OPEN INNOVATION IN INDIAN PHARMA

Dear Reader,

Times are changing for the pharmaceutical industry. Once secretive about their research and priorities, companies are becoming more open in sharing their aspirations and bringing new ideas from outside to fuel their innovation. The companies are not only searching for novel opportunities for themselves through outreach to startups or academia but also are out-licensing their own ideas and intellectual properties that don't fit their business strategies. This business model, where the organization is proactively searching for external opportunities for both in- and out-licensing, was coined by Chesbrough as 'Open Innovation'.

Innovation is not only important for success but also essential for survival, particularly for pharmaceutical companies where the 'patent cliff' is very challenging. To combat against this, the industry has been spending billions of dollars to discover new therapeutically active molecules or technologies that can lead the market. These multinational companies have vertically integrated R&D, state of the art research facilities, and thousands of smart scientists to conduct research. This strategy has led to quality research, subsequently introducing drug candidates which have made billions of dollars for the companies. However, the success at the end of this lengthy process is not always guaranteed and companies have suffered significantly sometimes even going bankrupt.

Over the years, companies have realized that in spite of spending lots of money, they cannot entirely rely only on their own innovation. This inward-looking innovation model ignores the fact that ideas can come from anywhere including small startups, entrepreneurs or academia. As the availability of highly qualified people has increased over the years, a large body of knowledge exists outside the multinational companies. The ideas developed by smaller companies may not be fully formed or fully tested but could provide a tremendous potential for larger companies to develop the next innovation. Rather than reinventing the wheel themselves, companies can partner with these smaller, yet specialized, companies and utilize their knowledge more effectively. Acquiring such novel external opportunities and further developing or co-developing them to meet the organization's criteria has become a key approach to achieve growth, accelerate innovation, and maintain a competitive advantage.

Open Innovation is not just business development but much broader; it requires a different mindset of openness. It involves the willingness to share not only technical details but also insights, priorities, and strategic growth areas between the partners to work effectively. Sometimes sharing this vital information with others become a challenge for the companies but a proper legal framework can make working together smoother. P&G was an early adaptor of this model with support from their senior management. They openly shared their innovation areas on their website (P&G Connect + Develop), so that the partners could see what technologies P&G is looking for. Similarly, Novartis, Sanofi, and GSK are also committed to this model and are working with several players to bring new technologies onboard. Technology giants such as Apple and Google are using this strategy aggressively to enter into the healthcare arena.

This model is equally important for Indian pharmaceutical companies. As the Indian pharmaceutical industry transitioned from the generic era of the mid 90s to today's innovation

era, market-relevant innovations and speed to market are keys to success. Once the growth objectives are established, the company can identify partners in India or abroad, who has the best technology and willing to work together. They can use the startup's entrepreneurship spirit and nimble approach to speed up the development and use their own best practices for quality and manufacturing to bring the innovation into their own system. It becomes a win-win situation for both partners.

This model can also benefit startups and smaller companies. As part of the Global Open Innovation team in GlaxoSmithKline, I have seen the tremendous creativity coming from smaller companies and academia, particularly in India. I have seen their published articles in renowned journals. I would like to encourage them to go beyond that and get their innovation onto the shelf by embracing Open Innovation. With proper networking, they can identify companies looking for common areas to grow and provide them the niche solutions. Smaller companies need to ensure that the technology ownership is protected through invention records and filing patents and that confidentially agreements are in place prior to sharing the knowledge with the partners. Armed with this framework, a savvy business development individual can ensure the proper transactional outcome. The startups and entrepreneurs should not limit their partnership to only Indian market but also explore global companies which are always looking for the next innovation.

I sincerely hope that the pharmaceutical companies in India embrace the culture of Open Innovation to work together and bring the next generation of innovation for the global markets. In this process, I hope that India becomes the pharmaceutical Innovation powerhouse for the world.

Dr. Ganesh Deshpande
Editorial Advisory Board
Indian Drugs

About The Guest Editor

Dr. Ganesh Deshpande is a co-founder and CEO of Advinno Healthcare, a pharmaceutical company focused on the discovery and development of innovative therapies. He brings over 20 years of experience in the global pharmaceutical industry across R&D, category management, and business development.

Prior to his current responsibilities, Dr. Deshpande worked with GlaxoSmithKline as a Director of Global New Product Research. Over the years with GSK, he worked with increasing responsibilities in Product Development, Product Research, and Innovation groups. He drove successful development and global launches of diverse product portfolios. He worked with several global partners to develop and file NDAs and ANDAs or equivalent in the US, Europe, Japan, and in emerging markets such as Brazil, India, and China.

Dr. Deshpande completed his Bachelor's and Master's degrees from University of Mumbai and Ph.D. from University of Iowa, USA. He has published in various peer reviewed scientific journals and presented at professional meetings. He has co-authored chapters and is credited with patent applications. Dr. Deshpande is the recipient of GSK CEO's award for Green Initiatives. He is based in New Jersey, USA and enjoys his free time in community volunteering and traveling.