

Collaborative R&D: Partnerships shaping the future of biopharma

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Biotechs and pharma companies face rising costs of drug development, depleting R&D pipelines and diminishing returns on investment. By joining forces and exploring collaborative R&D partnerships it is possible to overcome these challenges. In addition to sharing risks, they share the potential rewards when their assets move further into clinical development or come to the market.



Collaborative R&D partnerships can be established between pharmas, or an established pharma and a biotech. While the former are declining steadily, the latter are much preferred. R&D partnerships are mutually beneficial for both sides. Collaborating is one of the most effective ways for pharmas to enrich their drug pipelines and co-share the risks associated with new drug development. Biotechs bring their risk-taking ability, or 'risk capital', to the partnership thereby reducing the pharma's risk spread. Smaller biotechs gain access to the expertise and resources they lack.

Pharma companies and CROs have more experience with later stages of drug development, and more refined operating systems and processes. Their in-house regulatory expertise helps biotechs to prepare the submissions needed to register their product globally. By connecting with larger pharmas, biotechs benefit from their buying power, global market access and newer technologies. Another advantage is that biotechs can leverage the large pharma's access to data to design better development programmes.

For companies following this route there are multiple structures available. These include co-development, in-licensing and public-private partnerships. Other conventional models include joint ventures, mergers and acquisitions, public-private partnerships between academic institutions and industry, and full-service outsourcing (FSO) or functional service provision (FSP) models.

There are challenges too

There are, of course, some barriers to successful collaboration. The competitive nature of the industry can impact trust-building. Concerns about IP protection, conflicts of interest and sometimes suboptimal data quality can contribute to mistrust. Robust due diligence can alleviate data concerns. Most partnerships clearly divide future marketing rights by geographic regions to avoid possible future conflict. For example, often a Chinese biotech will retain exclusive rights within China or greater China while their global partner holds the rights for the rest of the world. It is common to see Chinese biotechs funding the Chinese portion of the clinical development while their global partner finances the global clinical development.

The geopolitical climate inevitably impacts global partnerships. Drug development timelines are long, making it difficult to anticipate how the world, and international trade rules, will change by the time a drug is launched.

Trends and the path ahead

Overall, 2024 was a strong year for biopharma. The emphasis shifted to a preference for biotechs with assets in the clinical stage. This meant fewer but larger investments with the average deal value going up by \$12 million compared to 2023. In Asia, China leads the biotech-pharma R&D collaboration race, the latest example being 3S Bio securing a \$3.8 billion deal with Pfizer with an upfront payment of \$1.25 billion. South Korea has emerged as a strong biosimilars hub and is seeing a continual inflow of biotechs too.

However, it does not match the scale of mainland China. When it comes to the biotech landscape, Taiwan always manages to punch above its weight. Listing on the Taiwan exchange is an attractive fundraising strategy for many biotech companies. India, while a powerhouse in the generics space, is still slow and small on the biotech front. Singapore is in the early stages of nurturing the biotech and pharma R&D ecosystem. It needs a shining startup success story to develop a reputation comparable to more established countries.

Despite the re-prioritisation of R&D portfolios, collaborative R&D remains an attractive option. By combining resources, sharing both risks and rewards, biotechs and pharmas can be greater than the sum of their parts. Working together they can access new markets, overcome rising costs and bring new therapies to patients across the world.

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