Stem Cells International

Special Issue on

Stem Cells Therapy for Wound Healing and Skin Regeneration

CALL FOR PAPERS

Stem/progenitor cells of the epidermis are recognized to play the most essential role in the tissue regeneration of the skin. Access to unlimited number of specific cell types on demand has been a long standing goal in regenerative medicine and in the last decade major advancements in protocols have facilitated the use of stem cells in treatment of inflammatory skin conditions as well as chronic wounds including diabetic pressure ulcers. More recently, a whole body graft of genetically modified stem cells has been used for treatment of severe form of epidermolysis bullosa, a devastating genetic disease associated with skin blistering.

Embryonic stem cells and somatic stem cells have all shown great promise in disease therapeutics. The indefinite self-renewal and potential to differentiate into other types of cells represent stem cells as frontiers of regenerative medicine via both autocrine and paracrine modes of action. Advancements in gene editing and engineering as well as other novel technologies have allowed better assessments of lineage, fate, and function of stem cells both in vitro and in vivo as well as facilitating the ex vivo remodeling of stem cells into 3D organoids and tissues for personalized applications. To date, clinical success has been achieved in small cohort of patients showing promise for translation of effective therapies for currently intractable disorders; however if these therapies are to deliver substantial benefits in clinical practice, many more challenges need to be addressed including scaffold technology and delivery of stem cells for skin regeneration.

In this special issue, we encourage researchers to submit original recent research articles, clinical advances, and review articles which address the current advancement in stem cell research relative to development of therapies for wound healing and skin regeneration.

Potential topics include but are not limited to the following:

- Stem cells in skin disease, wound healing, and skin regeneration
- Epithelial stem cells and gene therapy
- Skin regeneration scaffolds technology and biomaterials for skin tissue engineering
- Delivery technologies for stem cell based therapy
- Stem cells therapy for vascular disorders associated with chronic wounds

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/sci/nftr/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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