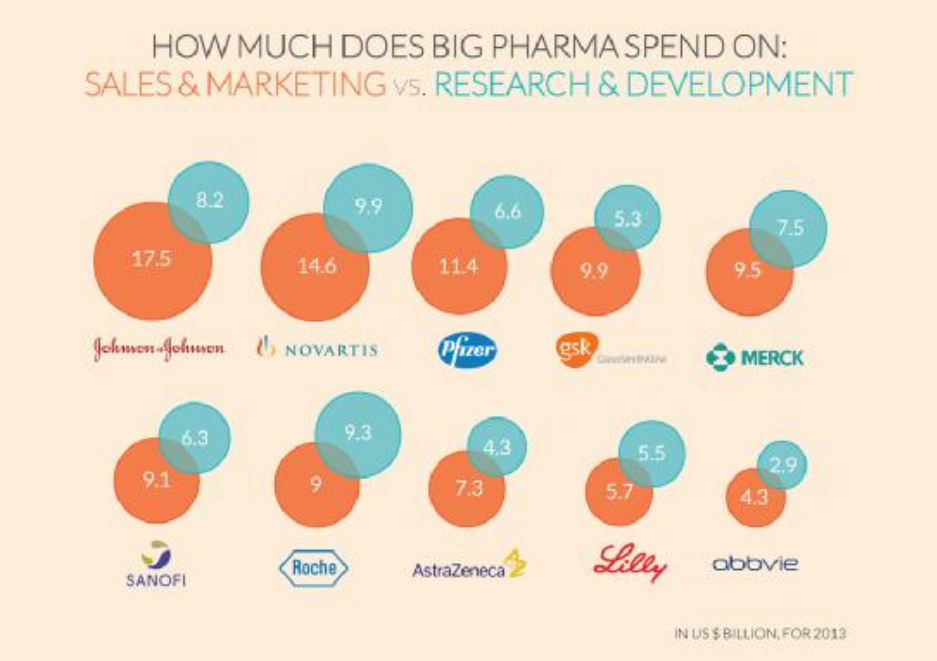
'Invented in China': R&D in Asian Pharmaceuticals

Research and development plays a crucial role in the innovation process of any industry. It is the investment in research and new technology that leads to new innovations, new products the continuing improvement of services. Duxes spoke to Dr. Joy Chen, Regulatory Affairs Director of Reckitt Benckiser Pharmaceutical's Developing Markets division, about the current state of R&D in the Asian pharmaceuticals industry. She described it as "vital" for the long-term sustainability of the healthcare industry and explained how it is developing.

The amount that pharmaceutical companies spend on R&D in comparison to sales and marketing is a particularly salient topic at the moment which was demonstrated by the public's reaction to John Oliver's biting depiction of the industry's marketing practices. In his programme, which was aired on HBO, Oliver exposed how drug companies spend billions of dollars on direct-to-consumer advertising and gives examples of pharma sales reps resorting to questionable practices when convincing doctors to prescribe their company's products.

GlobalData has released a report which shows that nine out of the 10 largest pharma companies in the world spend more on marketing and sales than they do on R&D. As the figure below shows, Johnson & Johnson spent US$17.5 billion on marketing, more than double the US$8.2 billion they spent on research and development. However, this is to be expected as the company has a particularly large consumer division which is likely incur more spending on marketing. The second biggest spender was Pfizer, which allotted US$11.4 billion for marketing, 72% more than it spent on R&D. AstraZeneca is close behind with US$7.3 billion spent on marketing last year, 70% more than R&D. Adam Dion, an Industry Analyst at GlobalData, identified a number of large pharmaceutical firms who reduced their expenditure on research and development. He explained: "In efforts to improve profit margins, cost-cutting still remains a strategic necessity for some players. Many companies reduced their workforces to help stabilize profits in the aftermath of patent losses". This refers to the limited time that pharmaceutical companies have to make profits from a drug as patents are usually awarded for 20 years after which the formula can be taken up by generic drug companies, which sell the medicines for a fraction of the price.



Source: dadaviz

The pharmaceutical industry in Asia has drawn criticism in the wake of bribery scandals and accusations of interfering with drug trial results. Many commentators in the industry are warning of a lack of innovation and describe lackluster performance in research laboratories: "in the past 10-20 years there has been very little breakthrough in innovation," said Dr Kees de Joncheere at the World Health Organisation.

Dr. Chen described to Duxes how Asian governments are already taking proactive steps towards alleviating the situation and are putting policies into place that she believes will lead the way towards a more productive R&D sector. She said: “there is an increasing awareness amongst many regulatory agencies in Asia to transition from being a healthcare ‘gatekeeper’ to an ’enabler’”. From this, we can infer that governments are adopting an increasingly liberal and encouraging attitude towards pharmaceuticals. Citing China's latest five year plan, Singapore's ‘Biomedical Sciences Initiatives’, Taiwan's ‘Diamond Action Plan for Biotech’, Japan's ‘Sakigake’ strategy and South Korea's ‘Bio-vision 2016’, she said that regulatory processes in the region are becoming more streamlined and that we can all expect to see a significant increase in R&D spending.

She went on to say that we can already observe the results of these approaches: “leading global pharma companies such as Baxter, GSK, Roche and Abbvie have invested in manufacturing plants for biologics in Singapore…. Singapore has 59 manufacturing plants, 46 R&D Centers and 48 commercial regional headquarters”. She also described the similar approach that has been adopted by the Chinese government: “in China, the Chinese government has implemented the 12th five year plan with a defined investment, therapeutic areas for new drug development and key engagement in order to increase innovation, competitiveness and promote health for China…. the Chinese FDA also has regulatory reforms for drug registration process such as fast-track for China-based innovations and drugs in high medical need”.

Dr. Chen also described how local regulatory agencies across Asia are increasingly working together and collaborating and have already implemented a series of regulatory reforms that simplify the process of entering the market. These reforms “streamline the product registration process by looking into the provision of alternative routes for NDA submission without Certificates of Pharmaceutical Product (CPP), fast-track and break-through designation in order to move toward effective product registration globally”. In addition to this, we can observe how markets in the region are expanding through agreements such as the Japan-China-Korea Tripartite cooperation for multi-regional clinical trials, China-Taiwan Cross-Strait clinical trial cooperation. More international regulatory cooperation is already underway.

However, there are still some challenges in the Asian pharmaceutical markets. These include a scarcity of cross-functional experts: “not only is the pharmaceutical value chain very lengthy and complex,” explained Dr. Chen, “each segment of this value chain calls for a different level of expertise to be involved”. Cross-functional experts are therefore highly beneficial as they can bridge the gap between each segment of the value chain.

As with many other regions, Dr. Chen described the collaboration between academia and industry in Asia as being somewhat fraught and often challenging. Dr. Chen also described local firms as “mostly segmented and their products and market portfolio are highly overlapped” which is likely to cause fierce competition for smaller profit margins. She also described local governments as having limited manpower to implement the aforementioned favorable policies and reforms.

Dr. Chen argued that international collaboration and the involvement of local pharmaceutical companies will be needed in order to drive sustainable growth: “it needs to integrate both local and global perspectives for a successful drug development… it will be timely for foreign companies to collaborate with Asian companies to develop products for the global market, in particular for international reach”. This also highlights the necessity of first-hand experience of local markets, demographics and consumer behaviors. One excellent opportunity to gather such information and to find potential business partners and clients is Duxes’ Medical Device Asia Pacific Summit 2015 which will take place at the Crowne Plaza Shanghai on May 20-22, 2015. Readers should also note that Duxes will also be holding the 7th China Healthcare Policy Seminar 2015 in August of this year; further details will be released at a later date. Both of these summits will be great chances to get up to date with healthcare policy and regulations in the region as well as gain deep insights into market trends and developments.

As we all know, the pharmaceutical industry in Asia has a reputation for being ultra-competitive and has often been accused of profiteering. If it is to change its image and regain consumers’ trust, the industry needs to foster a culture of honesty and innovation. As we have seen, much progress is already being made to improve the situation and that regional governments are the industry are working together to devise a solution. This is an encouraging sign that pharmaceutical companies are renewing their ability to bring new, effective and affordable medicines to patients all over Asia.