

摘要

以開放式創新觀點，本研究分析臺灣生技公司的新藥開發模式。臺灣生技公司從國外引進技術後，進行臨床前期試驗與臨床試驗，再授權技術，如基亞生技公司、寶齡富錦公司。本研究分析擁有內部資源較豐富的基亞生技公司如何結合外部資源來從事新藥開發，與分析內部資源有限的寶齡富錦公司如何引進大量外部資源以從事新藥開發。一方面，本研究希望分析臺灣生技公司從技術引進至新藥開發的創新模式；另一方面，探索臺灣生技公司技術移轉至國際製藥公司之獲利模式與在全球生技產業價值鏈之定位。研究結果指出，基亞生技與寶齡富錦都是著眼於亞洲市場的利基藥品。基亞生技著重抗肝癌新藥；寶齡富錦則著重腎臟疾病新藥。兩者採用不同的開放式創新模式，基亞生技利用自身醫界人脈，結合台灣在地的醫療資源，成功地在臨床試驗第二期後授權給國際大藥廠，並在臨床試驗第三期進行共同「合作」開發。相對地，寶齡富錦公司經營者利用自身在北美的人脈，有效地利用北美的臨床「委外」模式，進行臨床試驗並成功地在臨床第二期試驗後授權給國際大藥廠。這兩個對比案例提供開放式創新的新觀點，也指出企業未來對外整合資源的新作法。

關鍵詞：開放式創新、新藥開發、技術移轉、臺灣生技公司

Abstract

This paper aims to analyze new drug development projects of the Taiwanese biotechnology companies from the perspective of open innovation. Taiwanese biotechnology companies, such as Medigen Biotechnology Company and Panion & BF Biotechnology Company, transfer the foreign technologies and conduct the preclinical trials and clinical trials, and make a profit after licensing out the technologies. This study investigates how Medigen which has rich internal resources leverages external resources to develop the new drug, and how Panion & BF which has less internal resources leverages huge external resources to develop the new drug. Two important issues are addressed in this study: how Taiwanese biotechnology companies can leverage external resources and eventually make a profit by licensing out technologies to international pharmaceutical companies; and how Taiwanese biotechnology companies re-position themselves in the global value chain of biotechnology industry. Research results indicate that although both companies concentrate on the niche markets in Asia, they focus on different product markets, with Medigen focusing on liver cancer drug market and Panion & BF focusing on kidney disease one. Additionally, both companies adopt open innovation as a main business model, but they leverage external resources and network in different ways. Medigen successfully licenses out to a foreign pharmaceutical company after clinical trials by relying on the network of its CEO as a medical doctor and by forming international joint development team for its clinical trials. In contrast, Panion & BF successfully licenses out to an international pharmaceutical company by relying on outsourcing contract clinical/ research organization (CRO) through its networks in North America.

Keywords: open innovation, new drug development, technology transfer, Taiwanese biotechnology companies