

A new report from the Drug Discovery series...

Drug Development Opportunities in China

Regulation, key players and initiatives for domestic and international markets



-  Gain insights into drug R&D in China and identify trends and opportunities in the domestic market for pharma and biotech products
-  Identify the key issues involved in outsourcing drug developments to China and benchmark the practises of leading developers
-  Exploit the Chinese drug market by developing innovative strategies based on this report's unique market forecasts
-  Assess the competitive environment for R&D outsourcing in China and understand the threats faced by your organisation

Report overview

Drug development in the US and EU is becoming increasingly expensive and time consuming. As a result, China has emerged as an increasingly attractive option for companies aiming to reduce prohibitive investments in time and finance. Human clinical studies have historically dominated outsourced R&D activities in China, with the country's relative lack of capital and expertise being insufficient to facilitate technologically intensive discovery and pre-clinical work. However, an influx of western-trained scientists and increasing access to global capital markets are rapidly extending the development opportunities available to China's expanding base of pharma and biotech companies.

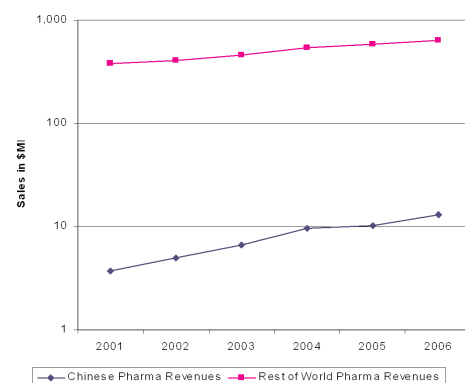
'Drug Development Opportunities in China' is a new report published by Business Insights that provides a comprehensive review of China's drug development industry, both in terms of R&D for the expanding domestic market and the country's role as a third-party provider of outsourced global drug developments. This report will examine the methods of expansion adopted by China's pharma companies, biotech developers and CRO's to increase the scale of their drug development operations, in addition to identifying their therapeutic interests and development cycle focus including discovery, pre-clinical, clinical and manufacturing. It will also provide forecasts for drug development trends in China over the next five years.

Identify the factors attracting global drug developers to China, assess future growth opportunities within the domestic pharma and biotech markets and deploy outsourced R&D more effectively with this new report...

Key findings...

- **Chinese sales of Western-style pharmaceuticals were estimated to value \$13.1bn in 2006**, achieving year-on-year growth of 30%, with the country expected to become the **world's leading consumer of pharmaceuticals by 2020**.
- **Significant numbers of global pharma companies have announced plans to expand their R&D operations** in China over the past two years. These include **AstraZeneca, GlaxoSmithKline, Pfizer, Novo Nordisk and Wyeth**.
- **CRO's can reduce research costs by up to 70%, when this research is conducted in China**. Drug developers can expect typical savings of 30%.
- **Strong government support continues to drive China's biotech and pharma industries**, and will help them to become major components of the global market over the next few years.
- **Cost advantages of conducting clinical studies in China will continue to incentivize drug developers**, although pre-clinical testing is set to become increasingly prevalent as well.

Growth of China's pharmaceutical drug market, 2001 - 2006



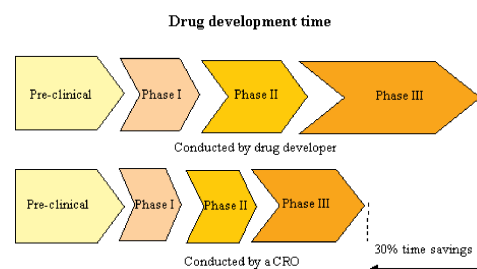
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"Sales of Western-style pharmaceuticals by both foreign and domestic players in China are experiencing strong growth, outpacing that of the global drug market. This is occurring as China's demand for medicines continues to rise and country's low wages offer and opportunity to cut high global drug development costs; however, the characteristics of these two groups of players are distinct..."

Key questions answered...

- What are the key growth drivers of China's rapidly expanding domestic drug market?
- How can the outsourcing of clinical trials to China deliver significant financial advantages to drug developers?
- Which new segments of the CRO industry are experiencing greatest growth?
- How can government incentives be used to set up R&D facilities in China?
- Which research targets have been designated highest priority within the domestic Chinese market?
- Where are China's most concentrated areas of drug development activity?

Timing advantages of using a CRO, 2007



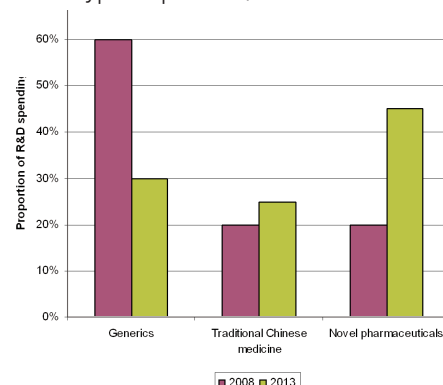
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"The main difference between clinical trials carried out by CROs and those conducted by in-house departments of drug developers are the time savings involved in using CROs. CROs are able to reduce the time taken to recruit both patients and the medical staff required to manage a trial, which can account for a significant proportion of the overall process."

Key issues examined in this report...

- **Increased drug development costs.** The price of procuring leading scientists and sophisticated technologies is rising, and this is being reflected in the growth of drug development costs.
- **Outsourcing of clinical trials.** Growing numbers of clinical trials are being conducted in China in an effort to exploit large, drug-naïve patient populations, at lower costs than in the US, Western Europe and Japan.
- **Expansion in size and number of clinical trials.** The increase in clinical trials has been prompted by regulators seeking more extensive study data to validate drug safety. Greater numbers of post-marketing Phase IV studies and a rising level of drug development activity have also contributed to this trend.
- **Domestic drug market potential.** The rapidly expanding Chinese economy and shifts in medical insurance are generating substantial domestic demand for drugs.
- **Enhanced scientific capabilities.** Large numbers of returning Chinese scientists and expanded access to capital are creating a growing pool of scientific expertise in China.

Proportion of R&D spending by type of product, 2008 and 2013



Business Insights

"In the near term, pharmaceutical R&D for China's domestic drug markets will include a range of products including generics, medications based upon Traditional Chinese Medicine (TCM) and novel pharmaceutical entities. Generics will continue to comprise a large but declining share of this, as patent laws are increasingly tightened and most of the leading medicines that would make attractive generics have already been genericized..."

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