Supplementary figure 1. Generation of induced pluripotent stem (iPSCs) and induced pluripotent stem cell derived endothelial cells (iPSC-ECs) from dermal fibroblasts was achieved by retroviral overexpression of Oct4, Sox2, Klf4 and cMyc, followed by culture in endothelial lineage specific growth factors.

Induced Pluripotency Dermal fibroblasts **Fibroblasts** Reprogramming (14 days) Oct 4 INTEGRATING **VECTORS** Klf4 · Retrovirus (OKSM) **Induced pluripotent** stem cells (iPSCs) Differentiation Differentiation media: (14 days) **VEGF bFGF** BMP4 **Endothelial growth** medium Lentivirus LV-pUb-Fluc-GFP **Endothelial iPSC-ECS** cells