Biotechnology Report

MALTA

PREPARED BY EUROPABIO AND VENTURE VALUATION IN 2009

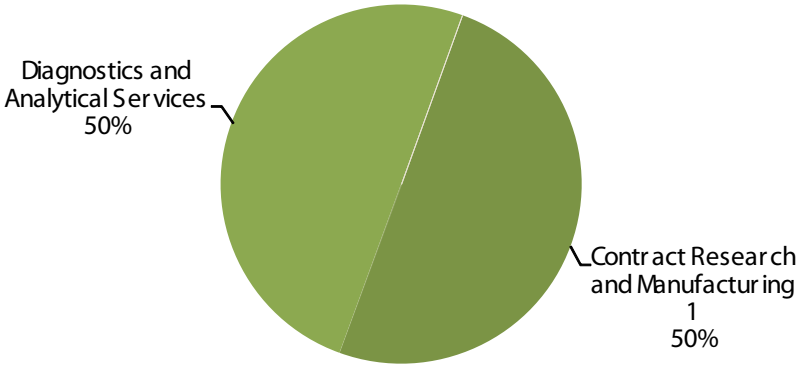
STATUS OF THE MALTESE SECTOR

(Financial data in €)	
1	Total Biotech Companies
0	Biotech-Therapeutic
1	Biotech-Services
0	Biotech-Other
4	Employees
2	R&D employees
NA	R&D spending*
NA	Revenue*
NA	Equity Raised*
NA	Government grants
100%	Percentage of SMEs
0	Percentage of companies publicly owned

* As some private companies do not disclose financial figures the above is based on available information only.

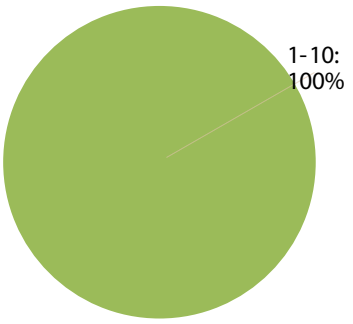
Malta is currently home to only one biotechnology services company which was founded in 2005 and can be qualified as a micro enterprise of less than 10 employees.

Biotechnology Companies in Malta
Breakdown by Subcategory based on 2 entries by 1 company

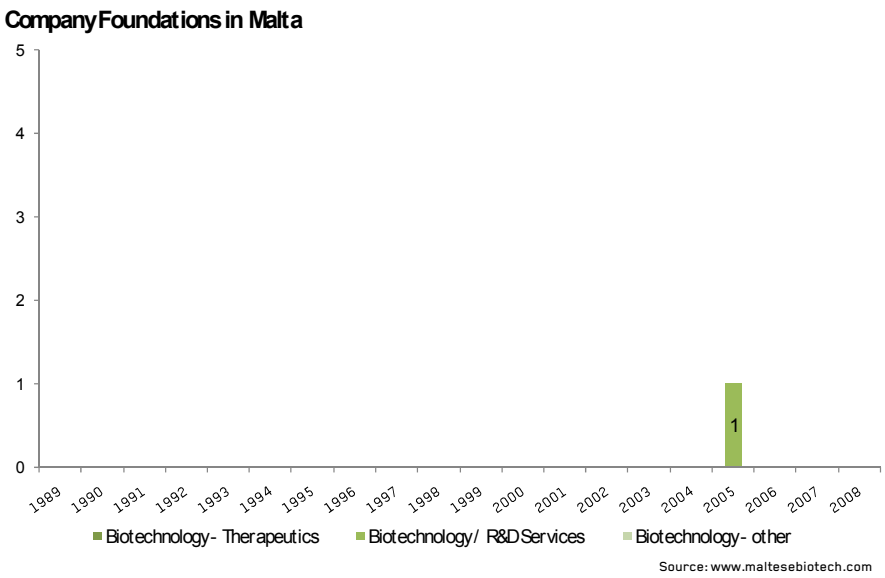


Source: www.maltesebiotech.com

Biotechnology Company Size in Malta
(number of employees)



Source: www.maltesebiotech.com



MALTA – AN INDUSTRY OVERVIEW

Because of its size and focus on attracting manufacturing and service industries, Malta's biotechnology industry is quite small and there is no biotechnology association. This is an area however that the government is dedicated to expanding by promoting incentives and a favourable legal, political and economical environment for foreign direct investments.

Political and Economic Environment

Malta is an attractive country for both industry and business due to its location, infrastructure and political stability. The governmental organization, Malta Enterprise, is dedicated to promoting trade and development and to attracting foreign direct investment.

Support Infrastructure

Malta Enterprise is the government agency specialized in attracting investment and providing support services and guides for both foreign investors and local companies setting up business in Malta. The Maltese provide services for new companies ranging from assistance with the identification of EU funding opportunities to helping with the relocation of business. Amongst other industries Malta targets biotechnology projects. In 2005 the government launched the START programme to support and promote the formation of technology based start-ups.

There is no formal biotechnology association in Malta; the most representative organization is the Malta Federation of Industry which has a Pharmaceutical manufacturing sector group that also covers biotechnology companies. As the name implies however, this organization focuses on manufacturing and services and is not focused on research.

The workforce

Malta has a highly qualified and flexible workforce with relatively low labour costs. English is the primary language of business and academia and is spoken by the majority of the population. Experienced management and business advice are available and the University of Malta has a good reputation. Students are

generally aware of the latest research and technology, training laboratories are well equipped and there is co-operation with private industry to increase the relevance of education to industry needs. However, while the University of Malta offers degrees in life sciences there is no course in biotechnology.

Technology and intellectual property

Although the volume of research and development at the University of Malta is increasing, the link between academia and industry needs to be strengthened. The university has set guidelines for management and marketing of intellectual property however no formal technology transfer office exists.

"Malta has a highly qualified and flexible workforce with relatively low labor costs"

There are currently no science and technology parks in Malta but they are in the process of being established with a target for completion of 2013. Premises are available at both the Kordin Business Incubation centre (KBIC) and at a new Technology Centre, through Malta Enterprise.

Products in the Pipeline:

There are currently no known therapeutic biotechnology products in the Maltese pipeline.

DEVELOPMENT CAPACITY INDEX

DCI 3

The development capacity index was calculated for Malta according to the description in Appendix A and can be used to compare the status of the Maltese biotechnology sector with that of the other new Member States and candidate countries. It consists of a qualitative factor of 20 and a quantitative factor of 7.

KEY FEATURES

3 positive key features:

- Several government incentives to foster entrepreneurship exist, such as the START programme
- The work force is highly qualified and flexible
- Management and business advice is available

3 negative key features:

- The biotechnology industry is small due to the size of the country
- Cooperation between academia and industry is limited
- No healthcare biotechnology products are being commercialized

As none currently exist, the establishment of a science and technology park in Malta is a promising next step to developing the industry.

SOURCES

BIOTECH GATE COMPANY DATABASE

The Maltese Biotechnology Database (www.maltesebiotech.com) part of the global Biotechgate database (www.biotechgate.com)

Survey from Malta Enterprises; 2008

Company interviews; 2008-2009

BioPolis – Inventory and analysis of national public policies that stimulate research in biotechnology, its exploitation and commercialisation by industry in Europe in the period 2002-2005 – National Report of Malta; March 2007

In collaboration with:

APPENDIX A: CALCULATION OF THE DCI

The Development Capacity Index (DCI) was developed as a means of representing the development status of a country in a format that allows comparison with other countries and regions. The resulting value indicates the respective countries' relative rank among their peers and considers both the existing state of affairs (represented by the quantitative factor) as well as the potential for development (represented by the qualitative factor). A higher DCI indicates the presence of a more advanced biotechnology industry and a more favourable environment for future growth.

Evaluation of the Qualitative Factor:

The qualitative factor was used to evaluate the framework available for the development of the biotechnology sector. Factors considered were existence of a pharmaceutical industry, level of government support, availability of public and private financial support, existence of a qualified workforce, establishment of technology transfer offices and technology parks, and general awareness of patenting and IP protection processes.

As shown in the following table, each factor was assigned a weight based on the subjective assessment of its relative importance for the evaluation of a countries development potential. Each factor was then evaluated for each country based on information gathered from literature, and interviews with local stakeholders and companies. A rating was assigned for each factor ranging from 0 (non-existent) to 4 (excellent) and individual ratings were summed to give the total qualitative factor for that country.

QUANTITATIVE FACTOR	WEIGHTING	RATING	POINTS	WEIGHTED POINTS
Pharma Industry (exiting know-how)	2	Non-existent	0	0
		Minimal	1	2
		Average	2	4
		Good	3	6
		Exceptional	4	8
Government Support	2	Non-existent	0	0
		Minimal	1	2
		Average	2	4
		Good	3	6
		Exceptional	4	8
Public Financial Support	3	Non-existent	0	0
		Minimal	1	3
		Average	2	6
		Good	3	9
		Exceptional	4	12
Private Financial Support	3	Non-existent	0	0
		Minimal	1	3
		Average	2	6
		Good	3	9
		Exceptional	4	12
Qualified Workforce	3	Non-existent	0	0
		Minimal	1	3
		Average	2	6
		Good	3	9
		Exceptional	4	12
Tech Transfer	4	Non-existent	0	0
		Minimal	1	4
		Average	2	8
		Good	3	12
		Exceptional	4	16

Tech Parks or Clusters	4	Non-existent	0	0
		Minimal	1	4
		Average	2	8
		Good	3	12
		Exceptional	4	16
IP Protection Awareness	4	Non-existent	0	0
		Minimal	1	4
		Average	2	8
		Good	3	12
		Exceptional	4	16

Evaluation of the Quantitative Development Factor:

The quantitative factor was calculated based on the number of biotechnology companies present, their category of activity (therapeutics, services and other biotechnology sectors), and the number of products under development. Parameters were all individually measured with emphasis placed on smaller and medium sized companies conducting research on human therapeutics, as these are considered to be the drivers of innovation for the industry.

Within each country, points were assigned per company depending on the type of company, number of employees, products on the market and products in development, as shown in the following table. Fewer points were attributed to products on the market as this is an indication of existing industry and know-how, whereas the development of new products indicates the potential for growth.

It is to be noted that few companies chose to disclose their product information therefore these parameters have only a small impact on the overall DCI. It was assumed that all biotechnology companies developing therapeutics had at least one product in the pipeline.

Factor	Points
Biotechnology therapeutics company	5
Biotechnology services company	1
Other biotechnology company	3
< 10 employees	5
10-100 employees	4
100-500 employees	3
500-1000 employees	2
> 1000 employees	1
no data or 1 product in development	1
2 products in development	2
3 products development	3
4 products development	4
5 or more products development	5
1-2 products on the market	0.25
3-5 products on the market	0.5
5-10 products on the market	0.75
10-20 products on the market	1
more than 20 products on the market	1.25

Points calculated for all companies in the country were then summed to give the total quantitative factor for that country.

Prepared by:

EUROPABIO
The European Association for Bioindustries

www.europabio.org

VENTURE VALUATION

www.venturevaluation.com

Information about the project can be found at www.14allbio.eu

All company details and data are available on:

BIOTECH GATE
COMPANY DATABASE

www.biotechgate.com