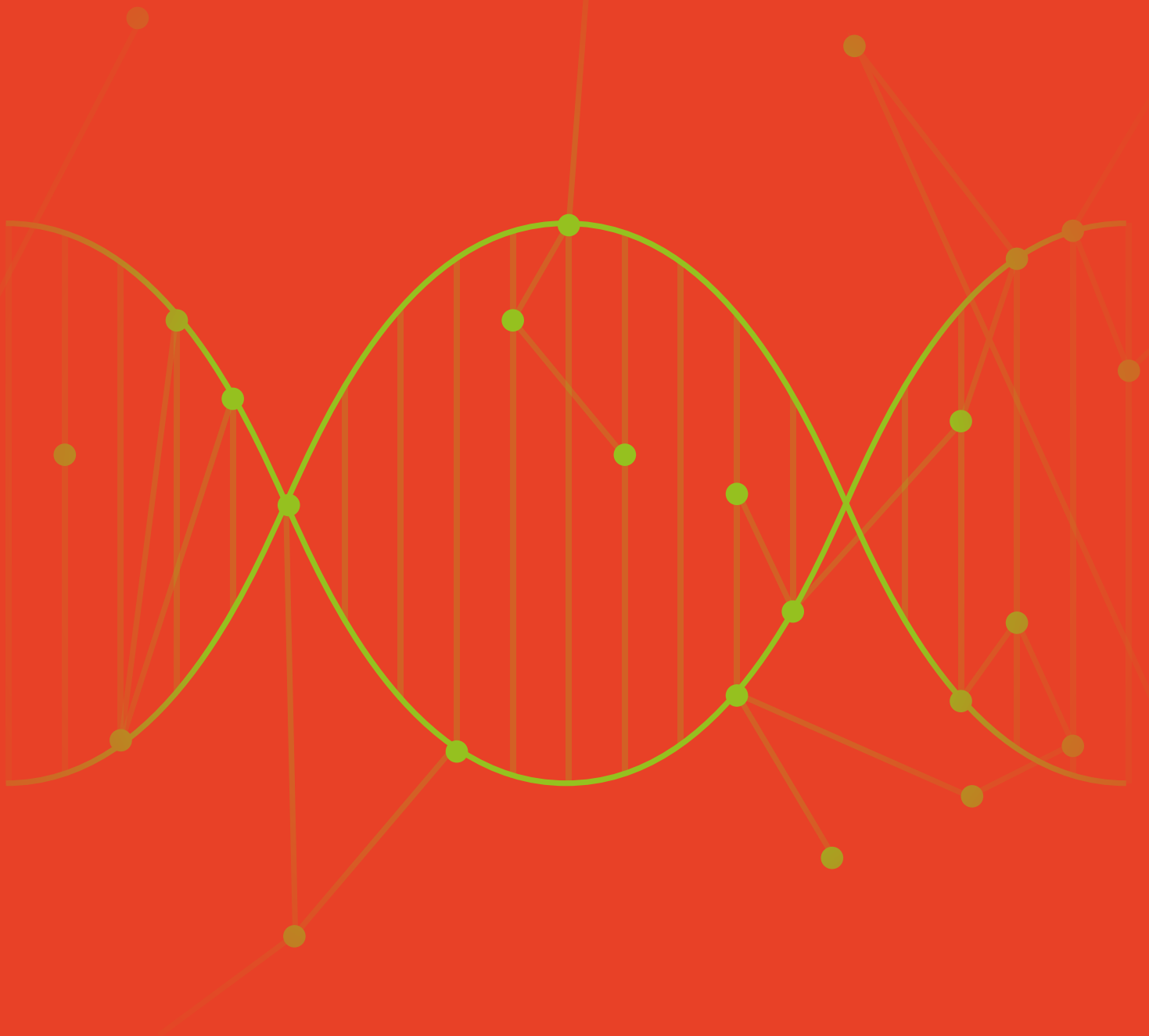


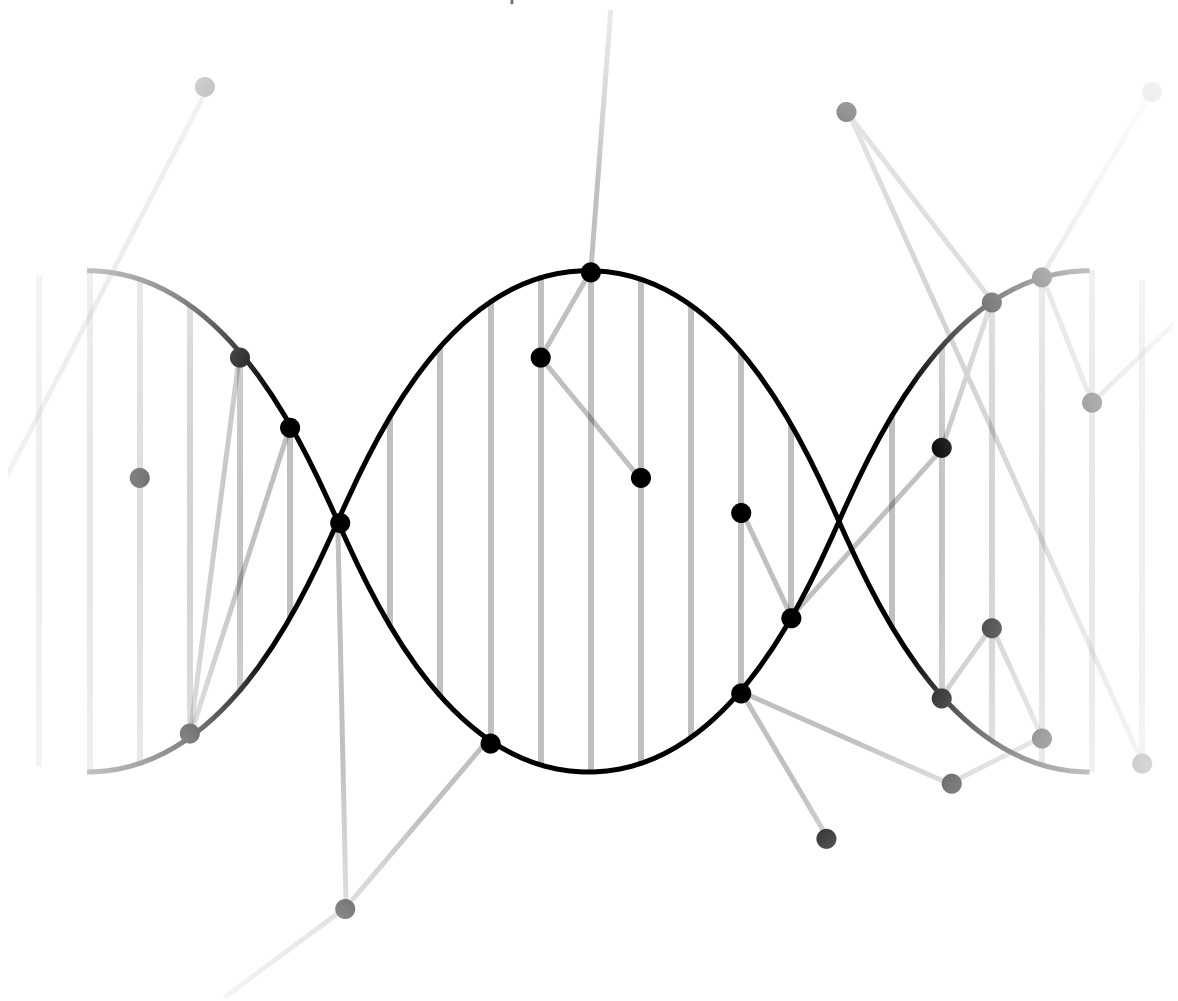
# 2018 ASEBIO

REPORT EXECUTIVE SUMMARY  
Trends from the Spanish Biotech Sector



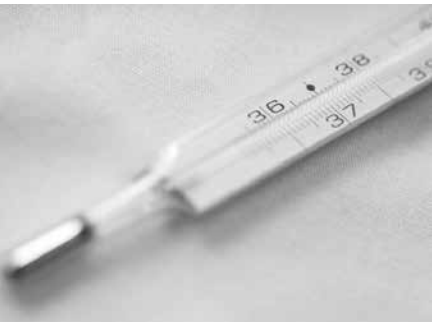
# 2018 ASEBIO

REPORT EXECUTIVE SUMMARY  
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The Asebio Report, published every year since 1999, is the benchmark publication for the Spanish biotechnology sector. It covers issues regarding the economy, market, science and finances.

*“Biotech companies account for 0.7% of the Spanish GDP.”*



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## Taking the sector's temperature

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The biotechnology sector rates the ecosystem positively, a trend we have seen since 2013 and that reached a high point in 2018 (3.60).

Companies noted that aspects like talent and cooperation with the public sector are enabling elements of the biotechnology sector in our country. Nevertheless, companies think that issues associated with funding, like the long time to profitability and cost of innovation, make developing biotechnology difficult in Spain.



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## Economic scope and indicators of progress

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In 2018, the Spanish economy continued expanding, although at a slightly slower rate than the two previous years, consolidating a five-year cycle of expansion and surpassing production volume from before the great financial crisis of 2009.

This expansion came along with good company start-up rates, with a net increase of 1% in 2017 and, above all, a boost in job creation, with 480,000 new positions.

Biotechnology companies were not left on the sidelines of this expansion, with 62 new companies focusing mainly on biotechnology (biotech), which is an increase of 9% and puts this sector above the average rate for the Spanish economy as a whole.

Additionally, the work these biotech companies do has been especially dynamic, with value added up 31%, more than any other productive sector.

This increase was due to a 6% jump in turnover and a drop in intermediate consumption, consolidating the growth in value added per unit manufactured that has been seen recently.

As with the economy as a whole, this growth was particularly strong with regard to employment, creating nearly 2,400 new direct positions at biotech companies. This is up 10.6% compared to a 2.9% rise for the Spanish economy in general.

Although we don't have definitive figures from the INE Survey on Biotechnology Use, estimates based on the fixed assets reported by the biotechnology companies analysed show some signs of stagnation in internal R&D expenditure. This would entail a slight drop in the sector's relative weight in total R&D. Nevertheless, according to the data available for 2017, the biotechnology sector is one of the most R&D intensive sectors in terms of R&D expenditure as a percentage of production: 4.3%. Only traditional sectors such as research, education and research services, and the pharmaceutical sector as a whole, spend more.

The biotechnology sector's total contribution to the Spanish economy as a whole can be determined by looking at the initial direct revenue streams, plus all the pull effects on the rest of the economic system from biotech companies purchasing goods and services and investing. In 2017, this contribution totalled €6.95 billion (0.7% of the Spanish GDP). It was responsible for more than 92,000 direct, indirect and induced jobs, which is 0.5% of all employment. Over 25,000 of these jobs were people employed directly by biotech companies.

All of this activity associated with biotech companies generated a total revenue of nearly €2.5 billion for the public treasury, which is 0.2% of the GDP.



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## Technological innovation and scientific production

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In 2018, the biotechnology sector confirmed growing demand for protection through patents in Europe and the world. The sector is increasingly protecting its innovations using patents within the European framework and on a global scale. The number of patent applications submitted to the European Patent Office (EPO) and through the Patent Cooperation Treaty (PCT) is up 80% and 50%, respectively, over the past decade.

Companies apply for the majority of patents in the biotechnology sector. They submitted a joint total of 178 patent applications in 2018, followed by universities with 90 applications.

Collaboration is an essential part of the innovation process in the biotechnology sector, which is reflected in the fact that 192 of the patent applications submitted in 2018 were filed jointly.

Spain is ranked ninth in the world in the production of knowledge in the biotechnology sector. Plus, scientific production in the sector has consolidated its quality and excellence. It has a normalised impact factor of 1.4 (which means it is 40% above average) and it has experienced an increase in the number of highly cited scientific publications (within 10% most cited), from 20,5% in 2007 to 26% in 2014.

The sector collaborates internationally to produce scientific knowledge, mainly with the United States, United Kingdom, Germany, Italy and France. As a result, the excellence and impact of publications has improved.



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## Market status

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Asebio members generated value through nearly 200 strategic alliances in 2018. Half of these were public-private partnerships.

Collaborations within Europe make up 27% of the total, but the international projection of strategic alliances extends to the United States (8%), Latin America (3%) and Asia (3%). The purpose of nearly half of all collaborations is to carry out R&D. This means technological alliances play an essential role in creating value within the biotechnology sector.

Internationalisation remains an essential part of the Spanish biotechnology sector. It has become the top priority for Asebio members. Mergers and acquisitions, however, are not a priority in their strategies.

In 2018, Asebio members launched 86 new products and services to market in areas like personalised medicine, food safety and bioproducts and biodrugs.

Moreover, 40 new biotechnology companies were started up in 2018: 10 in the Basque country and nine in Catalonia.



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## Financial arena

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While 2017 stood out for the significant increase in investments and investment commitments from venture capitalists that invest in the biotechnology sector, the most noteworthy aspect of 2018 was undoubtedly the two unprecedented corporate transactions in biotechnology in Spain, reaching nine figures. We are referring to Takeda acquiring TiGenix for €520 million and Qiagen acquiring Stat-Dx for €154 million.

2018 saw both more and larger capital increases, for the third consecutive year, totalling more than €94 million.

In addition, since 2008, venture capital funds have invested nearly €600 million in biotechnology.



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## Internationalisation

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Internationalisation is, once again, a top priority for biotechnology companies.

This brings excellent prospects for turnover and job creation on the international side of business and record investment in rounds including international funds, reaching nearly €74 million for the very first time.

This general optimism in the sector is balanced by the uncertainty of the economy and the political instability of several markets. This is why the biotechnology sector is prioritising more stable markets, like the European Union, United States and Japan, with a sharp drop in the United Kingdom and Latin America.

*See full report (in spanish) at [www.asebio.com](http://www.asebio.com)*

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