

Facts and Trends in Deal Making – A Perspective on the Pharma & Biotech Industries



PharmaVentures
Experts in deals and alliances

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A Perspective on the Pharma and Biotech Industries

This publication has been prepared by PharmaVentures' business analysts and consultants.



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Executive Summary

Facts and Trends in Deal Making – A Perspective on the Pharma and Biotech Industries provides vital information on the global deal making arena and answers your key questions, such as:

- What are the most common financial structures of deals?
- What are the deal making trends of the top 5 pharmaceutical companies?
- What is happening in the drug delivery sector?
- What were the top deals in 2004?

This report sets out to answer these and more questions by analysing data from the PharmaDeals® Agreements database, which currently contains over 18,000 deals from May 1996 onwards. Each chapter contains a number of figures that can also be found on the accompanying CD. These figures are suitable for use in your own presentations, quoting Source: PharmaDeals®.

Examined on a whole year basis, there has been a relatively steady growth in the number of deals reported from 1997 (1329) to 2004 (3052), or an average increase of about 230 deals per year. The deals reported from 1997 to 2004 exhibit generally similar proportions of deal types throughout this time period. Interestingly, the number of reported M&As remained fairly stable from 1999 to 2002 but has increased slightly in the past 2 years (2003 and 2004). In 2004, licensing and collaborative deals were the most popular with nearly 65% of all deals falling within these areas. Data from the Agreements database shows that since 1997 the US and Canada have been the most popular deal territory, followed by Japan, Europe as a whole, Australia/New Zealand and Latin America.

As the number of deals has risen over the past 8 years, has there been a change in the types of partner with which companies more often choose to license their compounds, patents or technologies? There has been a considerable increase in the number of licensing agreements where both (or all) partners are start-ups. In contrast, licensing activity between established companies has remained

essentially constant. As far as R&D is concerned, start-up companies have increasingly been forming research alliances with one another such that the number of these deals escalated by more than 100 over the past 8 years.

The number of deals within the PharmaDeals Agreements database containing financial information increased from 1997 to 2004. The most common deal components have been a combination of upfront, milestone and royalty payments. As expected, data indicate that the total values of the upfront payments over the past 5 years are greatest for Phase III compounds.

In 2003, the top 5 pharmaceutical companies, based on ethical pharmaceutical revenues, were **Pfizer, GSK, Merck & Co., AstraZeneca** and **J&J**. Pfizer seized the top position in the pharmaceutical sales league table from GSK in 2001 and has remained there since. Merck is the most active deal maker of the five companies and AstraZeneca the least active. For all five companies, approximately 90% of their partners in 2004 were either European or US-based. Also, research collaborations were established more often in 2004 than were deals of any other deal type.

Over the past few years drug delivery has become an important part of the drug development process. It has enabled drugs to be launched that were previously terminated in development due to lack of effective delivery. It has also been key to life cycle management of therapies, prolonging revenue streams. The level of drug delivery deal making activity exhibits a somewhat variable pattern from 1997 to 2004. Generally, there have been between 150 and 220 drug delivery deals reported each year. There was a peak in the year 2000 when over 260 deals were reported. This surge in deal making appears to have comprised mainly start-up/emerging companies, established companies and some academic institutions.

In the mid-1990s there was an explosion in the number of new biotech companies starting, with the period from 1995 to 1999 contributing 55% of all companies in PharmaDeals European Biotechnology Companies database. This expansion ended abruptly in 2001. Products from biotechnology companies are increasingly in demand as a result of the general belief that Big Pharma has become somewhat stagnant and less productive. The simplest and most common answer of correcting this is for Big Pharma to license compounds from biotech. This relationship benefits both sides: the



pharmaceutical companies attain exciting clinical-stage compounds to maintain future revenue and keep its investors satisfied, while the biotechs, which probably lack the infrastructure or financial support to complete clinical development, let alone product marketing activities, can receive substantial remuneration if a deal is signed.

Over the past few years the Japanese pharmaceutical industry has come under a number of significant pressures as a result of regulatory changes and governmental controls of drug prices. The amount of funds available for R&D is important for the discovery and development of pipeline products, and Japanese pharmaceutical companies have recognised the need to increase their R&D spending. The top ten Japanese companies' R&D spending as a percentage of net sales increased by 34% between fiscal years 2000 and 2004. The absolute monetary R&D expenses incurred by these companies also increased from 2000 to 2004. The total R&D spending of the top ten Japanese pharma companies increased by 55% between fiscal years 2000 and 2004.

Historically, anticancer has been the most common field of interest for business opportunities, but of late, opportunities in the antiviral field have also been prominent. There has been a sharp decline in platform technology opportunities, which may be as a result of there now being fewer pure platform technology companies in existence as such companies move towards becoming integrated pharmaceutical companies, with a greater emphasis on products rather than technologies. Of the business opportunities available in the period 1994-2004, those in the discovery and preclinical development phases have historically represented the largest subset by far. More pharmaceutical companies are actively seeking and tracking clinical phase opportunities rather than waiting to be approached by their potential partners, or waiting for opportunities to become freely available.

This report provides the reader with an abundance of material relating to facts and trends in the pharmaceutical and biotech industry, as well as providing numerous figures for use in customised presentations.

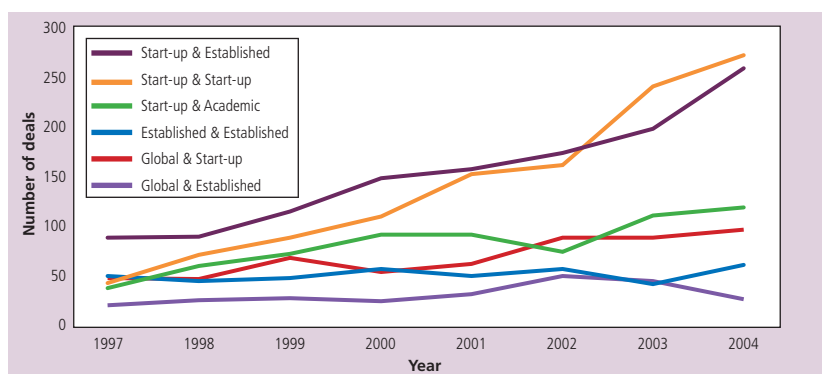


Figure 3.2 – Licensing deals by company type, 1997-2004.

partnering combination. In contrast, licensing activity between established companies has remained essentially constant, despite the fact that the total number of deals more than doubled from 1997 to 2004. As might be expected from the relatively small number of truly global pharmaceutical companies, the number of licensing deals in which they have taken part has grown little in recent years.

It is also informative to consider what proportion of the licensing deals in a given year is between start-up and established companies, for example, and how this figure changes over time. Approximately 25% of the licensing deals signed in 1999 and 2004 were between start-up and established pharma and biotech companies (Figure 3.3). The proportions of deals between start-up companies and academic institutions, global and start-up companies, and between global and established companies similarly changed little from 1999 to 2004. More of the licensing agreements entered into in 2004 were between start-up companies than was the case in 1999, with the proportion increasing by approximately 10% between the 2 years. Concomitantly, licensing between established companies constituted a smaller fraction of total licence agreements in 2004 than it did in 1999.

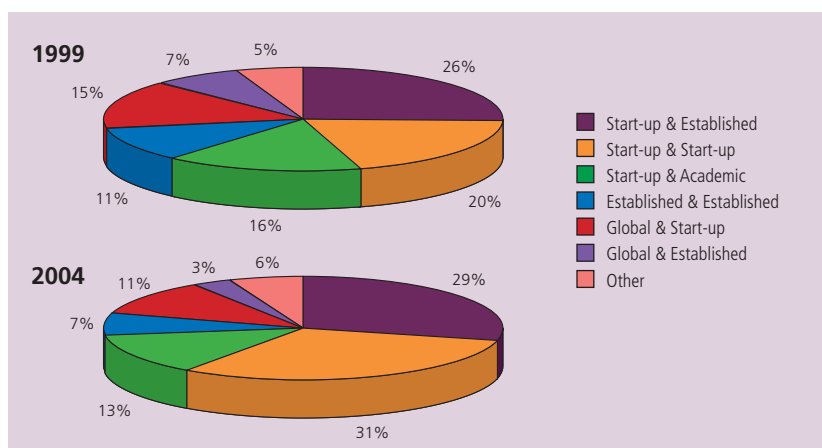


Figure 3.3 – Licensing activity by company type in 1999 and 2004.

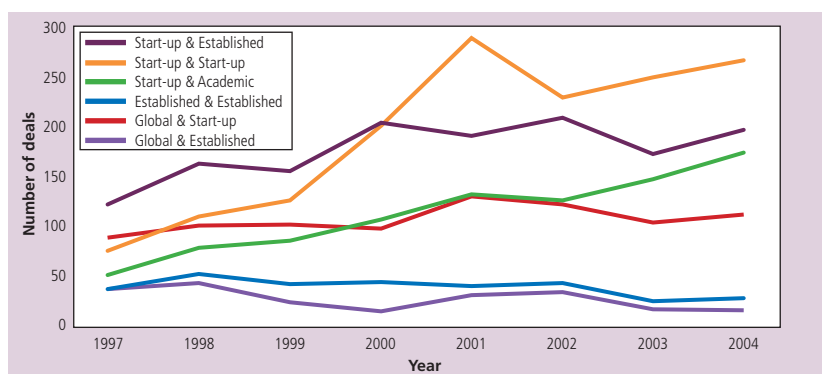


Figure 3.4 – R&D deals by company type, 1997-2004.

Are similar trends observed for collaborative R&D agreements? Start-up companies have increasingly been forming research alliances with one another such that the number of these deals escalated by more than 100 over the past 8 years. Conversely, the number of R&D deals between all other types of company remained essentially constant, or displayed only very modest inflation, from 1997 to 2004 (Figure 3.4). As with licensing, about a quarter of all R&D alliances formed in 1999 and 2004 were between start-up and established companies (Figure 3.5). The proportion of start-up/academic deals has remained similarly unchanged over the 5 year period. Thus, the only moderately significant change between the 2 years is that more of the R&D deals signed in 2004 were between start-up companies than was the case in 1999.

As both the number of biotech companies and the number of products in their development pipelines continue to grow, it is therefore not surprising that the number of deals involving start-up partners has also risen. Biotech is an increasingly mature industry that is no longer wholly reliant on partnerships with Big Pharma in order to gain access to funding and development

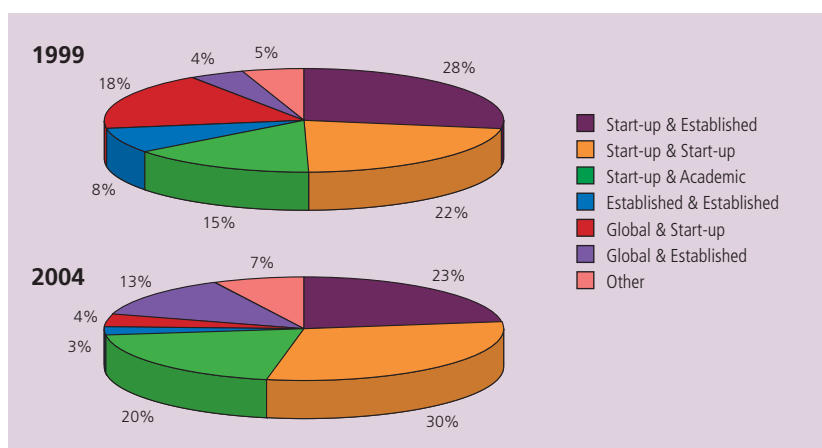


Figure 3.5 – R&D deal making activity by company type in 1999 and 2004.