Matchmaking: identifying and evaluating drug discovery partners

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'Partnering' is a growing and increasingly active area of the pharmaceutical industry that R&D management can ill afford to ignore. This article explains how potential partners identify and evaluate each other, and explores the most important considerations of partnering in the light of recent partnering events.

In the past decade, drug discovery in established pharmaceutical companies has become an increasingly expensive, long-term process. At the same time as drug discovery successes have proved to be more elusive, the recombinant DNA revolution has produced not only successful protein drugs but a blossoming of biomedical knowledge that could be exploited as new disease targets. What is the hard-pressed, budget-limited R&D director to do?

What he or she has been doing, in increasing numbers, is to form partnerships with those efficient technology transfer organizations, the biotechnology companies, or directly with academia. Such partnerships enable the established companies (the Bigcos) to cover a wider waterfront of disease targets, to try out new technologies and to find drug leads in a more financially-effective, although possibly more managerially-demanding, manner than could be achieved internally.

Locating the right partners

At the 'partnering' meetings that are held in the USA and in Europe each year, established companies can hear presentations from biotechnology and boutique research companies (Babycos). Usually, however, there are no presentations from established companies. Last year, *The Biopharmaceutical Conference in Europe* held in Monte Carlo in June, changed all this by inviting, for the first time, four established companies – Grunenthal, Recordati, Servier and the EuroAlliance group (represented by Alfa Wasserman) to introduce themselves and their portfolio interests and needs. The third conference in this series is planned for the summer of 1996.

Other partnering conferences held in 1995 included *The European Life Sciences Conference* held in Amsterdam in April and *Biopartnering Europe* held in London in September.

In the USA, there are also technology transfer days organized by some academic institutions, such as the *Connect Conference* of UCLA, where interested parties can look at academic research.

What do Bigcos look for in a partner?

Most business development or licensing executives approach partnering meetings with a very clear 'wishlist' of technology, disease focus, drug leads or other requirements. Having found something which potentially fits the list, what else do they look for? Not unlike evaluating an antique, they seek to evaluate the potential of the technology, so firstly they look at the quality of the science (for an antique, the workmanship). Then they want to be sure that the technology is truly owned by the company or institution, so they examine the intellectual property situation (the provenance). They will examine ways in which the preclinical work or clinical trial has been undertaken because the last thing they want to do is to have to repeat

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the work (for an antique, to repair bad restoration or damage).

But unlike buying an antique, Bigco is contemplating entering a long-term partnership, so other factors have to be considered; for example, does Babyco have the financial and managerial strength to carry out the project and give it the attention it needs? Bigco will also need to ensure that its own scientists are enthusiastic about the project. This may best be accomplished by entering into a trial collaboration, during which Bigco's scientists can try out the technology and at the same time get to know Babyco's scientists with whom they will collaborate.

What does Babyco look for in a partner?

Unfortunately, all too often, Babyco needs, or is pressured into believing that it needs, an immediate deal (see Table 1). Hence, rather than examine the field of potential partners, they may go for the biggest deal, or for the only bidder available at the time. By selecting a partner at a more leisurely pace, Babyco could assure themselves of some key issues:

- that Bigco really needs their technology
- in the case of a drug lead, Bigco really is going to develop it in a timely manner
- Bigco is willing to resource the project adequately
- Bigco has the appropriate strength to service the market niche

They also need to ensure that there is no internal resistance to the relationship and, even better, that there is an internal champion for both the science and business at Bigco. Babyco should have time to assess the 'feel' of Bigco (commandments 3 and 9, Table 1) and allow mutual confidence to build between the parties.

Table 1. The ten commandments of strategic alliances[a]

1. Never propose outrageous deal terms
2. 'No deal' is better than a bad deal
3. Mutual respect and open communication are essential
4. Endeavour to make every deal a win–win situation
5. Conduct parallel negotiations
6. Make sure the scope of any agreement is very clear
7. Make sure there are champions and adequate resources on both sides, and enough upside to motivate your partner
8. Do the due diligence
9. Pay attention to cultural differences
10. Never do a deal without talking to SmithKline Beecham

[a]Adapted from a presentation by Rich Casey (Scios Nova, CA, USA) and J.P. Garnier (SmithKline Beecham, London, UK) at *The Biopharmaceutical Conference in Europe*, Monte Carlo, June 1995

Valuing the technology

There are probably as many ways of valuing a technology or a drug lead as there are of putting a value on an antique. The value of a technology (as of an antique) is what someone is prepared to pay for it, and this is subject to the negotiation skills of both parties. However, rarely is the value put on a technology by Bigco the same as that attributed to it by investors in Babyco or their analysts. While investors are looking for a good return on their investment in the relatively short term, Bigcos rarely are, even if they take an equity stake in Babyco as part of the deal. Analysts' discounted cash flow analyses of the value of a potential drug are designed to support a company's stock price, but a Bigco may look beyond that to see what remains of value in Babyco should the particular drug fail. Lilly's deal with Centocor for HA-1A (Centoxin), which had received marketing approval in Europe and was in phase III trial at the time of the deal, was designed to permit Lilly to have rights to 7E3 (ReoPro) if Centoxin failed to get FDA approval. It did, but Lilly still is likely to get value for money from sales of ReoPro.

Other factors affect the value of a project, and, unfortunately, these often have nothing to do with the intrinsic quality or value of the science. They include issues such as:

- general attitude of investors to the healthcare and pharmaceutical sectors
- imminence of an announcement of the results of a clinical trial from a publicly owned Babyco
- which technology or therapeutic area is 'fashionable' at the time

As an example, 5–6 years ago, there was considerable interest in finding a potential cure for AIDS. Subsequently, it became very difficult to finance an AIDS-related project. However, this therapeutic area is again experiencing an upswing in interest and value.

At *The Biopharmaceutical Conference in Europe*, J.P. Garnier (SmithKline Beecham, London, UK) was asked if he was ever offered preposterous deals by prospective partners. "It happens all the time" he joked, but added that Babycos often overvalued their own technology.

David Buch (Astra Merck, NJ, USA) commented recently, that Babycos often overstate the market size for their potential drug, and that this can destroy Bigco's faith in the young companies' grasp of commercial reality[1]. In contrast, good accurate numbers can impress. However, accurate analysis of the market for a novel therapeutic agent, early in its development, can be costly and difficult. Lawrence Korn (Protein Design Laboratories, CA, USA) suggested in the same article that Babyco woo Bigco with good science and then work with them on the figures – and share the expense.

Other suggestions from Bigcos point to the need for realism in valuing Babyco's technology. They suggest that Babycos should not be pressured into assuming that their technology is going to attract the same sort of deal that another similar company has just achieved. They should enter negotiations with a clear view not only of the best, but also of the worst, deal that they would be prepared to accept, particularly if there are few buyers. They should lower their sights, and internal costs if necessary, to get the right deal.

Table 2. Some partnerships established in 1995

	Bigco	Babyco	Technology or therapeutic focus
August	Bristol-Myers Squibb	Somatix	Gene therapy for cancer
	Bristol-Myers Squibb	Sibia	Alzheimer's disease
	Hafslund Nycomed	Diatech	NMR imaging
September	Pharmacia	Arris	Antithrombotic
	Bayer	Myriad Genetics	Gene therapy for obesity, osteoporosis and asthma
	Pharmacia	Chiroscience	Single isomer bupivacaine
October	Leo	La Jolla	Systemic lupus erythematosus
	Glaxo	British Biotech	BB2983 – arthritis
	Pfizer	Cantab	Animal vaccine

Cultural differences

Bigco and Babyco are usually very different animals. It is important to be aware of the 'elephant and mouse' syndrome. The pharmaceutical major may be traditional, bureaucratic and relatively slow moving. The young product-development company has to be innovative, flexible and quick on its feet. Any alliance which stifles or institutionalizes the smaller partner is doomed from the start.

The spin-off

With the continuing consolidation of the industry, and increasing pressure on R&D spend, some research projects are likely to be shelved and the teams working on them made redundant from Bigcos.

To spin-off such a project could be an attractive option both to the company and to the management team, provided that the project is viable. It may be that the project has only narrowly missed the selection criteria or has become a non-core program in a post-merger strategy.

By spinning off the project to a management team, backed by a trade investor from the industry or by financial institutions, the company avoids the financial and public relations cost of closure and potentially shares in the upside of the project under its new ownership. Management and staff retain their jobs, but with greater autonomy, and have at least the prospect of substantial financial gain if the project is successful. A classic 'win–win' scenario.

A good example of this is the spinning off of Andaris Ltd from BOC's Delta Biotechnology, which permits Andaris to concentrate on developing the drug delivery possibilities of human serum albumin cloned by Delta.

Conclusion

The future for partnering looks promising (Table 2). Some US$1.4 billion in partnering deals supported Babyco's endeavours in the first quarter of 1995 – providing a vital stream of financial support at a time when the public and private markets in the USA had withdrawn funds from biotechnology. Increasingly, Bigcos are outsourcing technology and drug leads; for example, hitherto conservative Zeneca recently established deals with Sugen and Celltech.

More imagination is going into constructing deals with greater prospects of sharing the risk and the reward. An example is Vanguard Media's deal with SmithKline Beecham, where both the risk and reward of developing the drug are shared. As companies become more experienced in managing external partnership and these partnerships show results, identifying the best partner for a project will become easier. The 'not invented here' syndrome should evaporate and this will lead to even greater chances for partnering to succeed.

REFERENCE

1 Buch, D. (1995) *Biocentry* 18 September