

Biotech in Europe Biotech in France

- Thanks to Europabio (Nathalie Moll) and France Biotech (Haude Costa and Christian Berg).

- « The rendez vous de Concarneau 2013 »

Daniel Pardo (CNRS/MNHN)

- www.biotechweek.org



- www.europabio.org



- www.france-biotech.org



- <http://concarneau.mnhn.fr>



Biotechnology

A key technology platform

Today, biotechnology is a an enabling technology applied in 3 main sectors:



**Healthcare
Biotech**



**Agri Food
Biotech**



**Industrial
Biotech**

blue biotech ??????

European biotechnology at a glance, 2011-12 (US\$m)

	2012	2011	% change
Public company data			
Revenues	20,385	18,951	8
R&D expense	4,902	4,940	%
Net income (loss)	236	(19)	-1%
Market capitalization	79,829	71,497	-1,324%
Number of employees	51,740	47,700	12%
Financings			
Capital raised by public companies	2,882	1,530	%
Number of IPOs	3	8	
Capital raised by private companies	1,243	1,332	88%
Number of companies			
Public companies	165	169	-7%
Private companies	1,799	1,847	
Public and private companies	1,964	2,016	-2%

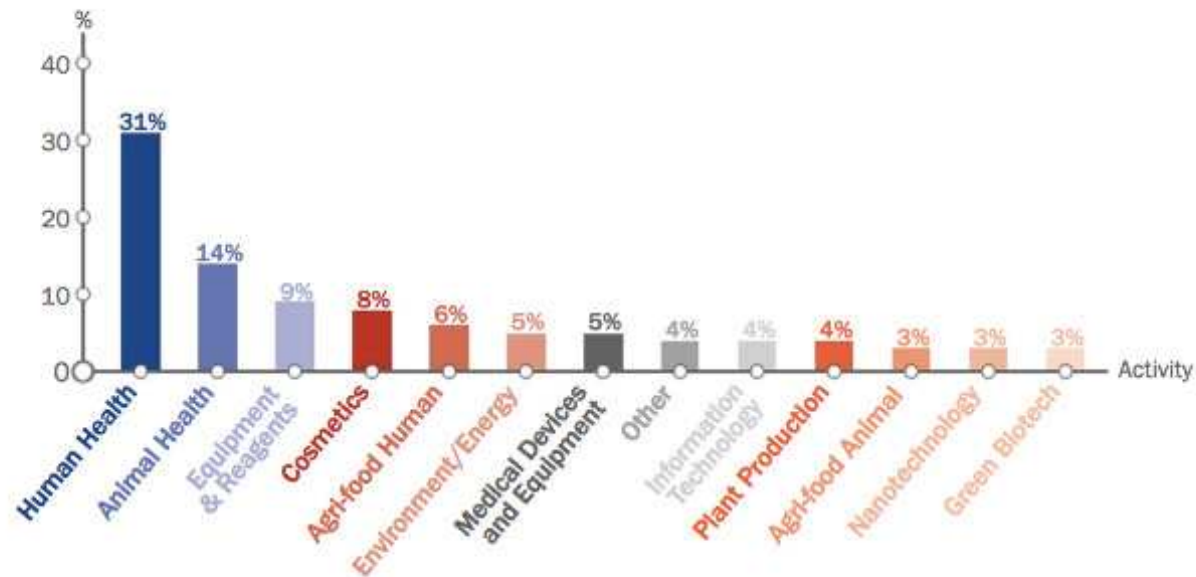
-3% -3%

Source: Ernst & Young and company financial statement data.

Numbers may appear inconsistent because of rounding.

Commercial leaders are companies with revenues in excess of US\$500 million.

Domain of Activity ⁽⁶⁾



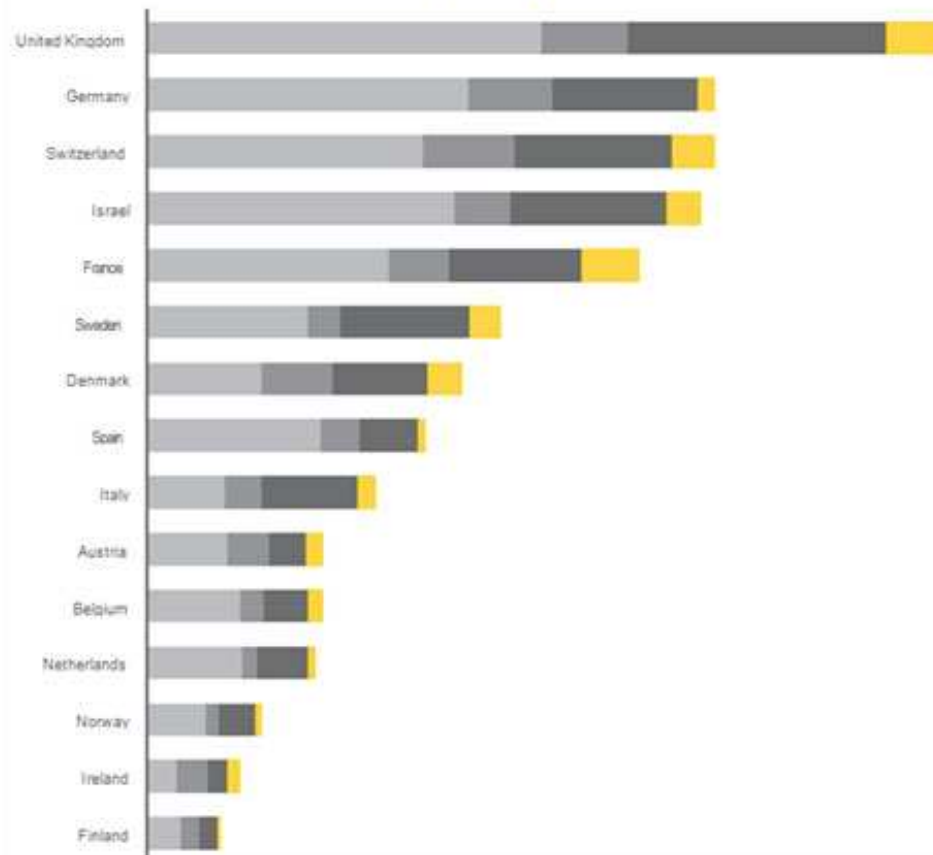
Source: France Biotech, May 2013; 186 companies

Human Health continues to be the most common domain of corporate activity among this year's survey respondents. Animal Health and Cosmetics remain focus areas for many companies, while 2012 saw an increase of activity in the domain of Equipment & Reagents. Looking broadly at Cleantech disciplines, a combined **12%** of activities are focused on the Environmental/Energy, Plant Production and Green Biotech domains (10% in 2011).

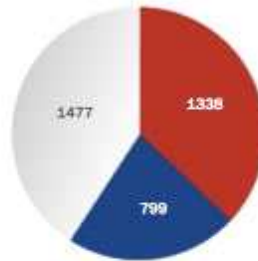


European pipeline by country

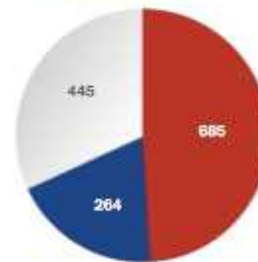
■ Preclinical ■ Phase I ■ Phase II ■ Phase III



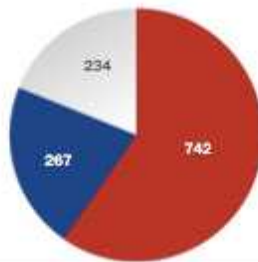
Patents Filed ⁽¹⁰⁾



Patents Granted ⁽¹¹⁾



Patents Exploited ⁽¹²⁾



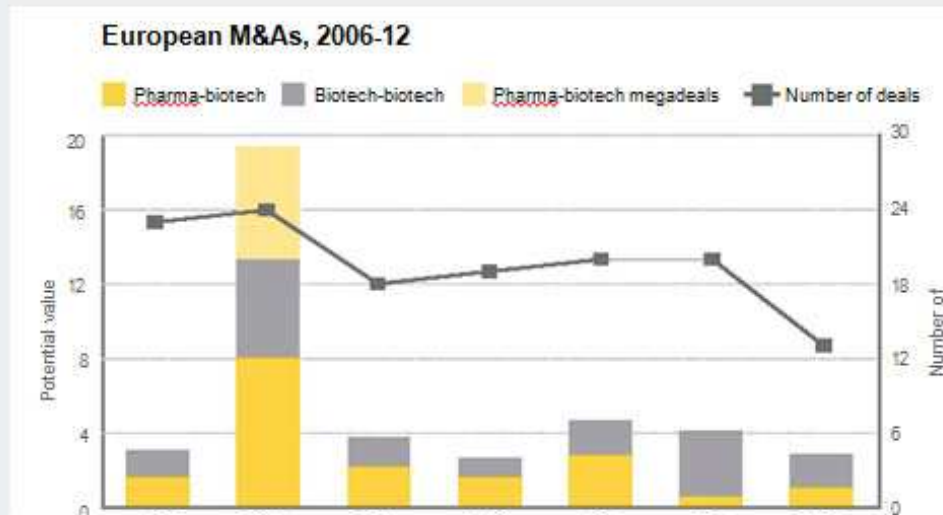
■ France/Europe
■ USA
■ Rest of World

Source: France Biotech May 2013; 130 companies

Source: Ernst & Young, Capital IQ, MedTRACK and company news.

Chart excludes transactions where deal terms were not publicly disclosed.

- ▶ In 2012, the total value of mergers and acquisitions involving US and European biotech companies increased 9%
- ▶ In 2011, the industry had experienced a marked decrease in both the volume of strategic alliances and the aggregate "biobucks" potential value of these transactions.
- ▶ In 2012, the number of deals increased by 4% to 153., however, their potential value fell by 9% to US\$27 billion



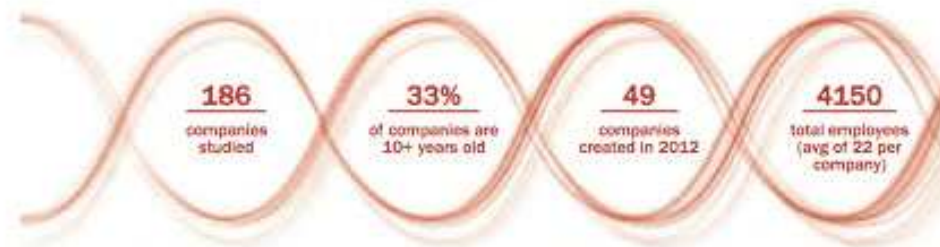
11th Edition

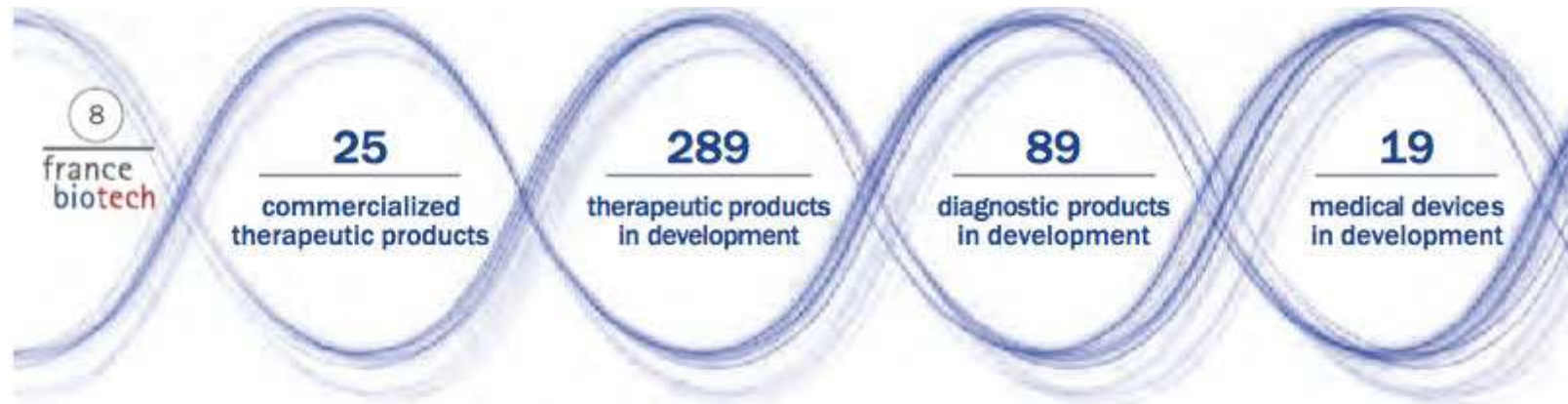
**Panorama of the French
Life Sciences Industry[®]
2012**

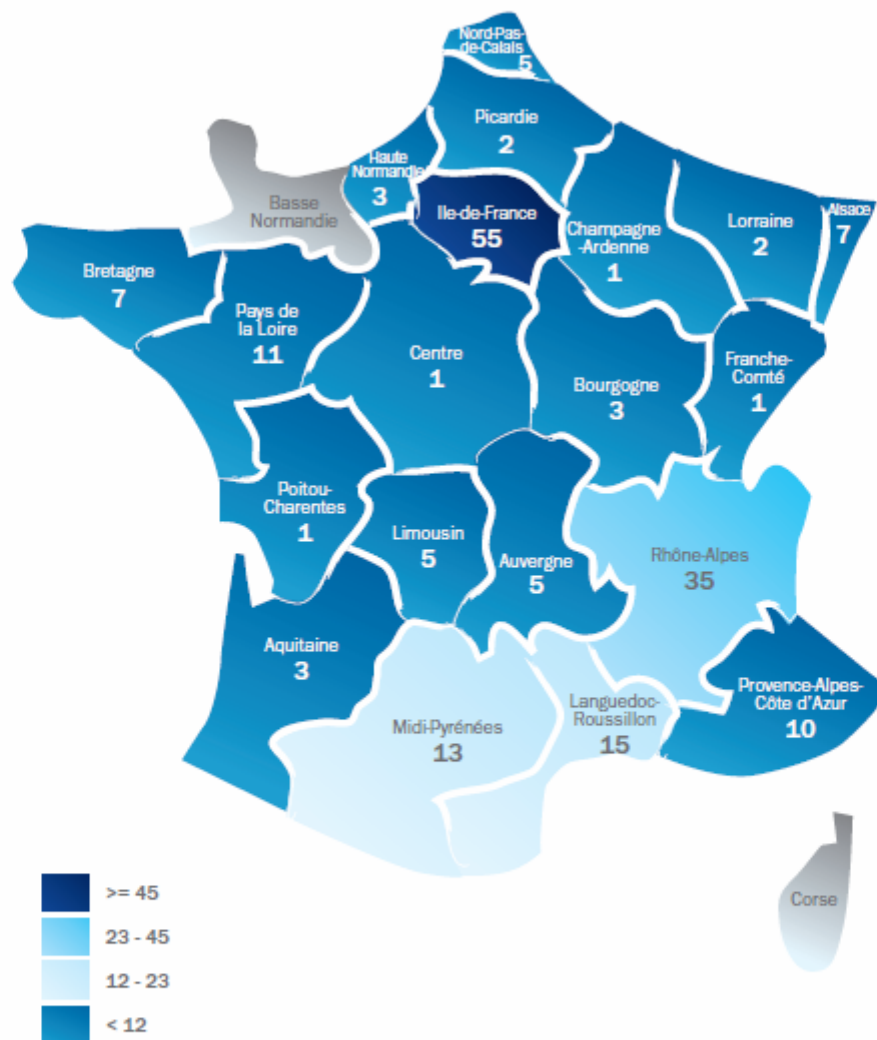
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leader in the field of in vivo diagnostics by the name of **Stracoma**. This was followed by the biopharmaceutical company **Vivalis'** purchase of Austrian firm **Intercell (133 M€)**, which created a new biotech leader in vaccines and antibodies by the name of **Valneva SE**. Other M&A activity included the purchase of **Eclat Pharmaceuticals** by **Flamel Technologies**, the acquisition of biotechnology firm **Prestizia** by theranostics company **Theradiag** and the acquisition of R&D firm **Cerep** by **Eurofins Discovery Services**.

Evolution of Key Industrial Indicators						
Year	2007	2008	2009	2010	2011	2012
Number of companies in Panorama	103	130	170	211	190	186
Employees declared by Panorama respondents	3 645	5 399	3 178	5 365	4 229	4 150
IPOs	5	1	0	7	6	8
VC Funding (M€)	181	203	101	183	121	138
Marketed products	7	13	11	20	22	25
Public Companies	17	20	21	21	28	36

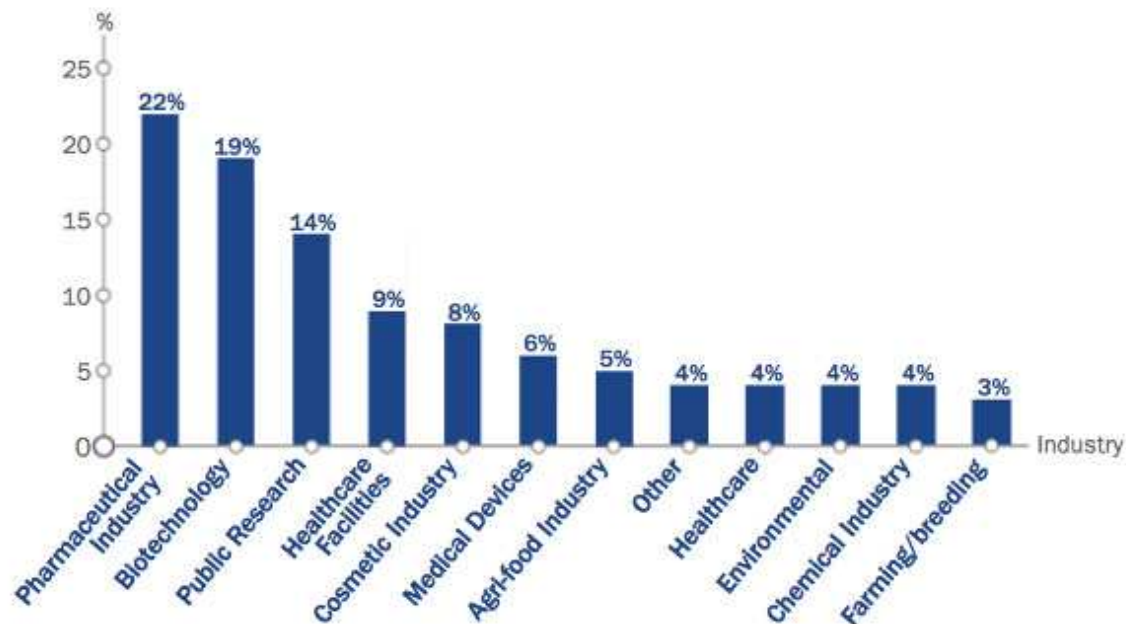






Source: France Biotech May 2013; 186 companies

Distribution of Clients by Industry Sector⁹



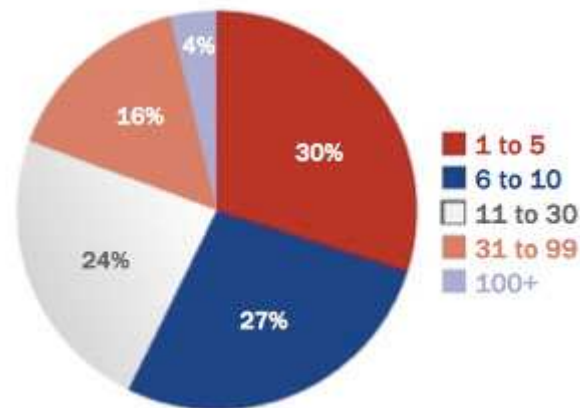
Source: France Biotech May 2013; 176 companies

The source of revenues for most companies in this year's Panorama study is similar to recent years, with the Pharmaceutical and Biotechnology industries, as well as Public Research Laboratories, remaining the most frequent customers for French Life Science companies. In fact, **78%** of respondents reported at least one Pharmaceutical industry client and **50%** reported at least one Public Research Laboratory client.

● Company Size and Employee Education

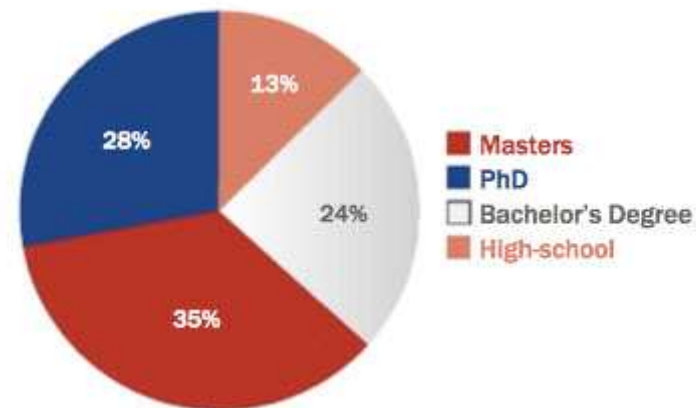
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Number of employees^②



Source: France Biotech May 2013; 186 companies

Level of Education Achieved by Employees^③



Source: France Biotech May 2013; 150 companies

Similar to previous Panorama studies, the majority of companies in this year's panel are small structures. **57%** of companies have 10 or fewer employees, while only seven companies have more than 100 employees. Recruitment in this innovative sector is mainly focused on individuals with advanced degrees, as **63%** of employees hold either a Masters or PhD level degree. **4150** people in total are employed in this innovative sector, making an average of **22** people per company.

● Government Support

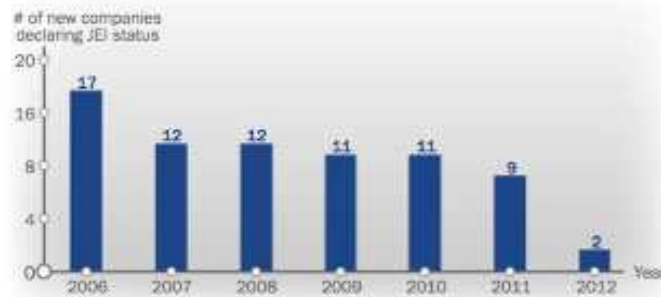
CIR

The research tax credit (CIR) is a tax reduction designed to encourage the R&D activities of French companies. 81 companies in this year's study reported taking advantage of the research tax credit for a total benefit of almost **68 M€**. **52%** of companies drawing on the research tax credit have 1 to 10 employees and **68%** have been in operation for less than 10 years, showing that this important program continues to benefit small, young and innovative companies. These 81 companies receiving the research tax credit together account for 19 products in Phase II clinical trials, 6 products in Phase III clinical trials and 16 products entering commercialization.

JEI

The "Young Innovative Company" (JEI) status, developed by the Strategic Council for Innovation and supported by France Biotech in 2004, provides a number of tax and social security exemptions for PME that allocate at least **15%** of their total costs to research and development. 160 companies employing 980 total workers in the 'Research and Development in Biotechnology' sector benefited from the JEI status in 2010, according to the 2012 DGCIS report "Évaluation du dispositif JEI." **50%** of companies in this year's study reported having opted for the JEI status. Furthermore, all 13 of the companies in this year's cohort that were created in 2011 or 2012 declared having applied for the status. The JEI status remains a crucial support for entrepreneurs in the Life Sciences sector.

Young Innovative Enterprise Status (JEI) ¹⁹



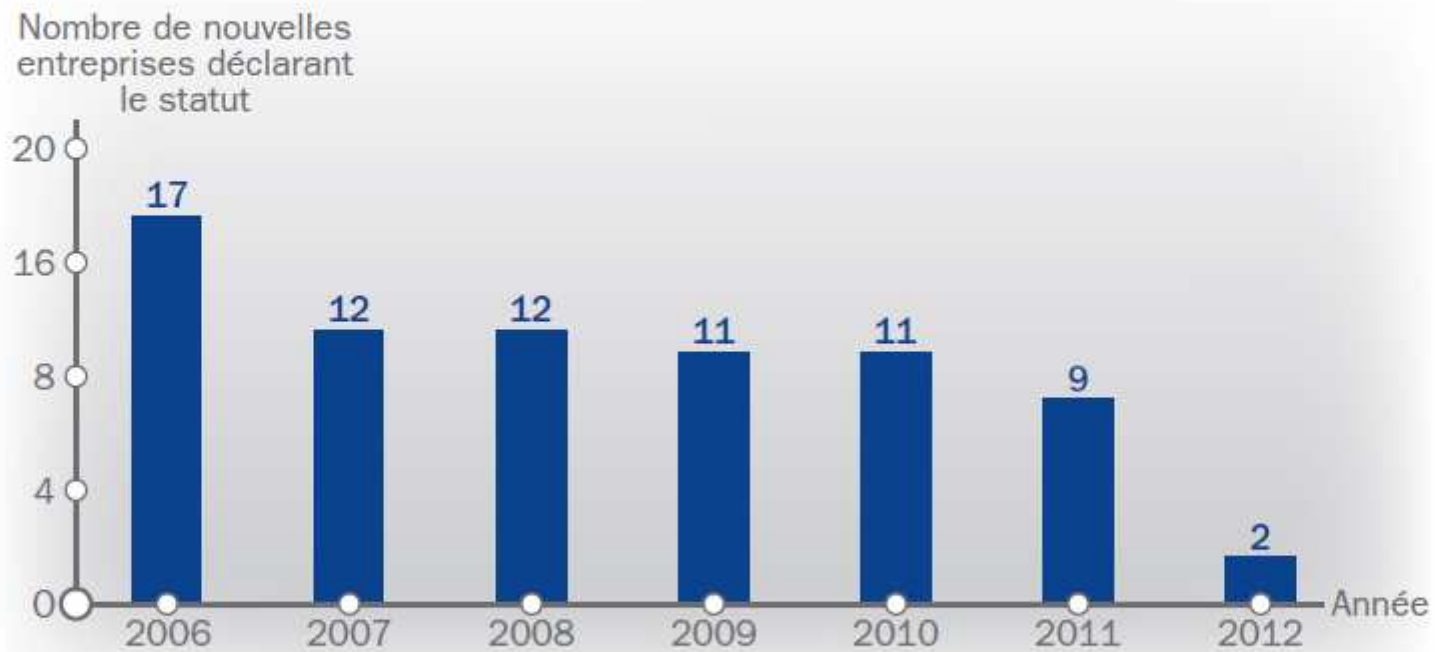
Source: France Biotech May 2013

Grants and Research Subsidies

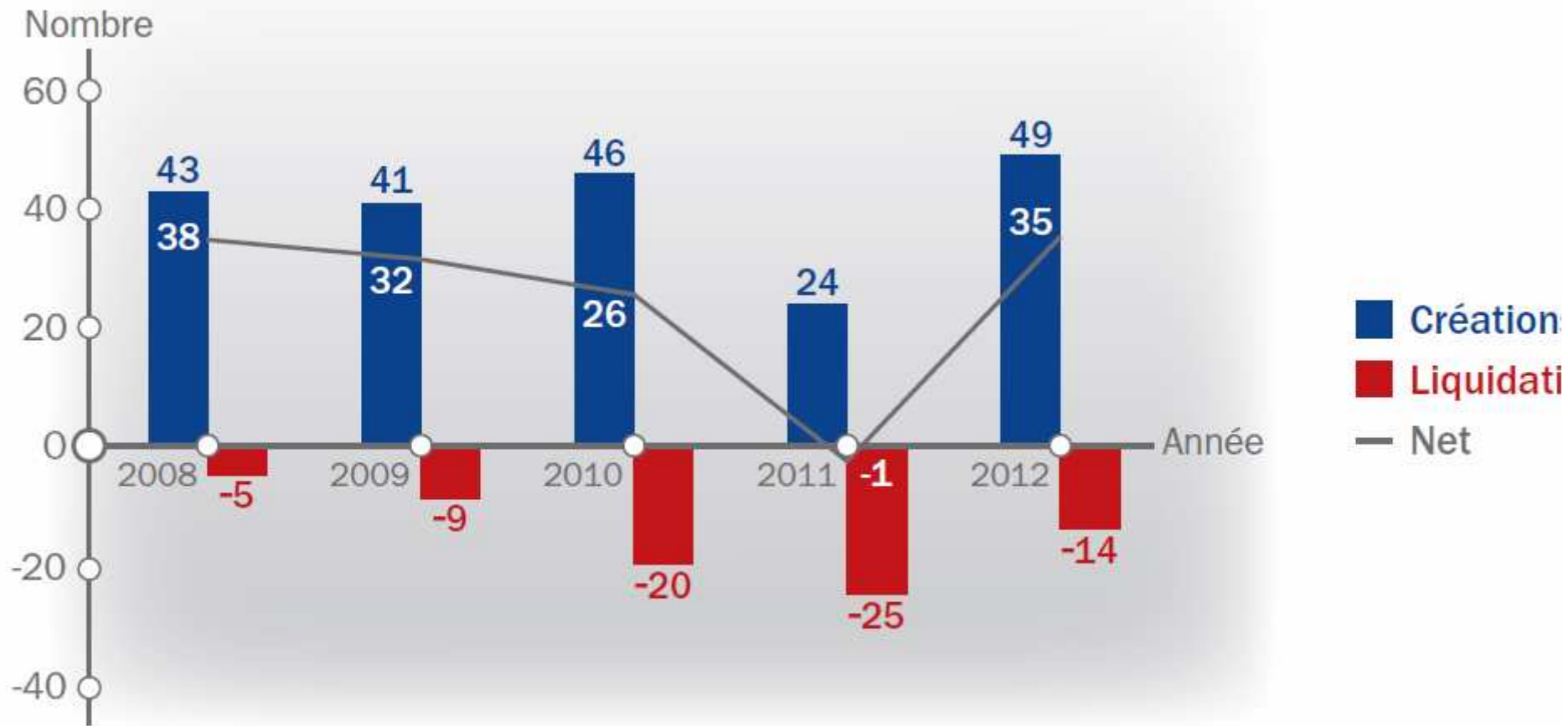
Among the 186 respondents to this year's survey, 138 reported receiving a grant or subsidy to support their activity in 2012. This financial assistance was distributed as follows:

- 52 companies received an investment subsidy;
- 64 companies received operating subsidies, totaling 40,5 M€;
- 84 companies received a repayable loan, totaling 73 M€;
- 39 companies received support from OSEO, totaling 61 M€;
- 23 companies received support from the Agence Nationale de Recherche (ANR), totaling 5.5 M€;
- 23 companies received support from a European program, totaling 8,3 M€.



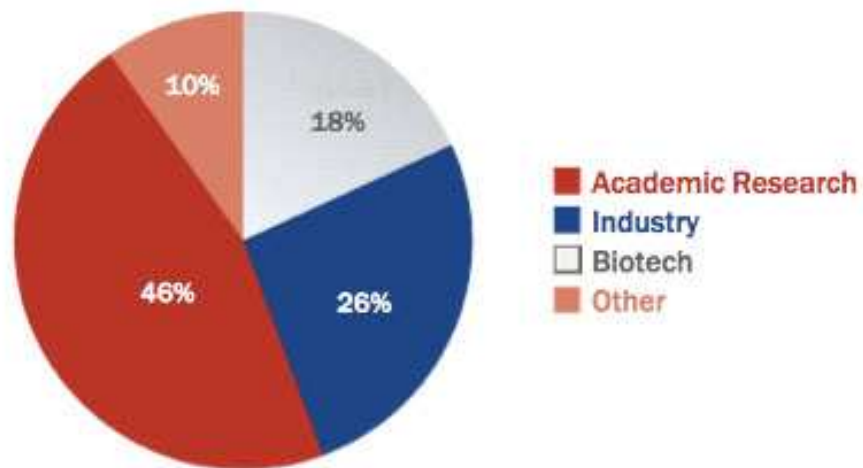


Source : France Biotech Mai 2013



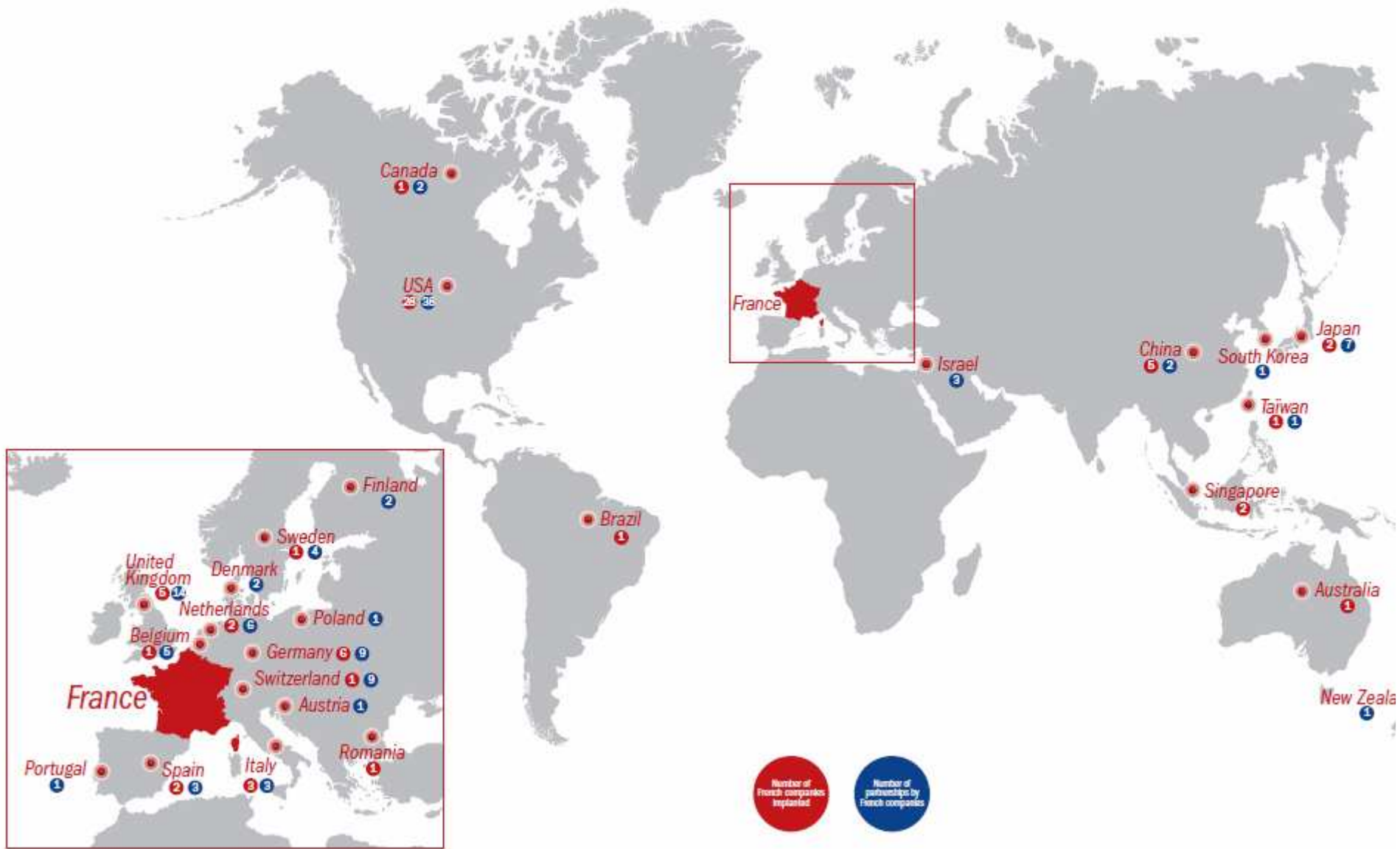
Source : France Biotech Mai 2013

Distribution of Partnership Types^⑧



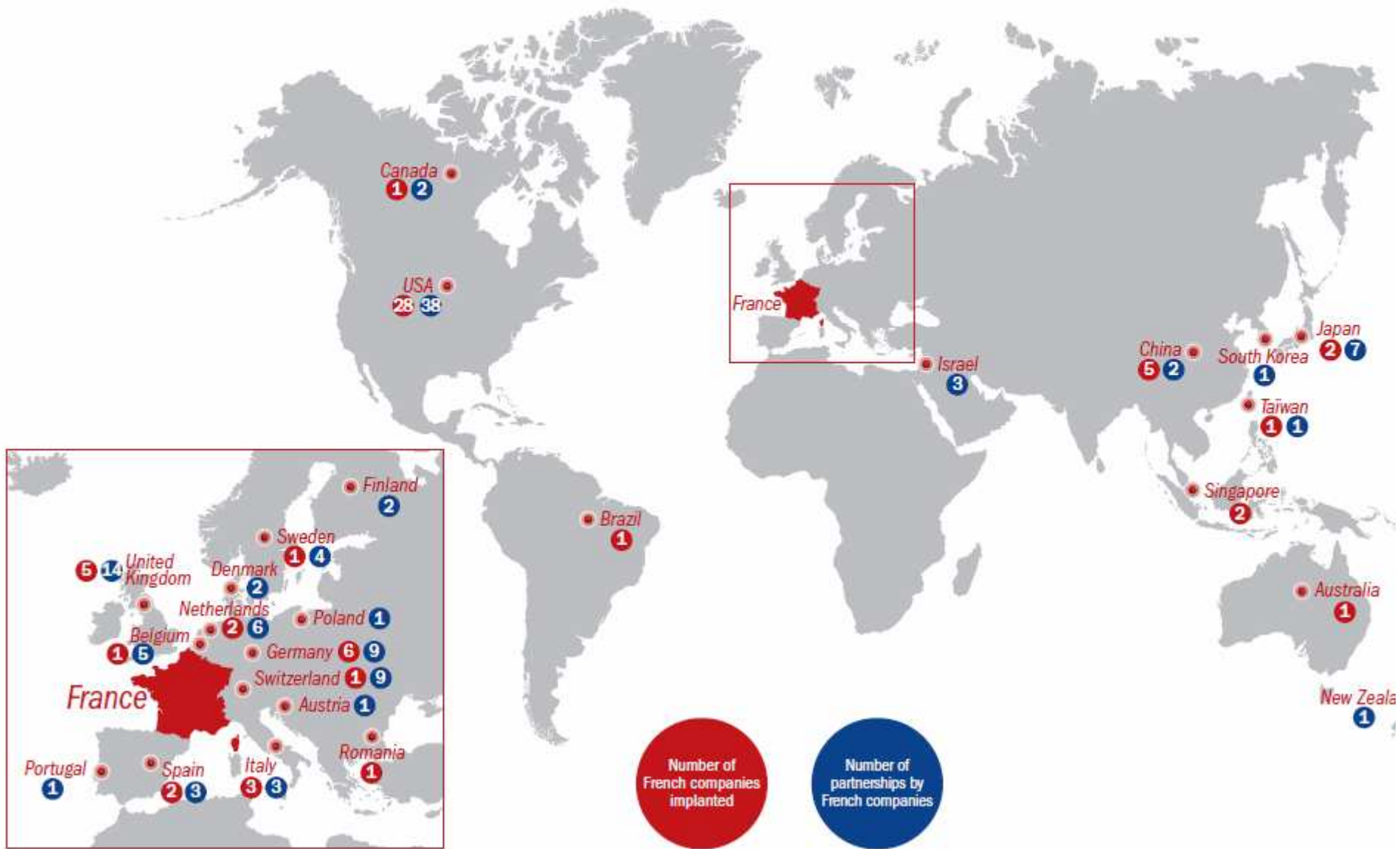
Source: France Biotech May 2013; 107 companies

Partnerships and strategic alliances continue to play an important role in the French Life Sciences industry. **58%** of this year's survey respondents reported having one or more partnership in place and over **400** total partnerships were declared. The foundational role played by the French academy in the Life Sciences sector shows up again in this domain, as nearly half (**46%**) of reported partnerships were constituted with academic research institutes (including CNRS, INSERM, Institut Pasteur, Institut Curie and APHP). These relationships are very international in nature, as nearly a third of partners are non-French organizations. Furthermore, **1 out of every 5** French Life Sciences companies with a partnership has developed an accord with a global 'Big Pharma' company (including



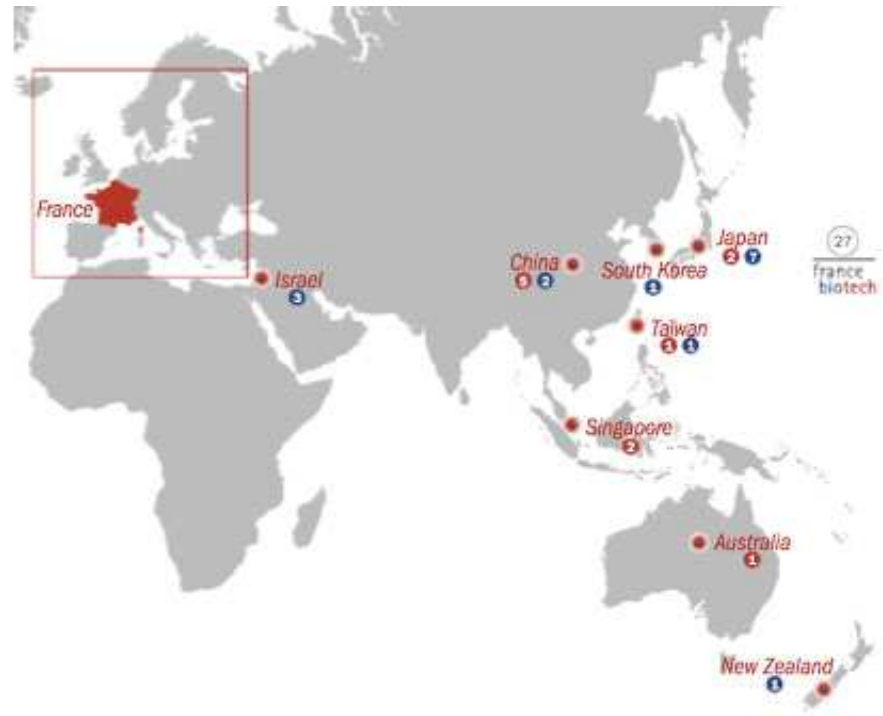
Number of French companies implanted

Number of partnerships by French companies



Number of French companies implanted

Number of partnerships by French companies



Source: France Biotech May 2013





INTERNATIONAL PERSPECTIVES

