The Big Buy

Alain J Gilbert and Meredith Edwards of Bionest Partners examine trends for biotech partnering in 2009 and discuss how to optimise outcomes in these turbulent conditions

The economic crisis sweeping around the world has affected many industries, leaving few unscathed, and biotech companies have been no exception. Current market value does not seem to depend on the real worth of these companies or their technology, with many biotechs losing significant value on the markets seemingly overnight. In contrast, it is the cash-rich big pharma companies who are among the best positioned during these uncertain times, and who could also prove to be the saviours for many biotechs otherwise heading for failure. The concept of risk has changed for big pharma and it is time to nourish empty pipelines and start buying, with the multibillion dollar acquisitions of Wyeth by Pfizer and Schering-Plough by Merck recent examples of big buys. However, what exactly is the risk?

Biotech-derived products are playing an increasingly important role in the global pharmaceutical market. It was estimated that in 2005, 45 per cent of FDA approvals were for products of biotech origin. In 2006, an estimated 75 per cent of Phase II and III compounds in development for oncology indications also originated from biotechs, illustrating the fact that most biotech research is highly innovative, often producing first-in-class molecules with complex manufacturing processes and intellectual property protection. However, despite this innovation, these companies have lost significant value, some by one half to two thirds in the past six months, and innovative companies are running out of cash. One such company, Advanced Viral Research, recently announced in January that they will suspend operations after running out of cash and failing to raise new money.

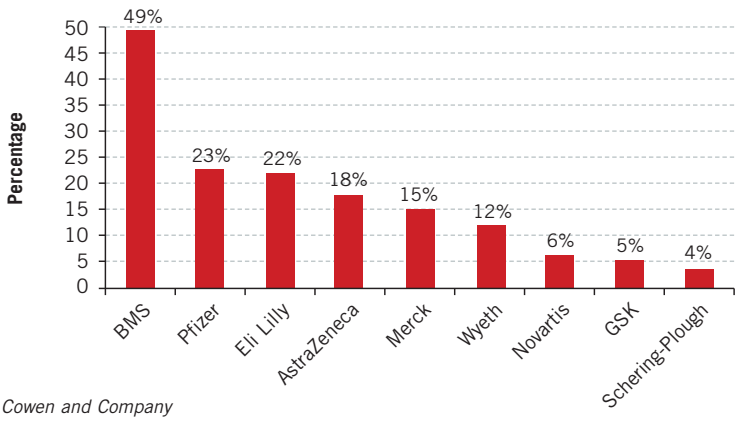
In order to ensure their survival, biotechs will have to be prepared to be bought, but by whom? Traditionally, buy-side competition has been between private funds (equity, venture capital (VC) and investment funds), public markets (IPOs) and big pharma; however, today, the only real bidder is big pharma.

TESTING TIMES

The venture funds that once flowed into biotech slowed to a trickle at the end of last year. According to a report from PriceWaterhouseCoopers, the National Venture Capital Association and Thomson Reuters, risk-taking has fallen out of fashion; VC investments plunged 33 per cent in the last three months of 2008, with biotech investment reported to have decreased by 31 per cent. A drop of 22 per cent in new deals, and an overall drop in the number of new acquisitions in this quarter was observed, with only 37 buyouts reported, compared to 88 for the same period a year ago.

Another traditional exit path for investors, IPOs, also ground to a halt. IPOs can have advantages such as the ease with which future financing can be raised, a quicker, easier and more cost-efficient way to raise debt, improved company image (if successful and accompanied by effective communication), and the option of financing the company's future acquisitions with stocks. However, even in a healthy

Figure 1: Percentage of sales vulnerable to patent expirations through to 2013



Source: Cowen and Company

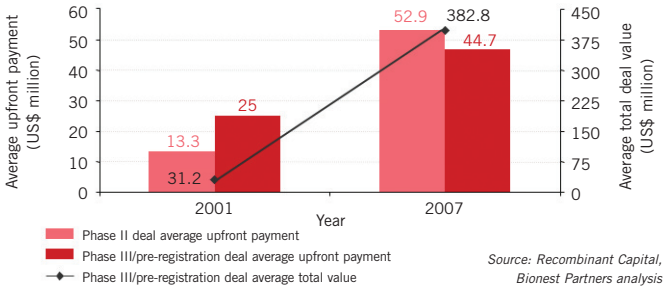
Table 1: Number of in-licensing deals: comparison between 2001 and 2007

	Total number of deals		Trend
	2001	2007	
Pre-clinical/Phase I*	1	15	↗↗
Phase II	9	17	↗
Phase III/NDA	16	8	↘
Total deals	26	40	↗

* with upfronts greater than $1 million

Source: Bionest Partners analysis

Figure 2: Average value of in-licensing deals between 2001 and 2007: upfront and total deal values



Source: Recombinant Capital, Bionest Partners analysis

public market, IPOs are not usually a biotech's first choice as a means of exit, as the drawbacks of this strategy include diluted ownership and much heavier regulatory compliance and reporting requirements. In addition, the public markets can be hard to convince, with the exact value of assets often under-estimated. It is predicted that investment will pick up later this year – just recently, a $1 billion biotech fund was announced in the US, led by well-known venture capitalist Steven Burrill. However, for the moment, there is little or no buy-side competition coming from private and public investors.

THE PROBLEMS FACING BIG PHARMA

Contrary to IPO and VC activity, big pharma buy-outs of biotech companies are expected to grow significantly in 2009. Big pharma have cash and are in desperate need of products to fill thinning pipelines.

Patent Expiries

The issue of increasingly empty pipelines is not a new fear for big pharma. The impact of numerous patent expiries over the next five years for big players has been a hot topic of discussion for some time. Generics represented 10 per cent ($70 billion) of the total pharmaceutical market in value in 2007 (although 50 per cent in volume), and have an expected compound annual growth rate (CAGR) of +14-15 per cent between 2007 and 2010 – more than double that of the total pharmaceutical market. Figure 1 (see page 16) illustrates the percentage of sales vulnerable to patent expirations for several big players.

Adapting to Survive

AstraZeneca (AZ) is a good example of a company facing a patent time bomb which will start diminishing their sales in 2011. In order for AZ to continue their sales growth of five per cent, they will need increasing sales from new products of up to $19 billion per year by 2014. As a result, AZ partnership activity has been busy, with 16 major deals signed between December 2005 and December 2007 for a total of $536 million of upfront payments and up to $5.1 billion promised as milestones. Eleven of these deals were for new chemical entities (NCEs), two were for life-cycle initiatives and three were related to technology acquisition. In addition, AZ acquired four companies (KuDOS, Cambridge Antibody Technology, Arrow Therapeutics, and MedImmune) for a total of $16.8 billion in cash investment.

Continuing Innovation

In addition to patent expiries, what else is at stake for big pharma over the next five years? They will need to stay at the forefront of real innovation. Innovation is rewarded by the market, for example by premium prices and fast-track approval processes, providing companies with a long-term competitive edge. There is an increasing focus on product safety profiles requiring stringent regulatory preparation, and it is becoming increasingly difficult to demonstrate value for money to providers of funding. These factors are providing challenges in terms of external and internal organisation and strategy.

A number of companies are currently reorganising in an attempt to increase productivity. Novartis and Merck recently closed small research sites in France in an effort to concentrate their R&D efforts in their global centres. AstraZeneca is aiming to outsource all of their drug manufacturing activity over the next 10 years. In Europe, three out of their five plants will be closed and the other two will decrease their production by 2013. Meanwhile, they plan to increase investments in Wuxi, China. In France, the pharmaceutical industry production workforce is expected to be cut by 30 per cent between 2005 and 2015. Finally, attempts are being made to optimise return on investment (ROI) by sales force downsizing and improving management of external →

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stakeholders such as health authorities, patient organisations and clinical organisations. GSK plans to reduce its sales force in France by 17 per cent (225 jobs) within the next two years, Pfizer is planning a 20 per cent decrease of its worldwide sales force, and Sanofi-Aventis has announced a cut in its French sales force of over 15 per cent (700 jobs).

STRENGTH IN NUMBERS?

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Despite big pharma's awareness of this, partnering has been viewed as carrying substantial risk, resulting in a conservative approach to the process. But now, with a significant drop in the value of biotech companies, and minimal buy-side competition for at least the first half of 2009, this concept of risk has changed. Now is the time to buy.

What acquisition strategies can therefore be expected in 2009? Over the last decade, there has been an increasing trend towards pharma in-licensing compounds at an earlier developmental stage. From publically available data, the number of in-licensing deals of preclinical and Phase I biotech compounds with upfront payments greater than $20 million was seen to increase from one, in 2000-2001, to 15 in 2007. At the same time, the number of deals for compounds in Phase II has also increased, from nine in 2001 to 17 in 2007. However, the upfront values of these deals have also increased dramatically. The average upfront payment value of these Phase II deals was $13.3 million in 2001, increasing to $52.9 million in 2007 – an increase of over 300 per cent. When big pharma in-licensing is examined over the same period for compounds in Phase III or pre-registration, the number of deals has been observed to decrease, from 16 in 2001 to eight in 2007. However, as seen with Phase II compounds, the value of these deals has also increased significantly. The average total deal value was $31.2 million in 2001 and $382.8 million in 2007. Notably, there was a big jump between the average total deal values between 2006 ($178.6 million) and 2007 ($382.8 million), an increase of 114 per cent. Table 1 and Figure 2 (see page 18) summarise the number and average value of in-licensing deals between 2001 and 2007. This data highlights the fact that there are fewer opportunities to in-license late stage development drugs (Phase III/pre-registration), and increasing costs for in-licensing deals (an increase by a factor of 3.9 for Phase II compound upfront payments between 2001 and 2007, and a 12.3 factor increase for Phase III or pre-registration compound total value deals during the same period). It must be remembered that all data listed here are for publically disclosed deals, which means there may be additional undisclosed deals that have not been included in this analysis.

MAKING THE RIGHT CHOICE

This is the time for big pharma to take full advantage of the state of the global economy to enrich their pipelines by buying assets at discount prices. Risk is reduced and smart decisions will be rewarded. There will be ongoing competition for more advanced stage compounds at higher prices, but significant activity should also be expected from earlier stage compounds, consistent with trends observed since 2001. Big pharma and biotech will need to be able to assess the potential of the products and companies in question quickly and accurately, and the implications on organisational and strategic decisions will also need to be assessed and defined, the faster the better.

Note:
With special thanks to Guillaume Madec, Consultant, Bionest Partners.

About the authors

Before co-founding Bionest in 2003, Alain J Gilbert was European Founding President of Biogen Inc (BGEN), where he was responsible for the launch of Avonex®, a biotech breakthrough treatment for MS. He held several positions at senior management level, such as European founder of IDEXX Labs Inc (IDXX) and President of Medtronic Europe. Alain started his career in sales and marketing at Abbott's Diagnostic Division and remained there for 17 years, holding key executive positions in the US and Europe. At Bionest, Alain is involved in biopharmaceutical, animal health, product launch, private equity and is focused on the US.
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