

StemRIM Announces Publication of a Paper on Novel Finding about Contribution of Ectomesenchyme for Epidermal Stem Cell Formation

Osaka, Japan, July 6, 2026 – StemRIM Inc. (TSE: 4599, President and CEO: Masatsune Okajima; “StemRIM”) announces the publication of a scientific paper on the results of its collaborative research with The University of Osaka, as outlined below.

Title : Ectomesenchyme contributes to epidermal stem cell formation through mesenchymal-to-epithelial transition
Journal : Nature Communications
Publication Date : July 04 2026
URL : <https://www.nature.com/articles/s41467-026-75278-0>

“Regeneration-Inducing Medicine™” platform being developed by StemRIM is designed to mobilize mesenchymal cells from the bone marrow to sites of tissue injury, thereby inducing the regeneration of tissues that have been lost or damaged as a result of disease. To date, therapeutic effects following the administration of Redasemtide, our first “Regeneration-Inducing Medicine™”, have been demonstrated in a wide range of intractable disease models. Clinical trials are currently underway in multiple indications, including epidermolysis bullosa and acute ischemic stroke. In parallel, StemRIM continues to advance research and development aimed at further elucidating the specific mechanisms by which mesenchymal cells mobilized by “Regeneration-Inducing Medicine™” contribute to the regeneration of injured tissues.

Based on the concept that tissue regeneration recapitulates tissue development, StemRIM has been conducting collaborative research with The University of Osaka to clarify the role of mesenchymal cells in skin development during the embryonic period. Through this collaboration, StemRIM and The University of Osaka have demonstrated, for the first time worldwide, that mesenchymal cells generated from ectodermal tissues, which give rise to fetal skin and the nervous system, contribute to the formation of epidermal stem cells in embryonic skin through mesenchymal-to-epithelial transition. Further details are available in the published paper.

Our novel finding of tissue stem cell formation by ectoderm-derived mesenchymal cells may provide an important scientific basis for understanding how ectodermal mesenchymal cells mobilized from the bone marrow by Redasemtide contribute to the regeneration of skin stem cells in patients with epidermolysis bullosa and neural stem cells in patients with acute cerebral infarction. StemRIM is currently conducting further collaborative research with The University of Osaka to verify this mechanism.

Guided by its mission of “overcoming intractable diseases through Regeneration-Inducing Medicine™”, StemRIM will continue to pursue the realization of “Regeneration-Inducing Medicine™” and aims to deliver innovative therapeutic solutions for patients suffering from intractable diseases.

About StemRIM Inc.

StemRIM Inc. is a biotech venture which began at The University of Osaka 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 mesenchymal stem cells is promising.

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