The system of biotech companies in Italy

Italy can be proud of being at third position in Europe for number of biotech companies, whose total turnover represents a more than proportional growth in investments in research and development. Active in the fields of human health, agro-food and in the industrial sector, our biotech companies confirm the ability to transform the excellence of Italian research into new products and services, and represent an extremely dynamic and competitive reality, able to overcome the cyclic nature that characterizes other industrial sectors.

Introduction

From our study we have identified 394 companies investing in Research & Development (R&D) in biotechnology in Italy, at the end of 2011 (Table 3.1). The results of the analysis confirm again this year, the positive trend in the industry for all major indicators. Indeed, despite the number of companies in the sample remains substantially the same, the turnover, investments and the number of employees in R&D, show an increase.

These results are even more significant when analysed in relation to the continuing difficult economic and financial situation and demonstrate, once again, the strength of a sector, namely that of biotechnology, which represents a promising reality in our Country too.

Table 3.1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total biotech</td>
<td>Pure biotech</td>
<td></td>
<td>Total biotech</td>
<td>Pure biotech</td>
</tr>
<tr>
<td>Number of companies</td>
<td>396</td>
<td>242</td>
<td></td>
<td>394</td>
<td>248</td>
</tr>
<tr>
<td>Total turnover</td>
<td>€ 6,814 million</td>
<td>€ 1,195 million</td>
<td></td>
<td>€ 7,075 million</td>
<td>€ 1,278 million</td>
</tr>
<tr>
<td>Total investments in R&amp;D</td>
<td>€ 1,692 million</td>
<td>€ 491 million</td>
<td></td>
<td>€ 1,830 million</td>
<td>€ 557 million</td>
</tr>
<tr>
<td>Total R&amp;D Employees</td>
<td>6,647</td>
<td>2,410</td>
<td></td>
<td>6,872</td>
<td>2,499</td>
</tr>
</tbody>
</table>

* Data have been rectified to make sample comparison possible.
Analysis

Despite the variations that arose in the sample, the percentages reveal few differences from last year in terms of type of company, field of application, size, origin and location of the companies.

62% of companies in the sample consist of pure biotech, the remaining 38% consist of firms belonging to other types, namely Italian pharmaceutical companies, multinationals’ subsidiaries in Italy and other Italian biotech companies including CROs and others. The pure biotech companies increased by 5 units, since most of the newly set up companies chose to enter the biotech sector by focusing their core business on one or more biotech methods, while the Italian pharmaceuticals and the other Italian biotech companies decreased by 2 and 4 units respectively.

The analysis by application field, according to the classification already adopted in the previous reports, shows that the distribution of the companies in the sample is not much different from last year (Figure 3.1).

More than half of the companies is active exclusively in red biotech (52%), confirming the predominant interest in human health, whose market outlet is highly attractive from an entrepreneurial point of view. However, 16% are active in GPET (Genomics, Proteomics and Enabling Technologies), 11% in green biotech and 8% in white biotech, whilst 13% of the companies are active in more than one field of application, and are therefore classified as multi-core (Figure 3.2).

Concentrating only on pure biotech companies, most of them are active in red biotech (47%), while 17% are multi-core, 16% GPET, 11% green biotech and 9% white biotech (Figure 3.3). The situation is completely unchanged from last year.

Before continuing with our analysis, we believe it useful to submit an alternative classification that describes the business models most commonly adopted in the different fields of application.
We have therefore defined three main types of business model:

- **Product-centric model**: the company focuses on molecules or products whose development involves significant investment of time and financial resources, but which represent a significant source of revenue, or a significant increase in the turnover deriving from other products and services already on the market;
- **Technology-centric model**: the company focuses on developing a wide range of products and services based on proven technologies, applied to accelerate the discovery and preclinical phases, as well as the early stages of clinical development;
- **Know-how-centric model**: the company is focused on exploiting its own expertise in R&D, regulatory, manufacturing and marketing, with a view to making this available to third parties, in the form of services.

From the analysis of questionnaires it emerged that there is a correlation between the business model and the chosen field of application (Figure 3.4).

Specifically, the analysis shows that:

- Red and green biotech companies, in more than 50% of cases, adopt Product-centric models, focusing on the development and commercialization of molecules or products that originate from R&D activities in their internal organization;
- White biotech companies are divided between Technology and Know-how centric, focusing on developing new technologies that permit the creation of alternative and more efficient processes at the production chain level;
- The feature common to different fields of application is the presence transversely of the Know-how-centric model, through which the company enhances its expertise to offer services to third parties. This trend is more pronounced among white companies, to whom the traditional industrial groups are turning more and more often in order to improve their own production processes.

The biotech industry recorded a total turnover of € 7,075 million in 2010, an increase of about € 261 million compared to the sample reported in 2009. The analysis of turnover by type (Figure 3.5) shows how, once again, 73% of the total turnover originates from Italian subsidiaries of multinational companies, almost all of which are active in red biotech, carrying out research in our Country, and which have a high number of products on the market.

The Italian-owned companies represent on the other hand 27% of turnover, divided between pure biotech companies (19%), Italian pharmaceutical companies (6%) and other Italian biotech companies (2%). Overall, pharmaceutical companies, which constitute 23% of the total sample, have an incidence on turnover of about 80%.

Analysis by size confirms that the majority of companies that operate in the field of biotechnology (77%) is micro-sized or small (47% micro and 30% small), having a number of employees less than 50 units (Figure 3.6). Also the new companies...
Included in the sample are all of micro or small dimension.

Companies that have between 50 and 250 employees (classified as medium-sized) are 12% of the total, while 11% are large-sized (more than 250 employees). These are mainly pharmaceutical companies representing 10% of total biotech companies, and accounting for 82% of total turnover.

Medium-sized companies constitute 10% of the total, while overall the micro and small enterprises only 8%. This figure shows how the Young Innovative Companies (YIC), while representing an important reality of the Italian biotech industry, both in numbers and for their ability to generate innovation, still cannot rely on revenue levels that are adequate to support their R&D efforts, due to the limited number of products that have reached the stage of commercialisation.

It is therefore essential that the development of the YIC can find adequate support at institutional level, through the introduction of appropriate and tailored made measures.

Restricting the analysis by size only to the pure biotech companies (Figure 3.7), the percentage of micro and small-sized enterprises increases further to reach 88%, confirming the fact that the majority of companies that fall into this category consists of YIC, that are specifically dedicated to R&D activities.

The analysis by origin confirms that the majority (39%) of firms in the biotech industry are set up as start-up companies, 22% as academic spin-offs, 14% as subsidiaries of multinational companies, 7% as industrial spin-offs or spin-outs, while 5% originates from Italian pharmaceutical companies and 13% from other (Figure 3.8).

Also as regards their geographical position, it has been confirmed that biotech companies are mainly concentrated in northern and central Italy.
The system of biotech companies in Italy

This year too, Lombardy has established itself as the region with the highest number of biotech companies (129), followed by Piedmont (43), Latium (42), Emilia Romagna (36), Tuscany and Veneto (both 25), while the number of companies located in the southern regions is still relatively limited (Figure 3.9).

As to their location, 54% of biotech companies have independent headquarters, 35% work within science parks or incubators, while the remaining 11% is located near universities, clinical centres or research institutes.

As regards the number of employees in the biotech sector, the absolute and relative data reported for 2010 show an increase in line with that of last year.

As for the number of employees dedicated to R&D, which totals 6,872 persons, this reaches a fairly high percentage of total employees (30%) in the case of pure biotech companies. In the pharmaceutical companies and the other Italian biotech companies, the ratio between employees in R&D and total employees is 10% (Figure 3.10).

Also this year, the analysis of the employees' distribution confirms that the 30% of the so called other biotech companies absorb 90% of the workforce.
An analysis of R&D investments by type (Figure 3.11) shows how these investments are generated by Italian pharmaceutical companies (36%) and multinational’s subsidiaries in Italy (36%), pure biotech companies (26%) and the other Italian biotech companies (2%). The amount of investments totals € 1,830 million, with an increase in the order of € 138 million compared to last year.

The comparison with previous years shows furthermore a positive trend in terms of net profit of biotech firms (Figure 3.12). 65% of Italian pure biotech companies record a profit in 2010, and this percentage rises to 75% for the so called other Italian biotech, to 82% for the Italian subsidiaries of multinationals companies, to 90% for the Italian pharmaceutical companies.

From the data collected with the questionnaire, it emerges that the companies interviewed expect the same results obtained in 2010.

The high percentage of companies that record a positive result indicates that most of these companies have adopted measures to increase efficiency or to reduce expenses in order to contain costs. This is confirmed by the fact that 63% of companies surveyed reported having made strategic decisions of this type in 2010.

Also this year the questionnaire sought to gather information from companies on the measures already adopted, or at least planned in order to face the crisis. 58% of the companies that answered to the questionnaire adopted measures, among...
The system of biotech companies in Italy

others, to increase operational efficiency and reduce expenditure, while 31% sought means to obtain alternative funding sources (Figure 3.13).

As far as possible measures for the future are concerned (Table 3.2), an increase in operational efficiency and reducing expenditure are considered as likely, or very likely, by 70% of the companies surveyed, along with the possibility of developing new strategic alliances (86%), and seeking alternative funding sources (56%).

Equally significant is that the reduction of employees as well as the development pipeline are not considered among the possible options, at least in the short term, by well over 80% of companies surveyed. The said companies seem also divided about the opportunity to share facilities and resources with other companies, or to develop new business models.

With regard to possible M&A deals and increased use of outsourcing, such options are considered unlikely, or very unlikely, by 75% and 64% respectively of the companies who answered to the questionnaire.

![Figure 3.13](image)

**Analysis of the main reactions to the challenges deriving from the economic crisis** (Source: Ernst & Young)

<table>
<thead>
<tr>
<th>Option</th>
<th>实施(%)</th>
<th>未实施(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing operating efficiency and reducing cash expenditure</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>Seeking alternative sources of capital</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>New business models</td>
<td>21%</td>
<td>79%</td>
</tr>
<tr>
<td>Decreasing the number of employees</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>Sharing of resources and structures with other companies</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>Seeking alliance opportunities</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>Reducing items in the development pipeline</td>
<td>11%</td>
<td>89%</td>
</tr>
<tr>
<td>Increasing recourse to outsourcing</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>Moving into a new business segments</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>Seeking M&amp;A opportunities</td>
<td>3%</td>
<td>97%</td>
</tr>
</tbody>
</table>
### Table 3.2

**Analysis of the main measures that could possibly be implemented in the future** *(Source: Ernst & Young)*

<table>
<thead>
<tr>
<th>Challenges (%)</th>
<th>Very likely</th>
<th>Likely</th>
<th>Unlikely</th>
<th>Very unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing operating efficiency and reducing cash expenditure</td>
<td>36%</td>
<td>34%</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>Seeking alternative sources of capital</td>
<td>21%</td>
<td>35%</td>
<td>18%</td>
<td>26%</td>
</tr>
<tr>
<td>Decreasing the number of employees</td>
<td>15%</td>
<td>7%</td>
<td>25%</td>
<td>53%</td>
</tr>
<tr>
<td>Reducing items in the development pipeline</td>
<td>5%</td>
<td>11%</td>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td>New business models</td>
<td>8%</td>
<td>38%</td>
<td>33%</td>
<td>21%</td>
</tr>
<tr>
<td>Seeking alliance opportunities</td>
<td>39%</td>
<td>47%</td>
<td>11%</td>
<td>3%</td>
</tr>
<tr>
<td>Increasing recourse to outsourcing</td>
<td>7%</td>
<td>29%</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td>Sharing resources and structures with other companies</td>
<td>23%</td>
<td>26%</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>Moving into a new business segment</td>
<td>11%</td>
<td>21%</td>
<td>28%</td>
<td>40%</td>
</tr>
<tr>
<td>Seeking M&amp;A opportunities</td>
<td>7%</td>
<td>18%</td>
<td>31%</td>
<td>44%</td>
</tr>
<tr>
<td>None</td>
<td>5%</td>
<td>11%</td>
<td>26%</td>
<td>58%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>24%</td>
<td>13%</td>
<td>63%</td>
</tr>
</tbody>
</table>
Innovation for sustainable growth

A growing number of companies operating in “traditional” sectors are integrating biotech products and technology in their production processes in order to improve the quality and the yield, reducing the environmental impact. No production process affect less the environment than natural processes from which biotechnology derives. Bioeconomy is the challenge that Europe is taking up for the establishment of a new model of sustainable development that can create value and employment.

The biotech industry meta-sector

Biotechnology represents a set of enabling technologies used in various industrial and economic sectors. Given its prevalence and the significant increase in productivity that it is able to generate, biotechnology is fully included in the so-called Key Enabling Technologies (KET), as also defined by the European Commission\(^1\). The prerogative of KET is, in fact, to increase the productivity of a system by improving the efficiency of existing processes.

In addition to the red, white and green fields, biotechnology is being used increasingly in other industrial sectors (Figure 4.1), which is why biotech is being considered more and more often as a meta-sector.

Not surprisingly, OECD predicts that, in 2030, biotechnology will have a significant bearing on the production of 80% of pharmaceutical products, 35% of chemical and industrial products, 50% of agricultural products, for a direct estimated value of 2.7% of the global GDP.

Consequently, the figure of the “end user company” is taking shape: a company that, despite operating in a “traditional” industrial field, integrates biotech products or technologies in its production processes in order to improve the output and quality, or reduce the environmental impact. No production process can have an impact on the environment less invasive than natural processes from which, not by chance, biotechnology has its origin.

Hence the growing interest from industry to use biotech methods and products. Only to quote some examples: the transition to the production of antibiotics by means of fermentation has reduced energy consumption by 50% and polluting emissions by 65%; values that exceed 90% as regards the production of vitamin B2.

The next goal is to replace oil. The idea is to move from an economy based on hydrocarbons to one based on carbohydrates or sugars, with which many other molecules can be made, in the same way as living organisms do in nature.

For this reason, people are talking more and more often about bioeconomy as being a model for sustainable development within which there is much space for biomass production and its conversion into a wide range of industrial products such as textile

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\(^1\) Source: European Commission Communication n. 512 “Preparing for our future: Developing a common strategy for key enabling technologies in the EU”, 2009.
fibres, cellulose, paper, energy, plastics, substances for the food sector and health.

Today in Europe, bioeconomy is worth more than € 2,000 billion a year, and employs more than 22 million people, mainly in rural areas and SMEs2 (Table 4.1).

According to the OECD forecast, by 2030, biotechnology for human health will be overtaken by industrial and agro-food biotechnology, which will count for 75% of the gross added value of the entire biotechnology industry3.

In Europe, revenues generated by bio-based products, which in 2007 amounted to € 48 billion (3.5% of total revenues from chemical products), will amount this year to about € 135 billion (7% of total revenues from chemicals), rising to € 340 billion (15.4% of total revenues from chemicals) in 20174.

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2 Source: www.oecd.org
3 Source: OECD, “The Bioeconomy to 2030: designing a policy agenda”, 2009
The food industry

The food industry is relying increasingly more on biotechnology, whose application aims at better governance of technological processes, based on the extensive knowledge of natural processes that we have acquired over time.

It is estimated that by 2015, about half the global production of industrial food, feedstuff and seeds will be derived from plant varieties developed using one or more biotechnology applications.

Another trend of particular importance is that of food diagnostics, aimed at the detection of pathogenic microorganisms and harmful substances in food. Although diagnostic methods are limited to intervention on biotech production processes without creating new ones, their application is essential to ensure not only safety but also the authenticity and originality of the products that arrive at our table.

The chemical Industry

Biotech applications in the Italian chemical industry today are worth 3.5% of the overall turnover in the sector. In other words, more than € 3 billion of the total turnover of the chemical sector originate from the introduction of biotechnology. As can reasonably be expected, this trend is likely to increase in coming years. The chemical industry is in fact, one of the sectors that has best integrated biotechnology, developing specific bio-industrial processes in the most various fields, ranging from textiles to detergents, cosmetics, polymers, paper and animal feed, from paints to food, from treatment of waste to leather treatment, and many others.

The key technologies for the implementation of these new bioprocesses are, on the one hand, fermentation, and on the other - and especially - those based on enzymes. The use of these biological catalysts, which are highly specific and totally biodegradable, is decisive for the induction of reactions that in their absence could not take place.

The pervasiveness of this technology is so high that, in 2011, the global enzyme market reached € 2.7 billion.

**The pharmaceutical industry**

The entire process of research and development of new drugs has profoundly changed. The design approach today is essentially biological (cellular or molecular), unlike what was happening just twenty years ago, when the role of chemical synthesis or extraction methods was predominant.

Over the last thirty years in fact, a number of biological methods have been developed, by which it was possible to develop many biological or biopharmaceutical drugs. Just using recombinant DNA technology, it has been possible to develop and validate more than 300 recombinant proteins with therapeutic activity in humans, such as: insulin, somatotropin, interferons, growth factors, coagulation factors, erythropoietin, and many others.

Equally considerable is the number of biopharmaceuticals we may produce thanks to other promising technologies.

However, biotechnology is also involved in the development of traditional synthetic pharmaceutical drugs. More and more often, in fact, also chemical synthesis compounds, including small molecules, are selected and tested, already in the early stages of discovery and preclinical, through the use of molecular biology methods that are faster and less expensive.

It has been calculated that in 2011, the turnover of biotech drugs on the Italian market alone represents 27% of the entire turnover of the pharmaceutical industry (€ 25 billion), worth approximately € 6.8 billion. As far as the veterinary field is concerned, revenues deriving from biotechnology7 count for 14% (€ 85 billion). Of course these figures do not fully reflect the real impact of biotechnology on the pharmaceutical sector, since they do not take into account the value generated by the synthetic drugs tested through biotechnology.

Over the years, biotechnology has made possible the improvement of processes in many industrial sectors and it represents between 0.4 and 1.1% of global GDP8, with an average growth of 11% over the past three years.

Considering the annual turnover of the chemical, pharmaceutical and paper industries alone, based on Istat - Ateco 2007 and Assocarta 2009 data, it can be seen that in Italy, the impact of the biotech industry is worth approximately 0.7% of GDP (Table 4.2).

**The detergent industry**

Detergents for washing machines and dishwashers contain from one to three enzymes. The spread of the biotech industry in this market has now risen to 95% in Europe and Japan, 70% in North America, and 50% in Latin America and Asia.

**Paper Industry**

The use of enzymes in the preparation of fibres (bio-pulping) and bleaching (bio-bleaching), provides a fast, economical and environmentally friendly method, now adopted by all leading companies in the sector. It is estimated that the introduction of biotechnology has resulted in an average saving of € 13.5 per ton of paper produced; since the annual production of paper in Italy is around 5.5 million tons9, the savings amount to € 75 million a year. The penetration of biotech in the paper industry is around 12%10, and thus represents € 720 million.

<table>
<thead>
<tr>
<th>Table 4.2 Estimate of the impact of biotechnology on the Italian GDP (Source: Ernst &amp; Young)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turnover (billion €)</strong></td>
</tr>
<tr>
<td>Chemical products</td>
</tr>
<tr>
<td>Pharmaceutical products</td>
</tr>
<tr>
<td>Paper and paper products</td>
</tr>
</tbody>
</table>

7. Source: Aisa, 2012  
8. Source: CrESIT, 2010  
10. Source: Ernst & Young on Assocarta data 2009
A significant number of our pure biotech companies are located within Scientific and Technological Parks (STPs). By encouraging the development of true centres of aggregation of researchers, companies and investors, Italian STPs guarantee to small biotech companies a network of excellence and consulting services, as well as promotion and support activities for fundraising purposes, thus acting as intermediaries between the demand for skills and the availability of innovation and financial resources.

The Scientific and Technological Parks, created in order to provide a range of business support activities to innovative companies operating in hi-tech sectors, represent an important and a really unique reality for the development and growth of a geographical area. STPs promote, in fact, the creation of genuine innovation centres dedicated to R&D, especially in the Life Sciences field, generating employment and economic growth opportunities.

They were conceived to combine the interests of industry to those of research by locating firms in a specific geographic district, and have increasingly brought closer the possibilities of territorial development to that of research and industrial sectors.

In Italy, a significant number of firms located within science parks are biotech companies of micro or small size. These seek partnerships with other companies to take advantage of technology platforms, external expertise and professional skills needed to support their development. Hence the role of STPs, both as means of creating a network of collaboration, and entities able to offer consultancy services in different fields (legal, fiscal, marketing, partnering, intellectual property, human resources, etc.), together with support activities to promote companies located therein for fundraising purposes. Italian STPs too, in fact, have a vast and complex network, such that the incubated companies can easily get in touch with each other, and with possible investors, both national and international.

This approach, based on the possibility to share and exchange resources, is an absolute winner for companies operating in global and highly competitive sectors such as biotechnology, and whose development is linked to projects with a high level of innovation, where the outcome is often influenced by the lack of critical mass and resources. Consequently, it is not by chance that biotech companies constitute a significant number of companies present in Italian STPs.

Generally, these are start-ups that do not yet have the structural, organisational and financial autonomy to pursue their own projects. In recent years, however, even some of the Italian subsidiaries of multinational companies have shown interest in these technology districts, which are perceived as the best opportunity to create synergies and integration between different but complementary entities.

STPs therefore act as intermediaries between the demand for skills and resources not available in-house and the supply of innovation and financial resources from research centres and investors respectively.

Science parks are also key in the radical evolution in the pattern of public funding allocation: setting aside the logic of indiscriminate intervention, the needs of companies and the quality of their projects are being considered. Similarly, it is the close relationship with companies that allows STPs to guide private investors in the choice of the company to invest in, or to become the spokesman for the problems of the incubated companies at an institutional level.

In Italy there are about thirty STPs, whose dimension however is not comparable to that of those which are active in other countries. The most important science parks in terms of number of incubated companies are about fifteen, and
there is a certain correlation between their geographical location and the concentration of red biotech companies of micro or small size.

Within the Italian STPs overall there are a total of 127 entities ranging between companies, research organizations and consortia active in the field of Life Sciences (Table 8.1)\(^1\). Making a selection of the companies operating in the Italian STPs on the basis of the Ernst & Young definition of biotech company, it was possible to identify 113 companies, with a total turnover of approximately € 87 million\(^2\), R&D investments in € 147 million, and a number of R&D employees which exceeds 600 persons. Although the reality of Italian STPs is still in the starting phase, their development product pipeline looks very promising indeed.

To fully exploit the potential of the system, 14 Italian STPs and the Regional Agencies, with the support of their respective Associations - Assobiotech and APSTI (Associazione Parchi Scientifici e Tecnologici Italiani) have created Italian Bioparks as a table for discussion and work on the major issues pertaining to the development of the biotechnology sector, with a specific focus on the needs of Young Innovative Companies.

The following STPs have joined the Italian Bioparks initiative:

- AREA Science Park
- Bioindustry Park Silvano Furno
- Campania Innovazione
- Consorzio Technapoli
- Fondazione Filarete
- Friuli Innovazione
- Metapontum Agrobios
- Parco Scientifico Romano
- Parco Scientifico Tecnologico della Sicilia
- Parco Tecnologico Padano
- Pont-Tech
- Sardegna Ricerche
- Toscana Life Sciences
- Vega Park

The ranking of territorial clusters and parks, the support of international development of companies, the provision of advanced services in a shared manner and the creation of programmes for entrepreneurial development, are just some of the issues discussed and addressed. Italian Bioparks strives both to support the development of territorial aggregations - also at multi-regional level - such that full exploitation of resources can address some of the limitations within the Italian system, and to promote the internationalization of companies, so that they may seize the best opportunities and compete to the best in a global market such as that of the Life Sciences.

The report is available at [http://assobiotech.federchimica.it/home-eng.aspx](http://assobiotech.federchimica.it/home-eng.aspx)

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1. In Table 8.1 there are two more units, since two of the companies examined have more than one laboratory, detached and incubated in different parks.
2. For the purposes of our estimate, we did not consider those companies with autonomous headquarters, which still have laboratories that operate within STPs, since it was not possible to separate the turnover they generate.