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China's Revotek deploys Bioink technology to research institutes

03 May 2021 | News

Revotek's cell encapsulation technology or Biosynsphere is applicable in basic and translational research in stem cell regenerative medicine

Recently, Revotek Co., Ltd., a vertically integrated biotech company specialized in 3D bioprinting, and West China Hospital of Sichuan University, a leading research hospital in China, have reached an agreement, in which the latter shall introduce Revotek's cell encapsulation technology, or Biosynsphere, for the use in its basic and translational research in stem cell regenerative medicine.

On April 22, the instrument (Biosynspherer) and its first batch of reagents and consumables were delivered to the laboratory of West China Hospital of Sichuan University. Revotek's 3D blood vessel bioprinter is scheduled to be delivered to the hospital laboratory in Q3, 2021.

In the cooperation, Revotek shall provide training on Biosynspherer, Biosynsphere preparation, technical and hardware supports.

Revotek, established in 2014, provides life-saving 3D bioprinting technologies that enable the delivery of fully personalized healthcare solutions. Revotek has developed the world's first Biosynsphere technology, a universal bio-ink that allows scaffold-free bioprinting. The 3D blood vessel bioprinter and bone repairing devices are derived and developed based on this technology, which is of great value in clinical applications. Revotek's technologies have been recognized as breakthroughs in regenerative medicine, and Revotek has filed for over 200 patents worldwide.

Biosynsphere® is a cell encapsulation process and tool that meets the needs of academic research and clinical applications. Biosynsphere shows good biological properties, enabling the enwrapped cells to perform biological functions normally; it also has good mechanical properties, which effectively protect the enwrapped cells from mechanical damages. As a platform technology, Biosynsphere has potential in various applications, including *in vitro* 3D cell culture, *in vitro* construction of micro-tissues, *in vivo* repair of damaged tissue and organs, and organ reconstruction.