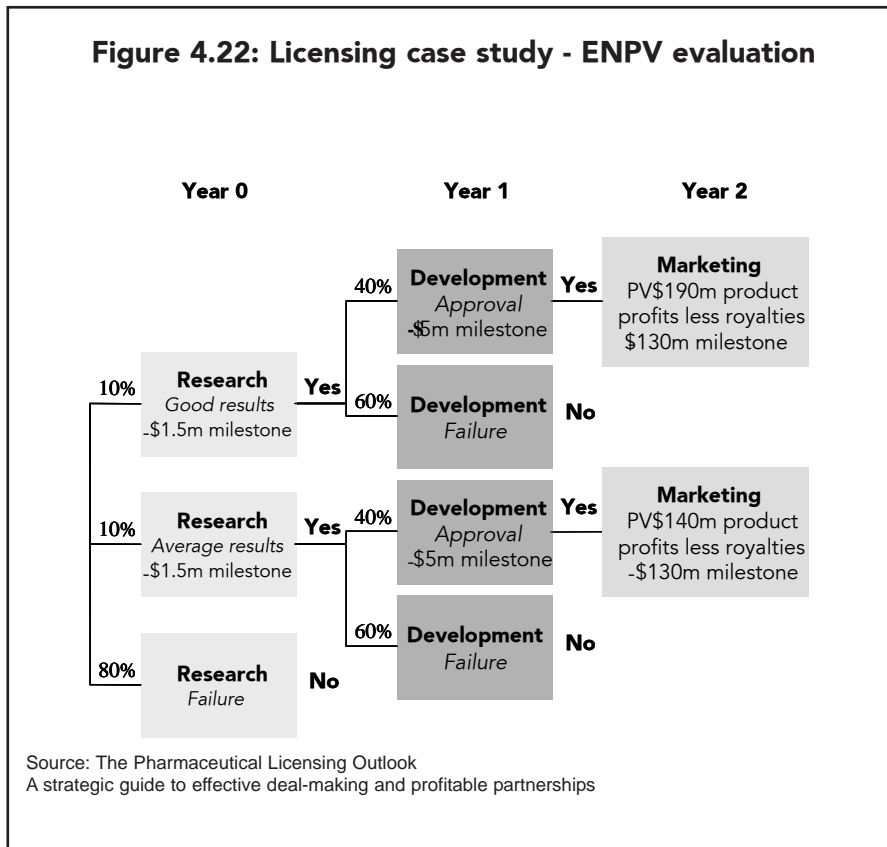


The Pharmaceutical Licensing Outlook

A strategic guide to effective deal-making and profitable partnerships

Ensure you optimize the ROI on your partnerships and alliances



- How can you maximize licensing as a strategic tool?
- What are the key elements in successful deal-making?
- Which companies leverage licensing most effectively?

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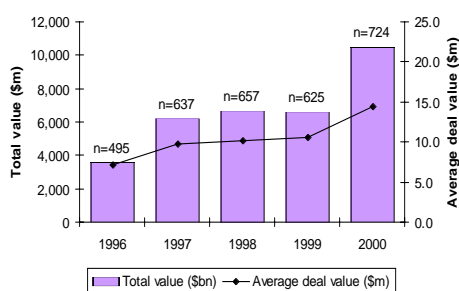
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The Pharmaceutical Licensing Outlook - New Report

Figure 2.8: Trends in pharmaceutical alliances, 1996-2000



Source: The Pharmaceutical Licensing Outlook

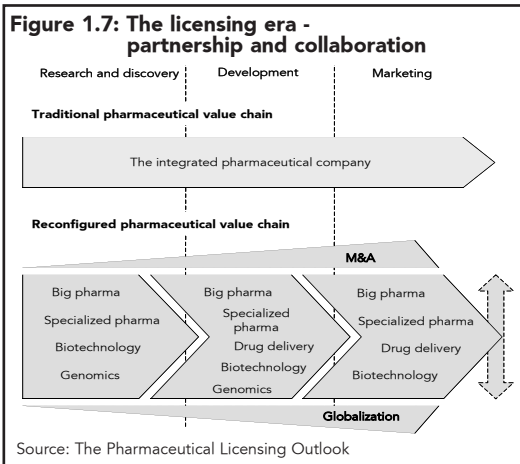
"The frequency and value of agreements has increased in line with the evolution of licensing as a key strategic tool. As companies focus greater attention on the deal-making process, the structure, terms and financing of licensing contracts is becoming ever more complex..."

Key findings...

- The **total value of pharmaceutical licensing agreements** in 2000 was \$10.5bn, compared to \$3.5bn in 1996.
- In 2001, the revenues earned by the 100 leading pre-commercialization biotechnology companies totaled \$2.8bn, a 17% increase over 2000.
- **Of the 691 new products approved in the US between 1963 and 1999, 38% were the result of licensing and joint development programs.**
- A number of companies, such as Lilly, are investing in the **creation of departments dedicated solely to the management of alliances.**
- **Pfizer's blockbuster licensing strategy has proved hugely effective**, with leading products, Lipitor and Celebrex, within its portfolio.
- The evaluation of licensing agreements can **benefit from the application of a number of different measurement frameworks** including traditional net present value, Monte Carlo simulation, real options, adjusted present value and contract theory.

The Pharmaceutical Licensing Outlook

A strategic guide to effective deal-making and profitable partnerships



Several factors have combined to transform the role of licensing in the pharmaceutical industry - the reconfiguration of the value chain, ongoing global consolidation and M&A and plummeting R&D productivity. In response, licensing has moved away from its roots as a transaction for intellectual property rights, emerging as a key value driver. Industry leaders now recognise licensing as a strategic mechanism through which they can achieve their corporate objectives.

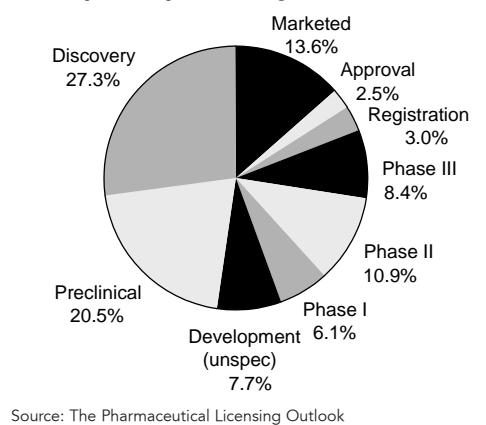
The Pharmaceutical Licensing Outlook, a new management report from Business Insights, identifies and examines current best practice in licensing. Using a blend of market analysis, case studies and executive interviews, the author provides a comprehensive guide to how best to maximize the returns on licensing activity.

"As integrated pharmaceutical companies' R&D productivity continues to fall below shareholders' expectations, there is greater reliance on acquiring development compounds through licensing. These acquisitions allow companies to invest in near-term returns, although those returns must inevitably be shared with the originating company..."

Equally valuable for pharmaceutical companies, biotechnology companies and technology providers, this groundbreaking report offers both practical and strategic analysis, including a detailed evaluation of successful deal-making.

Why you should order your copy today

Figure 2.10: Licensing agreements by development phase, July 2000-June 2001



What this report can help you to achieve...

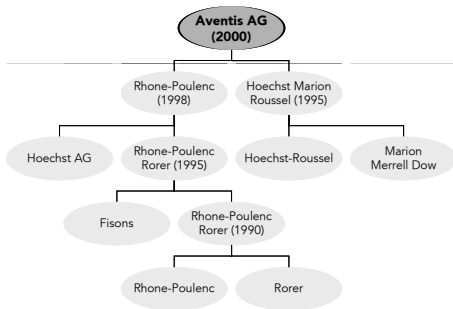
- **Leverage licensing** to close the shareholder expectations gap
- **Boost the success rate of your licensing agreements**
- **Manage your partnerships** and alliances more effectively
- **Generate revenues to replace earnings lost to blockbusters patent expiries**
- **Access new expertise**, technologies and capabilities
- **Capture strategic returns** across your whole business from licensing

"In light of the strategic objectives ingrained in licensing agreements, and the increased complexity of the deal structures, companies must pay particular attention to managing relationships with partner companies.

Order this report and find out more...

Your licensing questions answered

Figure 1.3: Aventis SA's recent M&A history, 1990-2000



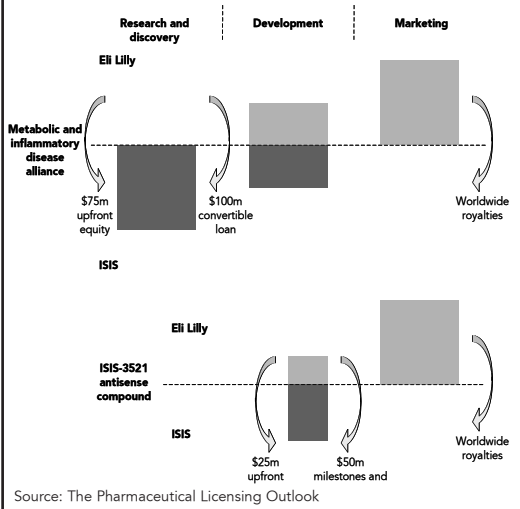
Source: The Pharmaceutical Licensing Outlook

"As an example of recent industry consolidation, Figure 1.3 shows that the incorporation of Aventis SA was the conclusion of five major deals and the consolidation of nine different companies between 1990 and 2000..."

- What can we do to fine-tune our deal-making to produce even better returns?
- How can we ensure our licensing activities yield maximum ROI?
- What percentage of new approvals are for products developed through licensing?
- How do the leading players in pharmaceutical and biotechnology manage alliances?
- What are the benefits in sales and marketing from licensing?
- How does licensing fit into the reconfigured pharmaceutical value chain?

Key features of the report

Figure 3.20: Eli Lilly/ISIS Pharmaceuticals, August 2001



Source: The Pharmaceutical Licensing Outlook

"ISIS stands to benefit from the proof of technology provided by the late stage licensing agreement, as well as from a likely significant share of sales through royalty payments. Further financial funding is provided by up-front and milestone payments, equity investments and a loan for the ongoing four-year research program..."

- **Extensive primary research** - bringing hard-to-get licensing data direct to your desk
- **Searching analysis of licensing trends** - showing you exactly how the licensing landscape is changing
- Five in-depth case studies, including **Pfizer and Genentech** - **outlining the success factors behind strategic licensing**
- Worked examples - demonstrating **sophisticated measurement frameworks for licensing agreements**
- **Practical advice** - describing interventions for effective partnership management
- **Identification of generic licensing strategies** - providing essential reference points for senior management

Order this report and find out more...

Sample information from the report

CHAPTER 2: LICENSING TRENDS

Table 2.13: Leading licensed drugs

Rank 2000	Brand	Generic	Indication	Marketing company	Global sales, 2000 (\$m)
3	Lipitor	atorvastatin	Dyslipidemia	Pfizer Inc.	5,031
6	Prevacid	lansoprazole	Ulcers (Gastroduodenal)	TAP (Takeda, Abbott)	2,739
7	Procrit EPO, Eprex	erythropoietin	Anemia	Johnson & Johnson	2,709
8	Celebrex	celecoxib	Arthritis, pain	Pharmacia	2,614
11	Seroxat, Paxil	paroxetine	Depression	GSK	2,345
14	Epogen	erythropoietin	Anemia	Amgen	1,960
17	Pravachol	pravastatin	Dyslipidemia	BMS	1,817
20	Mevalotin	pravastatin	Dyslipidemia	Sankyo	1,719
21	Cozaar, Hyzaar	losartan	Hypertension	Merck & Co.	1,715
24	Taxol	paclitaxel	Malignant neoplasms	BMS	1,592
26	Zithromax	azithromycin	Bacterial Infections	Pfizer Inc.	1,382
31	Fosamax	alendronate sodium	Osteoporosis	Merck & Co.	1,275
33	Neupogen	filgrastim	Neutropenia	Amgen	1,220
36	Effexor	venlafaxine	Depression	AHP	1,159
37	Humulin	insulin	Diabetes	Eli Lilly	1,115
47	Oxycontin	oxycodone	Pain	Purdue Pharma	957
50	Zantac	ranitidine	Ulcers (Gastroduodenal)	GSK	870
	Licensed drugs total			35.2%	32,219
	Top 50 drugs total				91,640

Source: The Pharmaceutical Licensing Outlook

Key licensing trends

Key trends in licensing activity over the last five years have seen an increase in the value and importance of licensing, increased competition for partnering in licensing agreements and an increase in technology and discovery agreements.

Value and importance of licensing

The past three to five years have seen a marked increase in the headline value of major licensing deals. In September 1998, Bayer and Millennium signed an agreement for the discovery of 225 genomics-based drug targets for a potential total value of \$465 million. The deal included a \$130 million equity investment and royalty payments. In March 2001, Millennium formed an agreement with Abbott for the identification and development of obesity and diabetes drugs. This agreement included a \$250m equity investment, almost twice that of the earlier Bayer agreement, and included 50/50 profit share rather than royalty payments. In 2000, Novartis and Vertex signed an eight year discovery and co-development licensing agreement for eight protein kinase drug candidates. Bayer and CuraGen signed a \$1.5bn discovery and co-development deal for obesity and diabetes small molecules. These deals were followed in 2001 by BMS's \$2bn co-development licensing agreement with ImClone for the cancer treatment Erbitux.

Order this report and find out more...

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- Glaxo/BioChem (3TC) - 1990
- Allergan/Ligand (retinoid compounds) - 1992
- Lilly/Centocor (Centoxin/ReoPro) - 1992
- SmithKline/Human Genome Sciences (gene sequencing) - 1993
- Bayer/Millennium (genomic small molecules) - 1998
- Innovex/CV Therapeutics (Ranolazine) - 1999
- Novartis/Vertex Pharmaceuticals (Kinase targeted drugs) - 2000
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Blockbuster

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