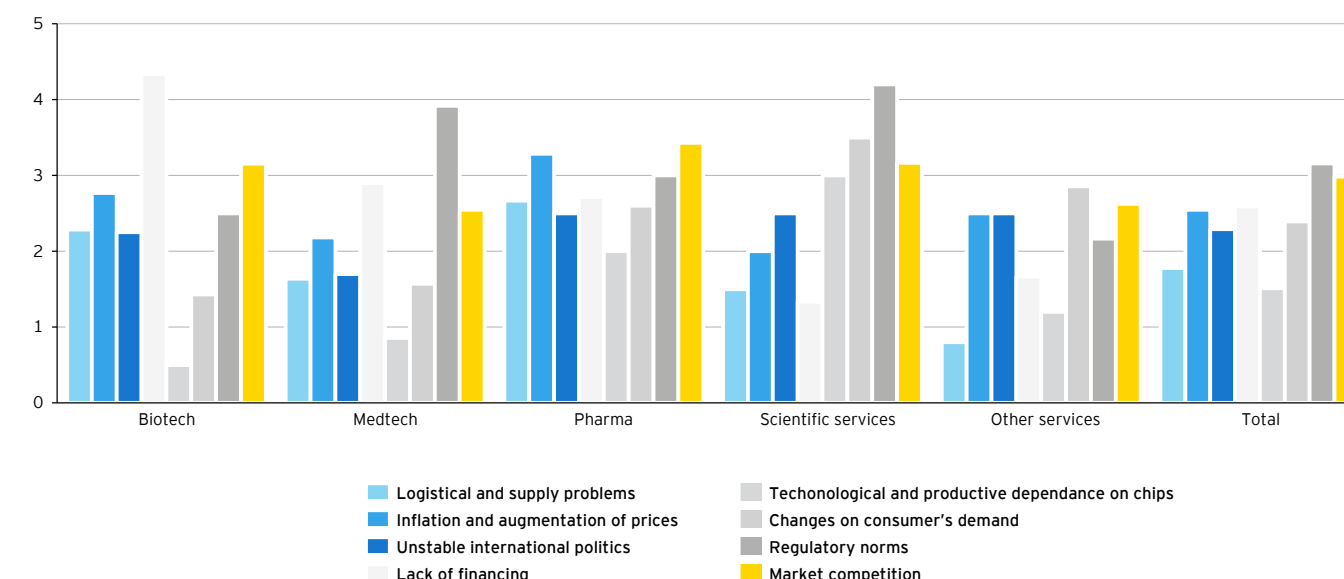
According to the companies surveyed, Catalonia remains the main centre of R&D investment in the health sector, accounting for 57% of the total. This indicates that more than half of the companies' R&D budget is reinvested in the territory.

However, the data reflect a trend towards geographical diversification, showing an increase in investment outside Catalonia. It is worth remembering that in 2022 the percentage of investment in Catalonia was 64%, which compared to 2017, where it reached 76%, already represented a significant decrease, the data for 2024 shows a confirmation of this trend. This can be explained by a combination of structural and strategic factors. Although it remains the main pole of attraction, there is a growing trend towards territorial diversification, driven by

the offer of competitive incentives and infrastructures in other ecosystems.

In 2024, medical technology leads R&D investment in Catalonia, allocating a total of 65% of investments. Pharmaceuticals, which in 2023 occupied the first position, is lagging behind according to the available data. However, it maintains its commitment to the territory, devoting more than half of its R&D budget.

Although Catalonia remains the first preferred option for companies, at the international level, investment in R&D projects is consolidated as the second, with an average of 32%. An analysis of the responses obtained shows that, in contrast, investment in other Spanish regions has decreased by 12% with respect to 2023.

**Figure 24** | Assessment of the economic impact of the following variables on companies (from 1 to 5, with 1 being the lowest impact and 5 the highest impact)

This section analyses the main risks that concern companies in the health sector due to their economic impact, identifying the factors that may condition their stability and growth projection.

Firstly, the regulatory framework has established itself as the main concern. Increasing legal requirements, both at national and European level, force companies to allocate more resources to meet compliance, certification and safety requirements. This concern is particularly relevant in the fields of medical technology and scientific services, and in pharma where regulatory changes can delay the commercialisation of new products and significantly increase operating costs. The complexity of approval procedures and the need for constant adaptation pose a major challenge for companies in these sectors, especially for smaller companies.

Secondly, market competition has intensified, becoming a critical factor for business sustainability. The entry of new players and the consolidation of large international groups increase competitive pressure, especially in highly innovative segments such as biotechnology and scientific services. Attracting specialised talent and securing strategic agreements with other organisations also becomes a key element in maintaining competitiveness.

Third, inflation and price increases, together with variations in consumer demand, continue to generate uncertainty. Rising production costs and volatile supplies have a particular impact on sectors that rely on specialised materials and

high-tech processes. In addition, companies must cope with a changing economic environment, where customer preferences and market conditions evolve rapidly. This situation highlights the need for a stable economic policy that allows companies to adapt more securely to changes in the economic cycle.

In addition, lack of finance emerges as one of the most significant barriers, especially for biotech and medtech companies, where research and development requires high and sustained investment. Difficulty in accessing capital can limit the pace of innovation, slow down the development of new products and affect their ability to enter international markets. In this context, dependence on public funding and venture capital becomes a determining factor for the viability of these companies.

Finally, it is important to note that while in 2023 inflation and price increases were seen as the main risk for companies in the sector, this year they have taken a back seat to other concerns. This lower risk perception is attributed to a progressive improvement in economic stability, as well as a greater ability of companies to adapt to the inflationary environment through cost management strategies and operational optimisation.

Chapter 7

The outlook of the main catalan investors

The outlook of the main catalan investors

The life sciences investment ecosystem in Catalonia is undergoing a transformation marked by several factors that have affected the strategy of the funds and the dynamics of the companies in the sector. This chapter analyses the role of the main life sciences investment funds based in the territory, exploring recent trends in health venture capital and their impact on regional economic development.

2024 has been a year of contrasts. On the one hand, there has been a surge of interest in emerging technologies, especially artificial intelligence, which has generated a real technological hype, a progressive redistribution of attention and capital, and has generated some reflections on how to maintain the balance between the drive for scientific innovation and the adoption of new technologies in an increasingly competitive and changing market.

On the other hand, funds also expressed concern about the uncertainty ahead of 2025, marked by a complex geopolitical context, changes in international regulation and the evolution of public policies on health and innovation, which could have a significant impact on both capital raising and project consolidation. These elements could have a significant impact on both capital raising and project consolidation. (The end of this section provides a more detailed analysis of the 2025 outlook).

In order to deepen their vision of investors and better understand their priorities, a specific survey was carried out for investors, in the framework of a collaboration between Catalonia.health and EY (as explained in the methodology chapter). This exercise was complemented by an exclusive face-to-face working session with representatives of the main funds based in Catalonia. This meeting served to compare data and generate a strategic debate on the present and future of funding in the health sector. The process as a whole has highlighted the importance of investors in driving the ecosystem and has allowed direct identification of the trends, concerns and opportunities that mark the current moment.

The survey results are analysed below to provide a more detailed picture of the situation in 2024:

Figure 25 | Total investment volume realised by Catalan investors (survey participants) in 2024

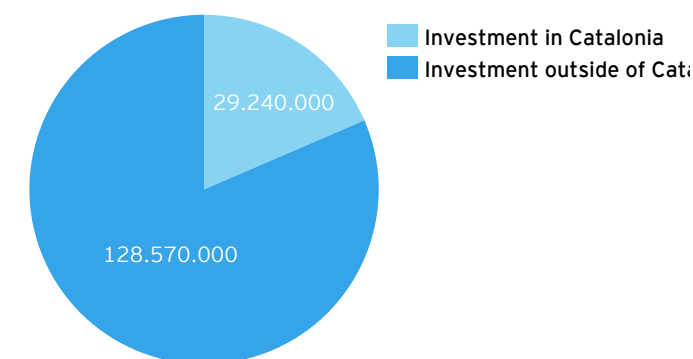
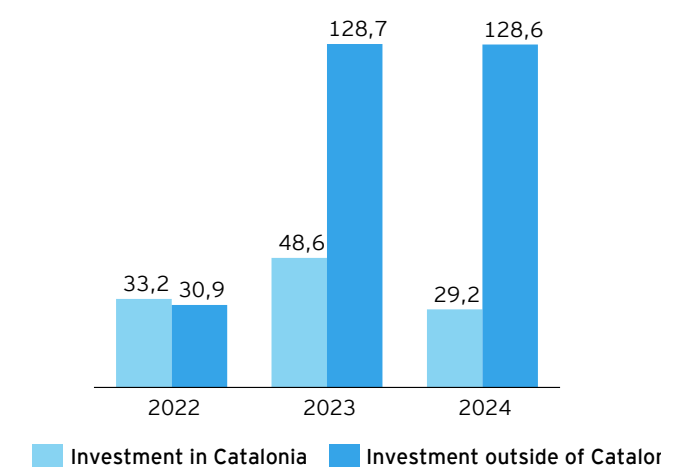


Figure 26 | Historical total investment volume made by Catalan investors (M€) (survey participants)



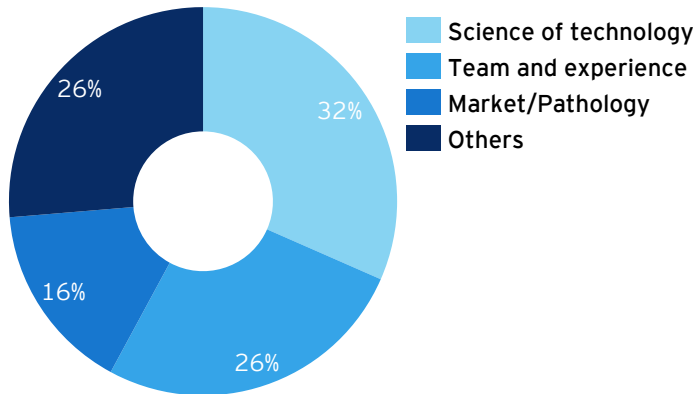
Over the course of 2024, Catalan investors in the field of innovation and health channelled an aggregate investment of €157.8 million, according to the data collected in the annual survey.

Within this framework, €29.24M went to Catalonia-based initiatives, representing 19% of the total mobilised. Although the figure still places the region as one of the most active, investment activity has suffered a slight downturn of 5% compared to 2023, probably as a result of the general tightening of financial conditions and the expectation of more tangible returns from investors.

In terms of deal size, the average investment per project located in Catalonia was €2.92m, a figure in line with trends in growth-stage deals. However, it is worth noting that two venture capital funds stood out with an average investment per deal of €8.7m, reinforcing the commitment to projects with a higher degree of maturity and international potential.

These figures reflect not only the resilience of the Catalan innovative fabric, but also the need to continue attracting specialised capital to help local start-ups leap up the ladder.

Figure 27 | Main factors motivating investment outside Catalonia (survey participants) in 2024



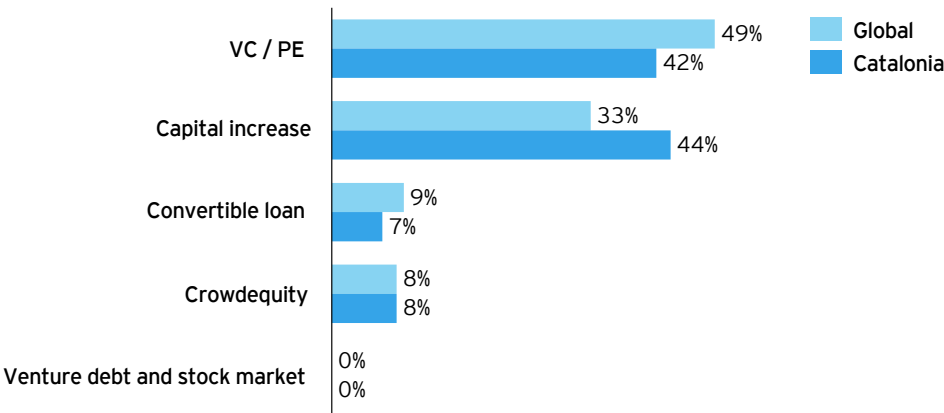
Looking at this graph, we can identify the main factors that have motivated investors to seek opportunities outside Catalonia. The most prominent reason is the perception that, abroad, there is a higher level of science and technology, which represents an opportunity to obtain a higher return on investment, especially in the US.

Another reason is the quality of the management team and management experience. Investors believe that access to well-trained professionals, together with the

best technology, can improve the performance of projects and make them more competitive, which is critical to the success of initiatives outside Catalonia.

Apart from these factors, other key aspects such as favourable regulation, likelihood of success and business expansion are also considered. A favourable legal environment ensures legal certainty, while international expansion allows for more sustained growth and risk diversification.

Figure 28 | Instruments used to invest globally vs. in Catalonia

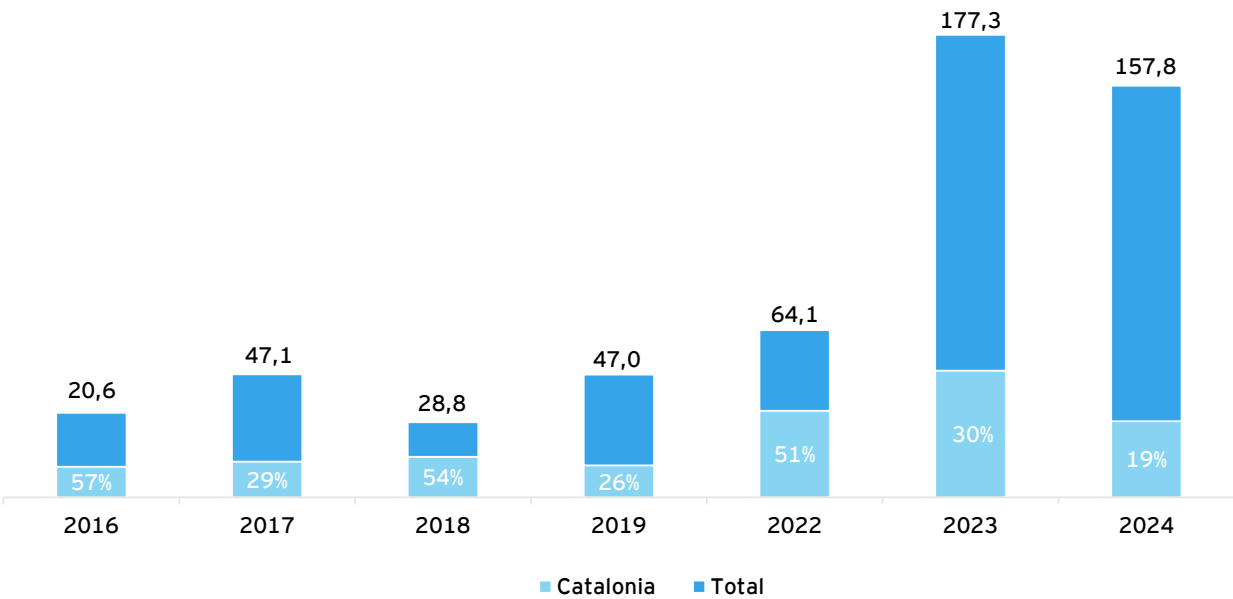


In Catalonia, capital increases have been the most widely used financing instrument in the last year, reaffirming themselves as the preferred option for investors. Its simplicity and effectiveness in providing direct resources to companies make it a very recurrent formula in the local ecosystem.

Globally, this instrument ranks second, accounting for 33% of transactions. The first position is held by venture capital and private equity (VC/PE), which has gained weight as the main financing channel, accounting for almost half of the transactions (49%) and driving projects at more advanced stages.

In Catalonia, VC/PE is the second most used instrument, which shows a partial alignment with global trends, but with a still dominant presence of capital increases, especially in early stage projects.

Figure 29 | Evolution of paid-in capital (M€) by the main Catalan investors

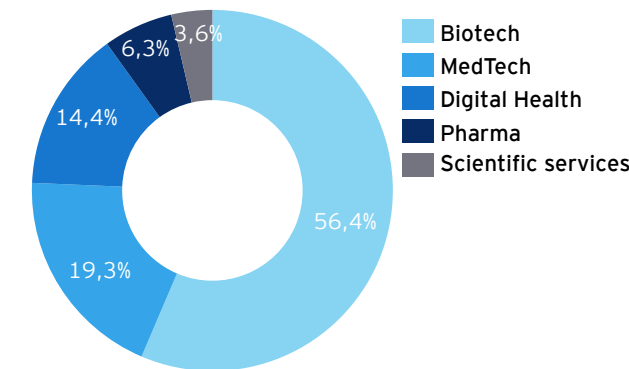


The analysis of the investment of the participating funds over the last few years shows a general trend of growth that began in 2023. However, in 2024, despite having reached a level of investment much higher than the trend prior to 2023, it has not reached the figure of 2023, where the reduction in the percentage invested in Catalonia is noteworthy.

Specifically, investment in Catalonia has fallen from €48.6m last year to the current €29.2m, which represents a reduction. This decline may be due to several factors, such as an increase in perceived opportunities in other international markets or greater caution in committing early-stage capital. However, this trend may also reflect the increasing international projection of Catalan funds, which are broadening their reach and diversifying their investment strategies towards global markets with higher growth potential.

The current figures show that global investment remains at similar levels to those of 2023, but with a slightly different territorial distribution. The loss of Catalonia's weight in the total could indicate the need to reinforce the territory's attractiveness for attracting capital in a competitive and increasingly globalised environment.

Figure 30 | Types of companies in which investments have been made in Catalonia

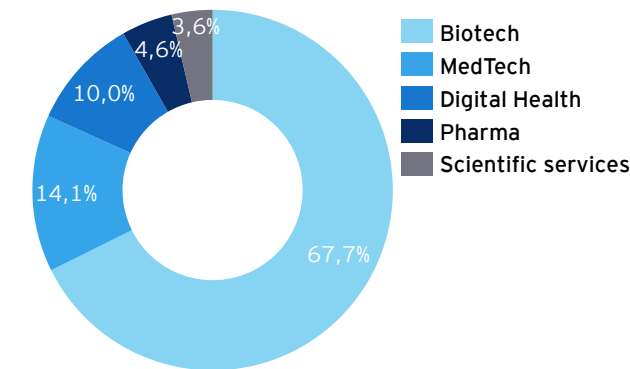


The sectoral analysis makes it clear that the bulk of investment has been channelled towards companies linked to biotechnology, which are strong leaders both in Catalonia and internationally. In the case of Catalonia, almost seven out of every ten euros invested have gone to this area, a slightly higher proportion than that recorded globally, where biotechnology also stands out but with a slightly lower weight.

Next, medical technology companies have received a notable volume of investment, consolidating their position as the second most preferred investment option for investors, while Digital Health continues to advance and attract interest in the ecosystem, showing significant growth potential for the coming years.

In conclusion, leading investors in the sector have identified a number of key trends that will shape the future of the sector's financing in the region.

Figure 31 | Type of company where investments have been made in general



The health sector in Catalonia continues to be perceived as a strategic opportunity for investment, characterised by stable demand and a remarkable capacity for resilience, especially in the face of crises such as the pandemic. However, there is a considerable level of tension within the health system, which limits the potential for clinical innovation. The overburdening of medical professionals has a direct impact on their ability to engage in entrepreneurial projects and on the transfer of knowledge from hospitals to the innovation ecosystem.

In 2024, after a subdued 2023, signs of investment revival are beginning to emerge, especially in areas such as MedTech and biotech. However, the outlook remains marked by high macroeconomic uncertainty, geopolitical tensions and an ever-changing regulatory environment, which means that investors are approaching 2025 with caution. In addition, the technology hype that has generated inordinate interest in artificial intelligence and other emerging technologies is also inflating expectations, leading to greater prudence in strategic decisions.

The emergence of artificial intelligence (AI) presents both opportunities and risks for the healthcare sector. The boundary between health and technology is blurring, attracting generalist investors, often oblivious to the regulatory complexities of the sector. This massive capital can distort the market and favour projects with low scientific maturity, which could jeopardise the quality and long-term viability of many initiatives.

On the other hand, although the Catalan ecosystem has a solid scientific base, there is a growing emergence of start-ups in the early stages of development, often with a strategic orientation still in the process of consolidation and teams in formation. The lack of a more consolidated leadership experience from the early stages, together with some challenges in generating quality spin-offs, are factors that may influence the growth potential of many of these initiatives. The consolidation of strong leadership and a more defined entrepreneurial orientation remains an important challenge for the entrepreneurial ecosystem.

On the investment side, investors in the medtech sector are not looking for standard returns, but rather focus on returns that exceed standard expectations or the market average. To do so, projects must generate tangible impact, be clinically validated and have a real capacity for adoption within the healthcare system. However, achieving this level of performance remains a challenge, especially in Catalonia, where there is still a need to create an

environment that allows for effective testing, scaling and risk-taking.

At the European level, investors see a significant opportunity for Europe to lead on regulation. Progress on clear legislation and testing environments conducive to innovation is essential. To attract more investment, Catalonia will need to improve its regulatory environment, strengthen entrepreneurial skills and promote a culture of learning and acceptance of error, key elements to compete on the international stage.

Finally, looking ahead to 2025, the global scenario remains uncertain, with legislative changes, technological competition and a pressured healthcare system. However, if investment, research, regulation and the healthcare system are properly aligned, the health sector in Catalonia has the potential to consolidate itself as a strategic pillar within the global healthcare system. The capacity for adaptation and collaboration between the actors in the ecosystem will be key to facing the challenges of the future.



Chapter 8

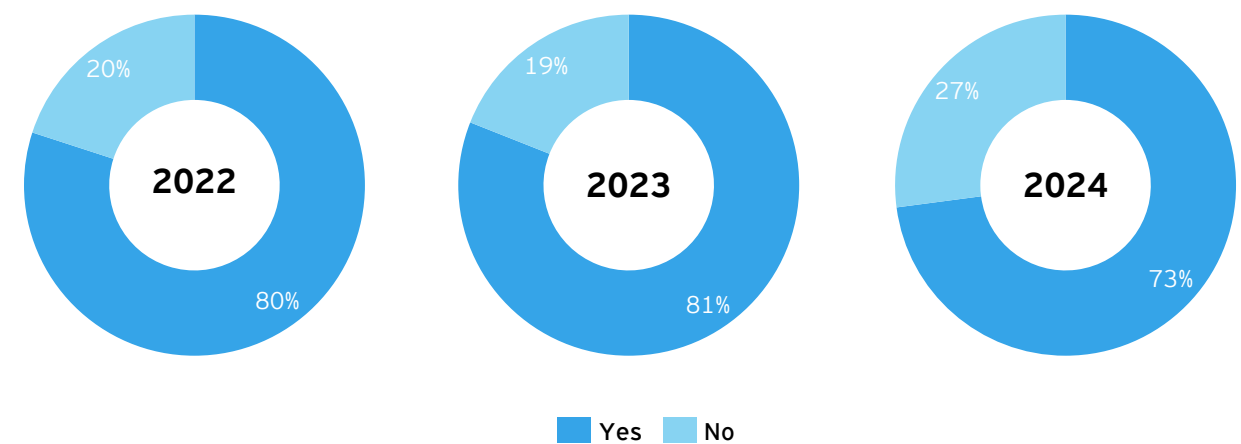
Successes, trends and future challenges

The eighth chapter of the report provides a comprehensive overview of the achievements, emerging opportunities and future challenges of the health sector in Catalonia. Through the analysis of the data collected, it highlights the key aspects that define the current evolution of the sector and the paths to follow in order to face the challenges of the future.

Assessment of the year 2024

After a 2023 marked by a remarkable growth of the sector at global level in 2024 it shows a slight decline in some areas. However, in Catalonia, where global trends are often reflected with some delay, an improvement continues to be observed, similar to the evolution of the sector the previous year at global level. Local investment continues to have a significant weight, with 29 million euros committed, and demonstrates the sustained confidence of Catalan investors in the potential of the territory. The sector is consolidating on a solid base: 24 hubs of excellence created between 2020 and 2024 and the continuity of major R&D&I projects.

Figure 32 | Percentage of companies reporting that they have achieved their targets by 2024



This track record reinforces Catalonia's position as a pole of innovation and research in health, attractive to both local and international agents.

It is worth mentioning that by 2024, seven out of ten companies have achieved the targets they initially set themselves. More recently, with regard to scientific services, 60% of companies say that they have achieved their targets, and in the case of companies classified under "Other services", this percentage is 67%.

Overall, these percentages are lower than in 2023, when they were all around 80%.

Opportunities for improvement for the competitiveness of the sector

In a context of constant evolution and strong competitive pressure, the health sector in Catalonia is facing a new stage full of challenges but also of strategic opportunities. Companies and investors agree on several critical points of action that could make a difference in the coming years. Some of these ideas have already been highlighted previously in chapter 7, but here they are taken up again and developed as priority areas to strengthen the sector's competitiveness:

1. Unlocking the health system to boost innovation

The structural overload of the healthcare system, especially of healthcare professionals, is one of the main bottlenecks for clinical innovation. This situation hinders their active participation in entrepreneurial projects and knowledge transfer processes. To overcome this barrier, policies are needed to encourage the involvement of clinicians, foster the creation of hybrid roles and establish agile collaboration models between hospitals, start-ups and research centres. The lack of success stories and entrepreneurs with consolidated trajectories within the sector was also highlighted. Having an ecosystem and a healthcare system that favours the incorporation of innovation can make a decisive contribution to the maturity and leadership of startups. This is the only way to unlock the real innovative potential of healthcare environments.

2. More leadership and maturity in startups

Although the Catalan ecosystem has a solid scientific base, it can be observed that some projects are born with a strategy that is still evolving and teams in the process of consolidation. These areas of opportunity indicate the advisability of strengthening support from the early stages, encouraging the recruitment of talent with entrepreneurial experience and favouring the presence of profiles with management skills, market vision and connection with investors. This reinforcement could facilitate a smoother transition to more advanced stages, helping initiatives to develop more fully without getting stuck in the initial phases.

3. Creating an innovation and validation ecosystem

Medtech investors are looking for projects that generate above-average returns, with tangible impact and clinical validation. In Catalonia, there is still an opportunity to create an ecosystem that facilitates the testing, scalability and adoption of new solutions within the healthcare system. This would involve establishing collaborations between startups, healthcare institutions and administrations, creating an environment that favours innovation and the assumption of controlled risks, thus improving the efficiency and sustainability of the healthcare system.

4. Catalonia as a health technology testing environment (European sandbox)

There is a clear opportunity for Catalonia to become a European benchmark in the testing and regulation of new healthcare solutions. We have the necessary scientific, clinical and technological assets, but we need to consolidate more flexible legal frameworks, such as regulatory sandboxes, and real testing environments where innovation can be validated, adapted and scaled up more quickly. A firm commitment in this area could position the region as a hub of attraction for investors and entrepreneurs from all over Europe.

The identified opportunities for improvement pave the way for a more dynamic and competitive future for the health and life sciences sector in Catalonia, acting as an engine to drive development, as well as attracting investment and talent.



Trends

After careful analysis of emerging trends in the health and life sciences sector, key areas have been identified that are experiencing considerable growth and could further boost the Catalan sector if properly targeted.

1. A more uncertain global environment and a more demanding investment climate

The ever-evolving macroeconomic and geopolitical environment is marking a paradigm shift in investment decisions. Increasing global uncertainty is forcing investors to adopt a more prudent and rigorous approach. This translates into a deeper and more exhaustive analysis process of projects, with a strategic approach that only bets on initiatives that are solid, differential and with a clear growth projection.

Investors are looking for projects that offer not only profitability, but also resilience in the face of economic and geopolitical fluctuations. In this context, companies will have to demonstrate their added value and their ability to innovate and adapt to a changing environment, ensuring their long-term sustainability.

2. AI as a driver of transformation and risk

Artificial intelligence (AI) is emerging as one of the main drivers of transformation within the industry, whose disruptive potential can redefine the boundaries of innovation and efficiency. Its application in various fields, from research to process optimisation, opens up new opportunities and possibilities for growth.

However, this technological breakthrough also brings with it a double challenge: on the one hand, the emergence of capital that often does not follow rigorous science and health criteria, which could compromise the quality and safety of the market; and on the other hand, the need to regulate and apply AI on a strictly ethical and scientific basis in order to avoid potential risks.

Thus, it will be essential to adopt a balanced approach to harness the transformative potential of AI, while ensuring that its online application meets standards of safety, quality and accountability.

3. Consolidation of oncology as the area of greatest investment

According to the study's historical data, oncology has established itself as the therapeutic area with the highest investment since 2016 (the year of the first edition of the study). By 2024, oncology will account for 24.4% of total investment in the sector. This trend shows a clear increase in

interest on the part of companies, highlighting the area as a strategic priority for investment in healthcare.

The growing incidence of cancer and its global impact contribute to this consolidation, and investment in this field is expected to remain one of the most important in the coming years.

4. Relocation of research and development

Since the first edition of the study, there has been a growing trend towards geographical diversification of R&D investment by local companies. Although Catalonia continues to account for more than half of the investment, this movement indicates a dispersion of capital to other regions, which could dilute the impact of investment at the local level.

This development poses both challenges and opportunities for Catalonia. On the one hand, geographical diversification can be seen as a strategy to expand the global presence of Catalan companies, diversify risks and open up new opportunities for growth. But, on the other hand, it is essential to maintain an appropriate balance between local and international investment, to ensure that Catalonia remains a top-tier innovation hub, recognised for its dynamism and collaborative capacity. . This balance is key to preserving the region's competitiveness and ability to attract investment.

5. Development of advanced therapies

Advanced therapies are emerging as one of the most relevant trends in the healthcare sector, with a growing impact on biomedical R&D and investment strategy. Technologies such as gene therapy, cell therapy and personalised immunotherapies are redefining the treatment of highly complex diseases, especially in areas such as oncology and rare diseases. These innovations open the door to more targeted and efficient approaches, aligned with precision medicine models. Despite the regulatory, logistical and economic challenges they still present, they are perceived by industry and investors as a strategic bet for the future, with a high transformative potential at both clinical and market level.

Chapter 9

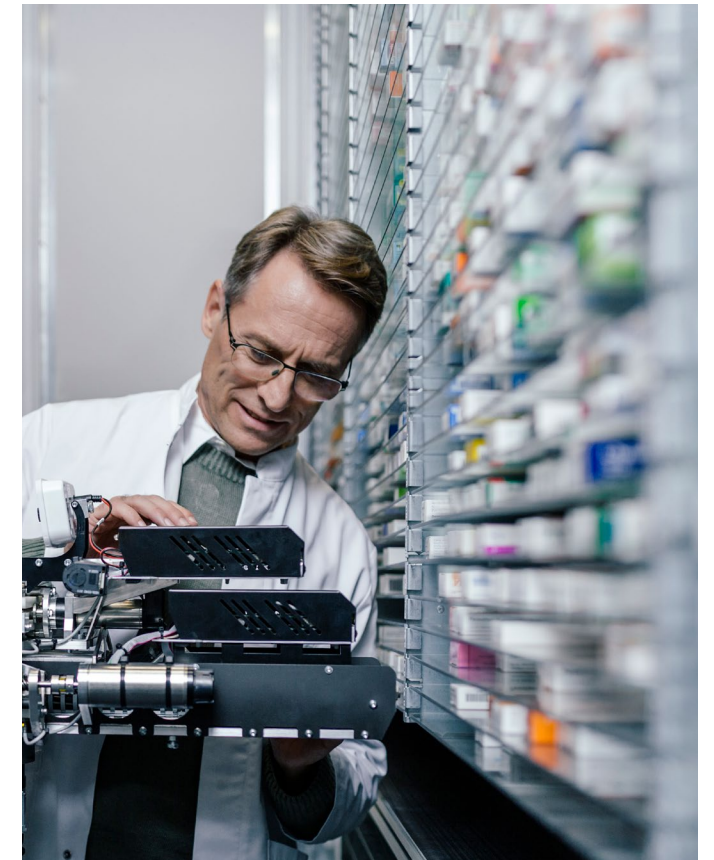
Final considerations

Final considerations

Catalonia has a consolidated health ecosystem with a first-rate scientific base, a growing entrepreneurial culture and a remarkable capacity to turn research into real solutions. The business fabric stands out for its agility and results orientation, with a large number of start-ups reaching the break-even point in very competitive timeframes and with a firm commitment to high-impact areas such as oncology, medical technologies and digital platforms.

The sustained attraction of capital, even in more cautious investment environments, is evidence of the market's confidence in the region's potential. Funds value the quality of science, proximity between actors and operational efficiency, while pointing to opportunities for further progress: consolidating more strategic leadership, facilitating faster validation environments and connecting better with the reality of the healthcare system.

The current moment is particularly open. Catalonia can take advantage of the global scenario of redistribution of investment to strengthen its position as a hub of reference, with a proposal focused on clinical impact, collaborative excellence and international vision. To grow better, it is necessary to grow better: with solid projects, leadership with a track record and an ecosystem capable of competing globally without losing its connection with its healthcare and social environment.



Annexes

Annex 1 | Agents of research centres

Agents	Definition
Universities	They generate scientific and technological knowledge through research, creating the basis for new ideas and patents
Hospitals	Key source for the detection of unmet medical needs, clinical trials and validation of medical technologies
Public funding institutions	They offer grants and financial support for the research and development of innovative technologies
Research centers	Institutions specialising in health R+D that develop innovations and collaborate with industry
Scientific foundations	Non-profit organisations that finance and promote research projects in the field of health
Public instruments of support	Institutional programs that help transform research into business or clinical projects
Regulatory agencies	They supervise and approve new health products and technologies so that they comply with regulations and can reach the market
Banks and financial institutions	Entities that offer loans and other forms of funding for researchers and startups in the field of health
Early stage research fund	Economic resources allocated to early-stage biomedical research projects, often from public or private funds
Public aid and subsidies	Financial support from public institutions to finance research and development of new health technologies

Annex 2 | Actors in the Spinoff/Startup Phase

Agents	Definition
Strategic partners	Alliances with other companies or institutions to accelerate growth and consolidate the market
Regulatory agencies	They supervise and approve new health products and technologies so that they comply with regulations and can reach the market
Early Stage Research Fund	Financial resources allocated to early-stage research to develop new biomedical technologies
Public grants and subsidies	Funding granted by public entities to promote research and development in health companies
Universities	They generate scientific and technological knowledge through research, creating the basis for new ideas and patents
Hospitals	Key source for the detection of unmet medical needs, clinical trials and validation of medical technologies
Public funding institutions	They offer grants and financial support for research and development of innovative technologies
Research centres	Institutions specialising in health R+D that develop innovations and collaborate with industry
Accelerators	Intensive programs that help startups grow quickly with mentorship, funding, and connections
Technology Transfer Offices	They facilitate the commercialization of university research and help to patent and license technologies
Venture builders	Companies that create startups from scratch, providing resources, capital and entrepreneurial teamr
Business angels	Private investors and companies that finance startups in their early stages
Crowdfunding platform	Collective financing systems where small investors provide capital to develop new projects
Public support instruments	Public sector programmes and grants to promote startups and growing companies within the health sector

Annex 3 | Scale up phase actors

Agents	Definition
Regulatory agencies	They supervise and approve new health products and technologies so that they comply with regulations and can reach the market
Public funding institutions	They offer grants and financial support for research and development of innovative technologies
Public support instruments	Public sector programmes and grants to promote startups and growing companies within the health sector
Pharmaceutical	Large companies in the biomedical sector that acquire innovative startups to integrate new products and technologies into their portfolio
Venture capital funds	They invest in companies in the growth phase to expand operations and scale globally
Clinical trial platform	They facilitate the testing of new biomedical solutions in regulated environments
Late stage investment funds	Institutional investors who contribute capital to mature companies with high expansion potential before an IPO or acquisition

Annex 4 | Actors in the phase continue as a company

Agents	Definition
Late stage investment funds	Institutional investors who contribute capital to mature companies with high expansion potential before an IPO or acquisition
Banks and growth funds	They provide loans or investment in advanced stages
We inversors	Institutional or individual investors who provide capital in funding rounds to accelerate expansion
B2B marketplace platforms	They facilitate the testing of new biomedical solutions in regulated environments to validate their efficacy and safety
Strategic partners	Alliances with other companies or institutions to accelerate growth and consolidate the market
Corporate venture capital	Strategic investment by large companies to promote startups aligned with their business
Regulatory agencies	They supervise and approve new health products and technologies so that they comply with regulations and can reach the market

Annex 5 | Actors in the sell-stage of the company

Agents	Definition
Late stage investment funds	Institutional investors who contribute capital to mature companies with high expansion potential before an IPO or acquisition
Corporate venture capital	Investment funds of large companies that invest in strategic startups for their business, offering capital and business support
Biotechnological	Companies that buy or collaborate with startups to develop and market products
Pharmaceutical	Large companies in the biomedical sector that acquire innovative startups to integrate new products and technologies into their portfolio
Private equity and M&A firms	Companies specialising in buying and merging companies, helping startups grow quickly or be acquired by larger companies
Transactional Lawyers	Legal experts who advise on the processes of buying and selling companies, mergers and acquisitions to guarantee a safe process and complying with regulations

Annex 6 | Actors in the marketing phase

Agents	Definition
Regulatory agencies	They guarantee the safety and efficacy of new health products before they are marketed
Hospitals and health networks	Key customers for healthcare startups as they embrace new technologies and treatments
Medical Insurers	Provide coverage and fund new treatments and medical devices
Health Coverage Fund	Financial resources aimed at guaranteeing access to innovative medical treatments, especially in the public sphere
Advice on market access	Consultancies and organizations that help companies understand the regulations, certifications and strategies to enter the health market
Administrations	Institutions that regulate, finance and promote health policies to facilitate innovation and access to new treatments
Distributors and suppliers	They are in charge of the logistics and sale of medical products to hospitals and pharmacies
Public funding institutions	They offer grants and financial support for research and development of innovative technologies

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Abbreviations

GLOSSARY

BioTech	Biotechnology
CTO	Chief Technology Officer
CAGR	Compound Annual Growth Rate
EMA	European Medicines Agency
FDA	Food and Drug Administration of the United States of America
Farma	Pharmaceutical company
MedTech	Medical Technology
M\$	Millions of dollars
M€	Millions of euros
R+D+I	Research, development and innovation

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