

StemRIM Announces Patent Registration for Stem Cell Gene Therapy Technology (Development Code: SR-GT1) Aimed at Curative Treatment of Dystrophic Epidermolysis Bullosa

Osaka, Japan, October 16, 2025 – StemRIM Inc. (TSE:4599, President and CEO: Masatsune Okajima; “StemRIM” or “Company”) announces that that a patent related to our stem cell gene therapy technology (Development Code: SR-GT1), which aims to provide a fundamental cure for epidermolysis bullosa, has been granted as outlined below.

Title of Invention : Therapeutic Agent for Dystrophic Epidermolysis Bullosa
Region : Japan
Application No. : 2022-538037
Registration No. : To be determined
Applicant : StemRIM Inc., Osaka University

Dystrophic Epidermolysis Bullosa (DEB) is a hereditary disorder in which even minor external forces encountered in daily life can cause burn-like blisters, erosions, and ulcers on the skin. The skin consists of two layers: the epidermis and the dermis, which are adhered together by a protein called **type VII collagen**. This type VII collagen is secreted by keratinocytes in the epidermis and fibroblasts in the dermis, acting like a "glue" that firmly binds the two layers.

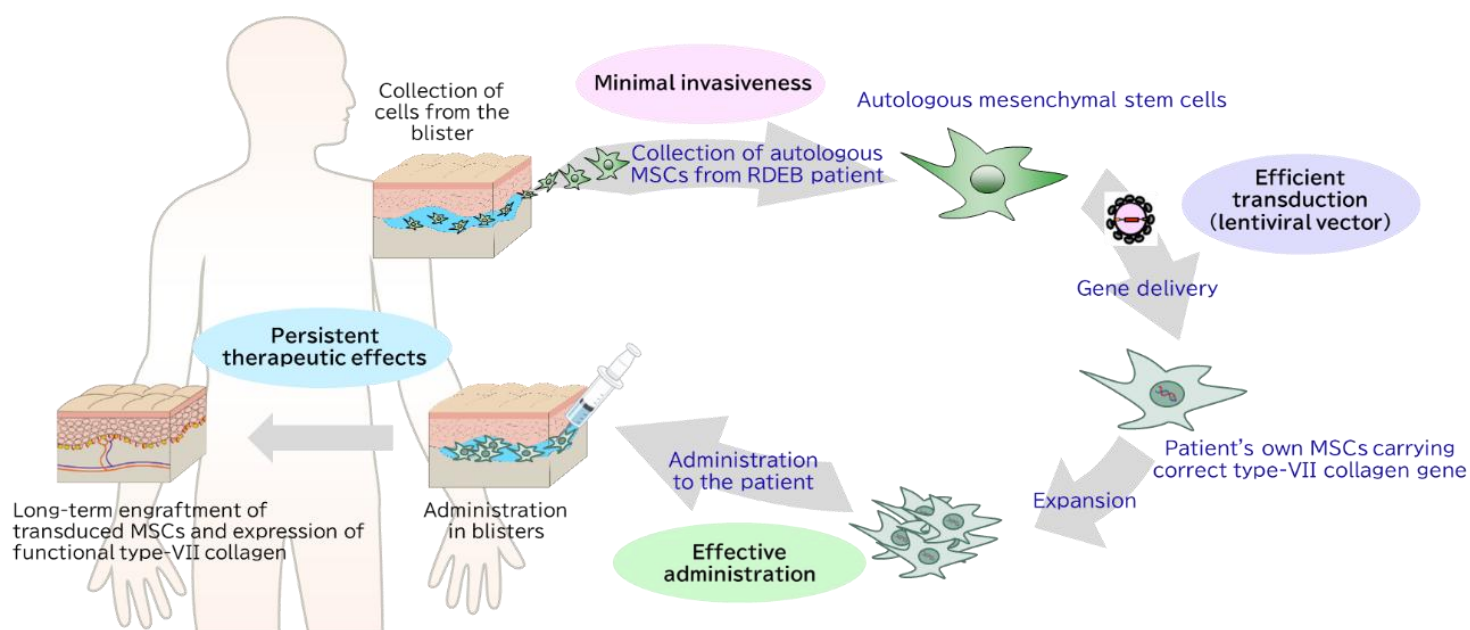
However, in patients with epidermolysis bullosa, genetic abnormalities in type VII collagen weaken this adhesion, causing the skin to peel away easily. As a result, tissue fluid accumulates between the skin layers, forming blisters. When these blisters rupture, they become ulcers. If healing cannot keep up, scarring may occur, leading to skin contracture and restricted joint mobility.

In severe cases, lesions may also affect the oral cavity and esophagus, making nutritional intake difficult. Symptoms often appear from birth and persist throughout life due to the ongoing fragility of the skin. Currently, there is no established curative treatment available other than gene therapy.

Building upon the development research of our proprietary "Regeneration-Inducing Medicine™" conducted in collaboration with Osaka University, we have aimed to advance in vivo regenerative induction therapy toward a curative treatment for genetic intractable diseases. Specifically, we are developing a gene therapy technology that targets stem cells responsible for skin regeneration.

In this approach, mesenchymal stem cells are collected from within the blisters of patients with nutritional epidermolysis bullosa, then cultured and expanded. The normal type VII collagen gene is efficiently introduced into these cells. The genetically modified autologous mesenchymal stem cells are further cultured and re-administered into the patient's blister

sites. These cells, now capable of stably supplying type VII collagen, engraft long-term in the skin, thereby enabling a **curative treatment for epidermolysis bullosa**.



The stem cell gene therapy *SR-GT1*, currently under development by our company, is being manufactured as an investigational drug with a view toward clinical application, supported by the Japan Agency for Medical Research and Development (AMED)^[1]. This technology represents an innovative approach aimed at a curative treatment for recessive dystrophic epidermolysis bullosa, and preparations for a swift transition to a physician-led clinical trial are steadily progressing.

The impact on the financial performance for the fiscal year ending July 31, 2026, is insignificant. We will promptly disclose any additional information that needs to be disclosed.

[1] Please refer to the notice dated December 6, 2024, titled "StemRIM Announces Selection for the AMED Project "FY2024 Project for Fundamental Technology Development toward Industrialization of Regenerative Medicine and Gene Therapy" "

About StemRIM Inc.

StemRIM Inc. is a biotech venture which began at Osaka University with the goal of realizing a new type of medicine called "Regeneration-Inducing Medicine™". The overall aim is to achieve regenerative therapy effects equivalent to those of regenerative medicine, solely through drug administration, without using living cells or tissues. Living organisms have inherent self-organizing abilities to repair and regenerate tissues that have been damaged or lost due to injury or disease. This ability arises from the presence of stem cells in the body that exhibit pluripotency i.e., can differentiate into various types of tissues. When tissues are damaged, these cells, therefore, exhibit proliferative and differentiative capabilities, promoting functional tissue regeneration. "Regeneration-Inducing Medicine™" is aimed at maximizing the tissue repair and regeneration mechanisms already present in the body. With this aim, StemRIM is currently developing one of its most advanced regenerative medicine products. Specifically, this product is designed to release (mobilize) mesenchymal stem cells

from the bone marrow into the peripheral circulation upon administration, thus increasing the number of stem cells circulating throughout the body and promoting their accumulation in damaged tissues. Here, these stem cells should accelerate tissue repair and regeneration. Certain disease areas expected to benefit from "Regeneration-Inducing Medicine™" include epidermolysis bullosa (EB), acute phase cerebral infarction, cardiomyopathy, osteoarthritis of the knees, chronic liver disease, myocardial infarction, pulmonary fibrosis, traumatic brain injury, spinal cord injury, atopic dermatitis, cerebrovascular disease, intractable skin ulcers, amyotrophic lateral sclerosis (ALS), ulcerative colitis, non-alcoholic steatohepatitis (NASH), systemic sclerosis, and any other areas where treatment with ectomesenchymal stem cells is promising.

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For more information, please visit the StemRIM website (<https://stemrim.com/english/>)