Isolation and Characterization of Gingival Mesenchymal Stem Cells from Healthy and Inflamed Gingival Tissue: Migration and Proliferation Potential Through a Guided Tissue Membrane. (In vitro study)

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Dedication:

TO MY LOVELY MOTHER WHO DEDICATED HER LIFE TO RAISE ME UP, AND SUFFERED A LOT IN HER OLD AGE NOT FINDING ME BESIDE HER FOR WHOLE 2 YEARS TILL MY PROJECT REACHED AN END.

TO THE SOUL OF MY FATHER WHO SUPPORTED ME TO BE A MAN, AND WHO SCULPTURED MY SCIENTIFIC STAMINA.

List of abbreviations:

MSC: Mesenchymal stem cells.

GTR: Guided tissue regeneration.

OM: Occlusive membrane.

MPM: Modified perforated membrane.

BMP: Bone morphogenic proteins.

VEGF: Vascular endothelial growth factors.

PDGF: Platelets derived growth factors.

ICML: Inner cell mass blastocyst.

OCT: Octamer binding protein.

SSEA: Stage specific embryonic antigen.

Sox: Sex determining region box.

ASC: Adult stem cell.

CFU-F: Colony forming unit fibroblast.

MUSE: Multi-lineage enduring stem cells.

BMSC: Bone marrow mesenchymal stem cells.

DPSCL: Dental pulp stem cells.

FCS: Fetal calf serum.

FFPP: Fresh frozen plasma platelets.

PDLSC: periodontal ligament stem cells.

DFC: Dental Follicle cells.

SCAP: Stem cells from root apical papilla.

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