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# Strategies for building a global healthcare biotechnology company

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## Abstract

This paper looks at the challenges, opportunities and strategies involved in building a global biotechnology company. There is no single global strategy that will answer all companies' needs; instead strategies will be dictated by the individual business development plans of a company, its products and its values.

## INTRODUCTION

Those setting up young healthcare biotechnology companies have often defined dreams for the future success of their organisations. These can almost be guaranteed to include goals such as gaining breakthrough product approvals, establishing positive cash flow and becoming 'truly global'. Being a global company, in particular, suggests a certain level of success and breadth of vision, but the move into the global marketplace, while it presents many opportunities and rewards, can be challenging and not without risk. This paper looks at what being global means, the challenges that face companies with global perspectives, and the strategies that companies may adopt in entering the global marketplace.

## GLOBAL: WHAT DOES IT MEAN?

Being global can mean different things to different companies. For many it will mean accessing scientific and medical capabilities outside the country in which they reside, for others it will mean building overseas manufacturing plants, and for some it will mean developing marketing capability in many countries across the world. The first question that companies need to consider when thinking about entering the global marketplace is why, and in what way, they want to be global. This, in turn, will

dictate the strategy that they adopt and the countries they should consider entering. The fundamental step for a company thinking about international expansion is to appreciate that the overwhelming majority of patient and physician populations are outside the home country, and that many major developments in science, medicine and technology also take place elsewhere. This is not a threat, but an attractive opportunity.

## THE DRIVE TOWARDS GLOBALISATION

Ultimately, becoming global is about accessing new markets not only to increase revenues and obtain return on investment for shareholders, but also to access science and expertise, and to reach patient populations in need of particular therapies. A company that produces therapeutics for specialised diseases has to build an infrastructure that reaches a small and highly dispersed group of patients, and here it can be even more important to have a global outlook – both for accessing relevant patients for clinical trials and for treating widely distributed patients with special needs. Genzyme's Ceredase, now replaced by its recombinant form Cerezyme, for example, was launched in 1991 to treat Gaucher disease, a rare genetic lysosomal storage disorder. It now reaches patients

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in more than 60 countries. Market penetration can be facilitated by the fact that patient organisations and communications focusing on specialist areas such as Gaucher disease tend to be well coordinated globally. This can make it easier to access specialist markets worldwide, more so than if, for example, a company was developing a next-generation commodity product.

Governments around the world, almost without exception, are welcoming biotechnology companies to their countries in the recognition that incoming companies create opportunities for their own economies – building infrastructure, making investments and stimulating local employment. Many of these countries are competing for new biopharmaceutical plants and may offer appealing economic incentives to attract biotechnology companies, as well as, in many cases, a workforce that is experienced in pharmaceutical production. Europe is a prime example. Initiatives such as the European Medicines Evaluations Agency (EMA), enactment of the Orphan Medicinal Products Regulation, and the publication of the European Commission's document 'Life Science and Biotechnology – a Strategy for Europe', provide momentum for companies wishing to invest in Europe.

There is evidence to indicate that some biopharmaceutical products may be gaining regulatory approval faster in the European Union than in the USA, and may represent a gateway for product approvals in other countries that recognise EU marketing authorisation. EU-derived authorisations may offer healthcare biotechnology companies a way of accelerating time-to-market in several countries.

For European companies, it has been suggested that a global outlook is necessary at the earliest stages. Pascal Brandys, former chairman and chief executive officer of Genset, stated: 'The lack of a well-developed infrastructure for biotechnology has forced European

bioentrepreneurs to found their companies as international businesses from the outset.' Brandys cites the need to access finance and experienced management as drivers towards an instantly international approach.<sup>1</sup>

Beyond Europe, markets such as the Asia Pacific region and Latin America are also becoming attractive targets. Japan is the largest market for biopharmaceuticals outside the USA and Europe and is working towards regulatory harmonisation with the US Food and Drug Administration (FDA) and the EMA. This, it is hoped, will create a unified approach to therapeutic product registration – avoiding duplication in the testing required during drug development. The aim is to use resources more effectively and eliminate unnecessary delays in the development and availability of new therapeutics. Less developed markets in Asia and Latin America, while less stable in terms of political, financial and economic factors, can also provide opportunities for research collaborations and access to new patient populations.

## THE CHALLENGES OF GLOBALISATION

Decisions to go global are not without risk. Almost every kind of international diversification carries significant costs – even for small companies – and can take a disproportionate amount of time and energy to manage. For companies setting up international operations it may be that different arms of the business operate at differing stages of maturity. While a company manages an overseas launch it also has to maintain and develop its existing business, which can generate difficult decisions about the allocation of resources.

It is very important for companies to be aware of the costs and risks of international expansion, and to be very clear on the company's objectives in entering the global market, or of how globalisation is to create value. The danger, which has been realised for some

**Globalisation creates opportunities for host countries - governments are generally welcoming**

**Regulatory procedures in some countries may offer accelerated time-to-market**

**International expansion can be costly – investment should be evaluated with care**

**Specific challenges of going global include functional and structural/cultural components**

**Rapid expansion can lead to rapid breakdown**

companies, is that globalisation can deteriorate into undirected globetrotting that incurs costs through ill-advised investments. These can jeopardise the value of what they are otherwise trying to do. Rapid expansion can also lead to rapid breakdown and area offices are often the first to go in downsizing. A number of small biotechnology companies, for example, particularly European companies, felt they needed a presence in the USA during the biotechnology boom years of the late 1990s and 2000. Many realised this was too ambitious and have since closed offices and laboratories, or reduced US operations. Morphochem, a German drug discovery company, is one example. In March 2000 the company acquired Small Molecule Therapeutics, Inc. in Princeton. The transatlantic acquisition was aimed at 'extending Morphochem's global reach by exploiting SMT's well-established world-wide connections in the US and Japan in combination with the Company's [Morphochem's] existing European connections'. In March 2002, citing a closed initial public offering (IPO) market and continued difficulties in the private and public equity markets, Morphochem announced a strategy change and restructuring which reduced the size of the US operations.<sup>2</sup>

Similarly, some now extremely successful US companies could also be said to have overstretched themselves at times during their development. In the late 1980s, Biogen sold Biogen Geneva to Glaxo, its Belgian operations to Roche and a laboratory in Zurich. Then president and chief executive officer, James Vincent, has been quoted as saying:

There are two classic mistakes made by development-stage companies regardless of industry. One is that an organization begins to believe its own press notices, over-committing on expenses before revenues and they go over a cliff. The second is to undercall the management capacity needed to build at very high rates of growth.<sup>3</sup>

The specific challenges of a global approach can be divided into two broad areas – functional and structural/cultural. Functional challenges include the identification of research capabilities, partners, sites and other vehicles of expansion. These are relatively straightforward to manage, being largely within a company's areas of technical expertise and within their control.

Biogen, for example, plans to build a large-scale manufacturing facility in Hillerød, Denmark. In May 2001, the company said it planned to invest US\$350m in the facility. The site was chosen after 14 months of research and evaluation on the basis that Denmark was extremely competitive in terms of quality of workforce. Manufacturing offers many opportunities for international expansion. Currently, monoclonal antibody-based therapeutics consume around 75 per cent of the total production capacity for biologics in the USA. Without new manufacturing facilities, capacity will be severely stretched as new products emerge. While many original manufacturing plants were built in the USA, many companies are now considering investing outside the USA. As well as Biogen, Wyeth is taking this approach in Ireland, and Genzyme in Belgium and Ireland.

Occasionally, a strategy to simply expand operations can result in both achieving strategic growth plans, and at the same time provide expansion into the global marketplace. UK-based Shire Pharmaceuticals was originally a speciality pharmaceuticals company and did not require extensive R&D facilities. However, it decided to diversify and develop its R&D pipeline. In May 2001, Shire Pharmaceuticals merged with BioChem Pharma, Inc. (Canada) in a US\$4bn deal. BioChem, a development stage company, provided Shire with both a development pipeline and a presence in North America in one transaction.

Structural/cultural challenges can be more testing. Many people without a

great deal of experience in dealing with international markets can become frustrated with apparent difficulties in achieving their goals, especially where legal and regulatory procedures are concerned.

A major challenge is to secure reimbursement for products. Reimbursement processes vary from country to country depending on government policy, the social security system and cultural requirements for different medicines. It is imperative that these are fully understood. Biotechnology companies have a responsibility to participate in reimbursement debates to ensure that patients are able to benefit from biotechnological advances in having timely access to innovative medicines. There is no single strategy for success in this area, but it is vitally important that a company has local expertise – employees on the ground who have an understanding of the way in which the local ministries of health, social security systems, medical establishments and local industry associations work. It is critical to get beyond a superficial relationship – Genzyme's strategy has always been to operate as a French company in France, a Japanese company in Japan, and so on, eg by having less than 1 per cent of non-Europeans working in Genzyme Europe.

With local managers, experienced in new product introductions, leading international operations it is possible to build relationships with governments, industry peers and local patient groups. One very effective way for a company to overcome regulatory and administrative challenges is to enter into dialogue with patient groups, scientists, clinicians and representatives from reimbursement agencies with the aim of highlighting unmet medical needs and finding workable solutions.

Genzyme works with a number of groups that promote discussion into improving the availability of medicines. Within Europe these include, for example, EPPOSI, the European Platform for Patient's Organisations, Science and

Industry, and EURORDIS, the European Organization for Rare Disorders. In working with such bodies, Genzyme supports policies that promote research into disease and expand patients' access to life-saving medicines.

Good communications between the parent and international offices, with a good flow of personnel between offices, additionally, encourages knowledge dissemination and can build a deeper understanding of international affairs in company headquarters.

## BECOMING A GLOBAL LEADER

There is no one formula for becoming a global leader. The extent to which a company enters into the global arena, and the way in which it does so will depend on the company's profile and aspirations. Entering the global arena can, for example, evolve from the way in which a company is organised. Some companies have international representatives within their board or management team, which can bring closer links with prospective academic or international partners. It is useful to build a team with globalisation in mind from the start to help establish an international network. Managers with international experience will be useful in helping to influence how and where international business decisions are made.

Some strategies have proven more successful than others, however, and companies can learn from others' experience. When Biogen was first established, it was set up with dual headquarters in the USA and in Switzerland, which it later discontinued as unworkable.

Swiss-based Serono was successful a number of years ago in establishing a US R&D capability using a strategy that involved entering into partnership with US companies and agreeing to hire personnel from US biotechnology companies – essentially buying a programme and the people to start a core facility.

It is important to understand a

**Participation in reimbursement debates can help improve patient access to new products**

**Local success means establishing relationships with government, patient groups and industry peers**

**Understanding the company's own needs and capabilities is central to a globalisation strategy**

company's own research capabilities, its products and technologies, marketing and distribution capabilities, and overall business plan. Analysing each area and identifying strengths and weaknesses will help define whether there is a need to access new capabilities through merger, acquisition, investment or collaboration in order to obtain global reach. Most companies use a combination of options depending on the specific case. As products come close to market, for example, decisions need to be made on how to sell and distribute these products – either alone or through partnership. Decisions will be greatly affected by the nature of the products. Genzyme's Ceredase, for example, was a highly innovative product targeted at a specific patient group, so it could be launched with relatively few people. For other companies, initial products may dictate that they have a distributor or participate in some kind of co-marketing agreement or joint venture.

Amgen, for example, entered into a joint venture agreement with Italian-based company Dompé. Dompé is perhaps the leading marketer of biotechnology products in Italy and brought great value to Amgen. As Amgen grew it established its own highly successful Italian subsidiary, but Dompé has continued to deliver high value sales.

Companies should enter licensing or distribution agreements with some caution to make sure that they are not giving away international rights without fully understanding the long-term implications. Historically, many biotechnology companies licensed international product marketing rights to large pharmaceutical companies – often in return for funds that they in turn invested in programs in earlier developmental phases. This may have precluded them from taking an active role in the global marketplace. A company with aspirations to become a major global company should strive to retain some flexibility in the terms of these agreements. Some large, successful US-

based biotechnology companies sold a controlling interest in the company in part to access the EU: examples include Genentech, acquired by Roche, and Chiron, who sold a controlling interest to Novartis.

Genzyme is notable in being perhaps the only non-Japanese biotechnology company to have self-managed approval for its products in Japan. Other US companies now seek to partner with Genzyme to benefit from its expertise with Japanese regulatory processes. Biogen, for example, has partnered with Genzyme to bring its treatment for multiple sclerosis, Avonex, to the Japanese market.

## **SUCCESSFUL GLOBAL BIOTECHNOLOGY COMPANIES**

Among the US biotechnology companies that have achieved global success, the most notable are Amgen, Biogen and Genzyme. The traffic is not one way, however, and some European companies have also successfully developed their international interests. Examples include Serono in Switzerland and Celltech in the UK. Serono, based in Switzerland, has operations in Singapore, Europe, Latin and North America. Celltech, founded in 1980 as the UK's first biotechnology company, now has operations in the US, Denmark, Germany, Belgium, France and Spain.

## **THE GENZYME APPROACH**

Genzyme's approach to globalisation grows out of the company's core strategies. These include developing medicines for serious unmet medical needs; innovation; building diversified research platforms; and trying to independently manufacture and market important products. Genzyme has tried to build direct 'in the field' capabilities because the company believes that it has some understanding of how to treat these diseases, and that it is important to be as close as possible to the patients to help ensure that they are adequately treated.

**Flexibility in the terms of licensing agreements can help to secure a future global presence**

**Globalisation is not an end in itself but should be part of the company's overall strategy and vision**

These philosophies have guided the company's strategy for global development. The fact that Genzyme utilises a wide range of technologies in key areas such as protein therapy, gene therapy and cell therapy, has driven collaborations with many companies outside the USA. The aim to manufacture products independently has meant expansion of manufacturing facilities – and the company has tried to maintain a geographical balance in that area. The company also tries to reach out to a wide range of international investors.

Being global has not, for Genzyme, been an end in itself. That end is to meet patients' unmet medical needs. Globalisation has been an important tool serving the goals of the company, which cannot be adequately fulfilled without connecting with patients, governments, scientists, physicians and regulatory agencies around the world. Genzyme has reached out to them, not to become

global for its own sake, but to support the company's underlying values.

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