

Deciphering Major Pharma's China Strategy¹

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Introduction

It has been widely recognized that the global pharmaceutical industry is currently experiencing dramatic changes underlined by a series of actions taken by all major pharma companies as they are all experiencing a number of common challenges, both internally and externally.

Discovering a new medicine has become more and more difficult. The success rate of drug R&D has been low, which translates to low productivity. A number of blockbuster drugs in the product portfolio of almost all major pharma companies are facing rapid expiration of their patent protections, resulting in the loss of a big chunk of their sales revenue in the coming years. What is worrisome is that it seems that all these major pharma companies currently still do not have any new drugs in their pipelines that could soon replace these blockbusters.

These challenges have been around for a few years and forced all major drug makers to take all necessary actions including vigorously controlling operation cost, significantly trimming workforce and increasingly using external resources. Unfortunately, the first round of actions taken before 2008 did not resolve any issues. All major pharma companies are currently still facing a number of challenges. Meanwhile, the industry just experienced a rarely encountered financial crisis, which has triggered a wave of healthcare reform in almost all countries. One of the common aims of the global healthcare reform is to reduce the healthcare cost including capping the price of innovative medicines. The government action is certainly placing more pressures on all drug companies that have already been under severe pressure.

All in all, it has been proved that the traditional model in the pharmaceutical industry is no longer working any more as it is less flexible, efficient and productive but too costly.

New operation models are evolving

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To cope with these challenges, a new round of actions is currently being taken by all major pharma companies, including reducing the size of their internal R&D organization by increasing the collaboration with external partners, increasingly pursuing virtual R&D model by focusing on managing the relationship with external partners and by operating their internal R&D in a way more like an R&D-focused small biotech company, and closing more manufacturing facilities in particular for those off-patented small molecule drugs and outsourcing all general manufacturing tasks including APIs and intermediates.

Although all major pharma companies will never stop R&D in the future, the main difference between then and now is that they are doing less and less in house but more and more collaboration with external partners. For that purpose, all major pharma companies are focusing more on searching for ideal partners and managing the relationship with them. To still keep their pipelines full, all major pharma companies are also more diligently searching around the world for appropriate drug candidates to license.

To offset the revenue shortage from innovative small molecule drugs coming off patent protection, all major pharma companies are also changing their current product portfolio. On the one hand, they are increasing the proportion of generic drugs through searching and licensing sales rights from generic drug makers around the world. On the other hand, they are also focusing more on the development of novel biologic products as increasing numbers of biologic drugs have become new blockbusters, demonstrating the great future potential of biologics.

All these actions currently underway will lead to evolving of new operation models spanning the entire value chain of drug R&D, manufacturing and marketing. As a result, in near future all world major pharma companies will become much slimmer, more reliant on outside, more focused on managing relationship with external partners and expanding market space in particular in the emerging economies. All these actions are to make their organization more agile and adaptive and their operation more flexible and productive.

Therefore, compared with the present, major pharma companies will be doing more search than research in the future. They will still conduct R&D in house but only to a minimum extent. They will still perform manufacturing tasks but only those that are critically important. They will still focus on marketing but the marketed products are not necessarily made by themselves. To them, to a large extent, the change in R&D model will be from research to search. Searching for right drug candidates/technologies to in-license or right partners to collaborate with will become high priority. Similarly, searching for right service providers for outsourcing and right material suppliers for their supply chain will also become important to them.

Major pharma becoming focused on emerging markets but more on China

In addition to the series of changes in their R&D and manufacturing models, to keep their sales revenue still growing, the major pharma companies have also become more focused

on emerging markets as it has been widely recognized that the emerging markets will contribute most of the future market growth to the world pharmaceutical industry.

To enhance their marketing capability, most major pharma companies including Pfizer, GlaxoSmithKline, Astra-Zeneca, Novartis, etc. are aggressively increasing the proportion of generic drugs in their product portfolio through searching and licensing sales rights from generic drug makers around the world. To access the emerging markets, they are currently investing heavily in these countries including building manufacturing facilities, sales offices and even R&D centers. Meanwhile, they are also increasingly searching collaboration opportunities of all types with local drug companies and/or research organizations.

According to our research, in the emerging markets, the current top five major pharma companies are Sanofi-Aventis, Pfizer, GlaxoSmithKline, Astra-Zeneca and Novartis. Combined together, their current sales revenue in these markets reached more than \$31 B and accounts for about 15% of their combined total global sales revenue. Compared with 2008, it was increased by about 19%. Clearly, the significant growth of these major pharma companies in the emerging markets have made these emerging markets the new battle ground of drug product marketing for all pharma companies in the near future.

Among all emerging economies, China currently has become the main focus of these major pharma companies as the Chinese pharmaceutical market has displayed a fastest growth history in the past and, more importantly, still has huge future growth potential. The growth momentum of the Chinese pharma market is further strengthened by the recently implemented healthcare reform which aims to increase the healthcare accessibility to more ordinary Chinese citizens. Beside the attraction of the pharmaceutical market, the availability of a large talent pool in China whose skills and techniques are fast catching up, a large variety of resources that are still relatively cheap to access, and a large population of treatment-naïve patients are among the many other elements also attractive to these major pharma companies as they can help them accelerate their R&D progress.

So far all world major pharma companies have had a variety of activities in China including R&D, manufacturing, outsourcing and marketing of their pharma products. Many of them have so far invested hundreds of millions of dollars in the country and are still planning to invest even more as they are prompted by the even faster future growth potential of the Chinese drug market. At present a common feature of their activities in the Chinese market is that they have become fully engaged.

Strategies of major pharma companies in Chinese drug market

The long process of the major pharma companies entering the Chinese market can be divided into four stages. Most major pharma companies started paying attention to the Chinese market in as early as 1980s; but, they almost all initially intended only to establish a foothold in the country. However, as China demonstrated stable growth of its economy, which drove up the demand for high quality Western-style medicines, the

major pharma companies then decided to seriously make and market their drug products in the country. Figure 1 summarized the four stages of their entrance into the Chinese market.

Figure 1. Four stages of major pharma companies' entrance into Chinese market

The entrance of the major pharma companies into Chinese market experienced four stages:

- ❖ In 1980s – First stage; during which time those pioneer companies established manufacturing facilities in China.
- ❖ In 1990s – Second stage; during which time most major pharma companies formed JVs or partnerships with local Chinese companies and started selling their drug products in China.
- ❖ In 2000s (mainly between 2001 and 2008) – Third stage; during which time most major companies established and later further expanded their wholly owned R&D centers in China, expanded their manufacturing facilities and became more and more aggressive in product marketing.
- ❖ From 2009 to present – Fourth stage; during which time those major pharma companies that have already had large presence in China started establishing their regional operating headquarters in China [either for the Great China Area (including mainland, Hong Kong, Macau and Taiwan) or for the Asia-Pacific area]. They have become fully engaged in the country.

Almost all major pharma companies that have been in China have their wholly owned R&D center. Some even have multiple centers. Those that have not had any R&D facilities in China are currently planning to build. These China centers have now all reached decent sizes after constant expansions and are able to conduct research independently. For example, GSK's China R&D center (in Shanghai) has started clinical trial for the first drug candidate discovered by the center itself. A common research focus of these China R&D centers is the discovery and development of novel drugs against the diseases prevalent in China such as cancer, bacteria and viral infections, metabolism disorders, cardiovascular and CNS-related diseases, etc.

Besides, all major pharma companies also have their own, large scale manufacturing facilities in multiple locations in China. Many of these facilities have recently been expanded to accommodate more functions and to increase production capacities, just to meet the ever growing demand of the Chinese drug market. For example, Astra-Zeneca has expanded its China manufacturing facility (located in WuXi, Jiangsu Province) twice in the past five years. More new manufacturing facilities are under construction or in planning.

Meanwhile, this process has been accompanied by a large number of outsourcing collaborations, both in R&D and manufacturing, of the major pharma companies with local Chinese companies and/or research institutions. The scale and scope of their collaborations have also been significantly increased and widened with more high-end projects handed to the local Chinese organizations.

More significantly, all major pharma companies have a variety of pharma products currently marketed in the Chinese market and a large size sales team on ground. For example, Pfizer currently has more than sixty drug products in the Chinese market and a sales team of more than 2,300. It plans to expand the marketing team to 3,200 by 2011.

The drug products marketed by the major pharma in the Chinese market include both prescription drugs and OTC drugs, and both brand products and generics. Besides, there are also a variety of vaccines marketed in China by these major pharmas. In the past, most of their sales activities were concentrated in those major hospitals in major Chinese cities. But currently and in the near future those second and even third-tier Chinese cities will also have become their market targets.

Based on our research results, the current world top ten major pharma companies that are most active in the Chinese market are: Pfizer, Sanofi-Aventis, Bayer Schering, GlaxoSmithKline, Astra-Zeneca, Novartis, Roche, Johnson & Johnson, Eli Lilly and Merck. All these companies have successfully achieved and maintained extraordinarily high annual revenue growth rates in the Chinese market in the past five years. Combined together, their current (2009) China sales revenue reached \$7.2 B. Compared with 2008, it was increased by about 29%.

Currently, the top two therapeutic areas in the Chinese market are diabetes and cancer. In the diabetes drug sector, Bayer, Eli Lilly and Sanofi-Aventis are the current top three companies dominating this Chinese market sector; whereas in the cancer drug sector, Roche, Pfizer and Novartis are the current top three players.

In summary, the challenges currently facing the world pharmaceutical industry have forced all major pharma companies to pursue new strategies throughout all aspects of their operation. These new strategies are leading to evolving of new operation models industry-wide. One of their strategies is the marketing focus on the emerging countries; whereas among all emerging countries, their focus is currently more on China than any others largely because of the faster growth trend displayed by the Chinese market. So far all major pharma companies have had heavy investment and a wide variety of activities in China. Their efforts have resulted in the admirably high growth of their sales revenue in the Chinese market. Their success in the Chinese market have thus made them determined to more dramatically increase their investment and strengthen their presence in the country, which will in turn accelerate their further growth in the Chinese market in the near future.