

Strategies and Elements for the Growth of Pharmaceutical Industry

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From a world perspective, pharmaceutical industry in any country and in any time has been unique for a variety of reasons. It has little or no tolerance for failure in health service and care because it deals with the life and the quality of life. It requires highly educated human resources and it depends upon heavy re-investment for research and development to stay in business, compared to other competitive industry. Recent effort for the standardization of drug synthesis and research technique through International Conference on Harmonization brought not only harmonization, but also invited a keen competition among drug manufacturers. On top of the rapidly moving research and development health care industry is known to be costly due to ever increasing standard and regulation of governments and public demands.

In order to maintain competitive edge of pharmaceutical research and development, historical and recent activities of US counterparts could be summarized below. The business of US pharmaceutical industry has been operated with specific directions and vision for long-term commitment. They have been sensitive to the needs of their potential customers and they were willing to deliver their confident products to the end of globe. To meet their goals and specific objectives they had to employ new methods and techniques, which were the usual products of hard research and heavy re-investment operation. That is, to just stay in the business they had to innovate their operations from organic synthesis, preclinical pharmacology, pharmacokinetics, and toxicology to clinical drug design, random clinical trial procedures, and new drug application. Innovations were necessary to every corner of research and development because innovation only has been cost effective and it will be the best strategy for the pharmaceutical research and development for long run. Innovations in discovering new molecular devices, screening system,

cost-effective production procedures, and every aspect of pharmaceutical activities should be linked to research and therapeutic application for competitive drug research and development.

Creation of healthy environment for pharmaceutical research and development, education and training not only for health care scientists, but also for general public have been necessary evil. Up to date medical information, experiences in basic and applied sciences, and imaginative and innovative idea must be fused for sound growth of pharmaceutical research and development. Healthy and research-driven industry is recommended to link with pharmaceutical knowledge and purposeful application for drug discovery and development. At the same time leaders for pharmaceutical research and development should aware any changes in current pharmaceutical research and development by connecting with regulatory agencies and academia. Requirements for scientific evidence and reliance on scientific innovation and technology are the lifeline for their decision-making process for competitive drug research and development.