



Healing Wounds and Protecting IP

Case Study | Celligenics

At a Glance

Chronic wounds such as diabetic foot ulcers afflict one in 20 Singaporeans, with most affecting the elderly. Economically, chronic wounds cost at least US\$216 million worth of healthcare burden in Singapore and will continue to rise due to Singapore's ageing population. The situation is aggravated by limited treatment solutions for chronic wounds with some being too costly or causing adverse side effects.

Celligenics, a biotechnology company founded in Singapore in 2016 as a spin-off from the Agency of Science, Technology, and Research (A*STAR), Singapore's lead public research & development agency, has developed an affordable and effective regenerative extract, the secretome, sourced from stem cells that can stimulate cell repair and regeneration. Preliminary data suggest a one-third acceleration in wound closure upon treating wounds with this secretome, highlighting the secretome's potential in addressing the needs of chronic wounds.

Keeping their Secrets

The science of stem cell extraction, storage, and secretome production requires highly rigorous protocols. Know-how and trade secrets in the process of extraction, storing, and cellular differentiation control are at the core of Celligenics' value proposition. Protecting these trade secrets effectively is critical to securing Celligenics' competitive edge.

Celligenics keep their secrets by:

Implementing confidentiality agreements, e.g., Non-Disclosure Agreements

Establishing safe-management processes, e.g., Standard Operating Procedures for staff access and limiting access of information to key personnel

Storing trade secrets in a separate repository

Protecting their Trade

To complement the protection of their trade secrets, Celligenics also protects their intellectual property through strategic patenting and trademarking, as well as retaining professional legal counsel and engaging with the Intellectual Property Office of Singapore (IPOS) to ensure that their intellectual property management remains robust.

The company has a vision to empower people with affordable and accessible regenerative healthcare solutions that will enhance the quality of human life, and with a comprehensive system in place to protect their intellectual property, the company is in good position to punch above their weight, and expand their business beyond Singapore.