

ROKIT brings innovative 3D bioprinting strategy for skin regeneration

20 February 2019 | News

ROKIT's treatment strategy uses INVIVO®, ROKIT's proprietary 3D bioprinter, and patient's autologous tissues and cells to "print" a dermal patch graft to treat scarred lesions



ROKIT Healthcare, Inc., a regenerative medicine company focused on the development of novel regenerative therapeutic strategies using three-dimensional (3D) biofabrication technologies for treatment of various medical conditions including dermatological, orthopedic, and autoimmune disorders, announced a novel application of dermal regeneration platform using autologous cells and its proprietary 3D bioprinter INVIVO®. This new regenerative therapeutic platform will be further studied in clinical settings for patients in need of treatment for damages suffered from dermal scarring.

Skin scarring is one of the most common medical conditions that can arise after almost every dermal injury, some of which can cause considerable physical, aesthetic, psychological and social problems that result in millions of elective operations and operations after trauma.

ROKIT's treatment strategy uses INVIVO®, ROKIT's proprietary 3D bioprinter, and patient's autologous tissues and cells to "print" a dermal patch graft to treat scarred lesions. Combination of the 3D printing technology that allows for uniform and equal-density distribution of the cells and the use of patient's autologous tissue/cells can lead to rapid migration of keratinocytes and neovascularization at the wound site, resulting in effective regeneration of the skin at treated lesion.

ROKIT will further evaluate the effectiveness of the treatment in investigator-initiated clinical studies, which will initially open in Korea, with expansion to multiple countries worldwide. The company plans to expand the application of this novel treatment strategy to other dermatological conditions such as burns, pressure ulcers, and diabetic foot ulcers.