

Teijin announces launch of novel cardiovascular surgical patch in Japan

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New product is designed to be used in surgical treatment of patients with congenital heart disease



The consortium of Teijin Limited, Fukui Tateami Co., Ltd., and Osaka Medical and Pharmaceutical University has announced that a novel surgical patch, to be marketed under the brand name Synfolium, will be released for manufacturing and distribution by Teijin Medical Technologies Co., a Teijin Group company.

Synfolium is a surgical patch with knitted fabric consisting of both bio-absorbable and non-absorbable yarns, which are coated with cross-linked gelatin.

After the patch is surgically implanted in the body, the patient's tissue grows and gradually surrounds the expandable, non-absorbable portion, while the bio-absorbable portion degrades. The regenerated tissue has the potential to reduce the risk of inflammatory reactions, foreign body reactions and cell death, which often cause deterioration of the implants.

This new product is designed to be used in surgical treatment of patients with congenital heart disease (CHD). The prevalence of CHD is 1 in 100 people globally, and in Japan, it is estimated that approximately 10,000 neonates are born with the disease each year.

Teijin developed the technology to coat knitted fabric with gelatin, which can prevent blood leakage and can be replaced by the patient's own tissue. The company has been proceeding with design and development, clinical trials, establishment of a commercial production system, and application for manufacturing and marketing approval in Japan.

Furthermore, to help improve the quality of life of patients with CHD around the world, the consortium plans to market Synfolium overseas by working to gain manufacturing and marketing approval in the United States, the European Union and other countries.