GelMA-Encapsulated hDPSCs and HUVECs for Dental Pulp Regeneration

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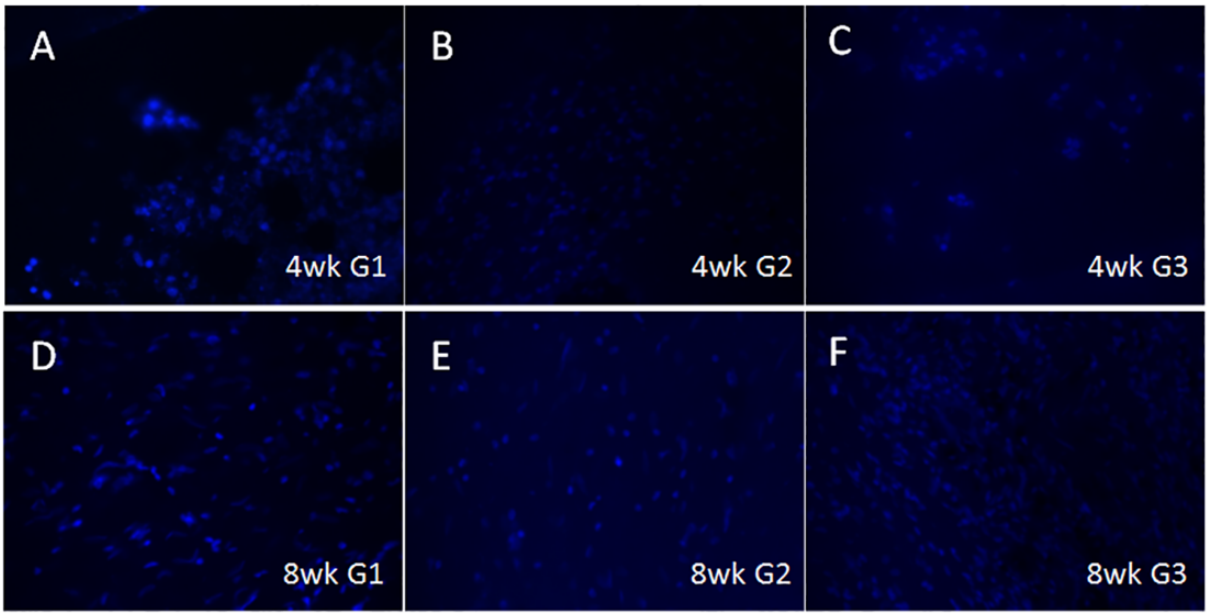
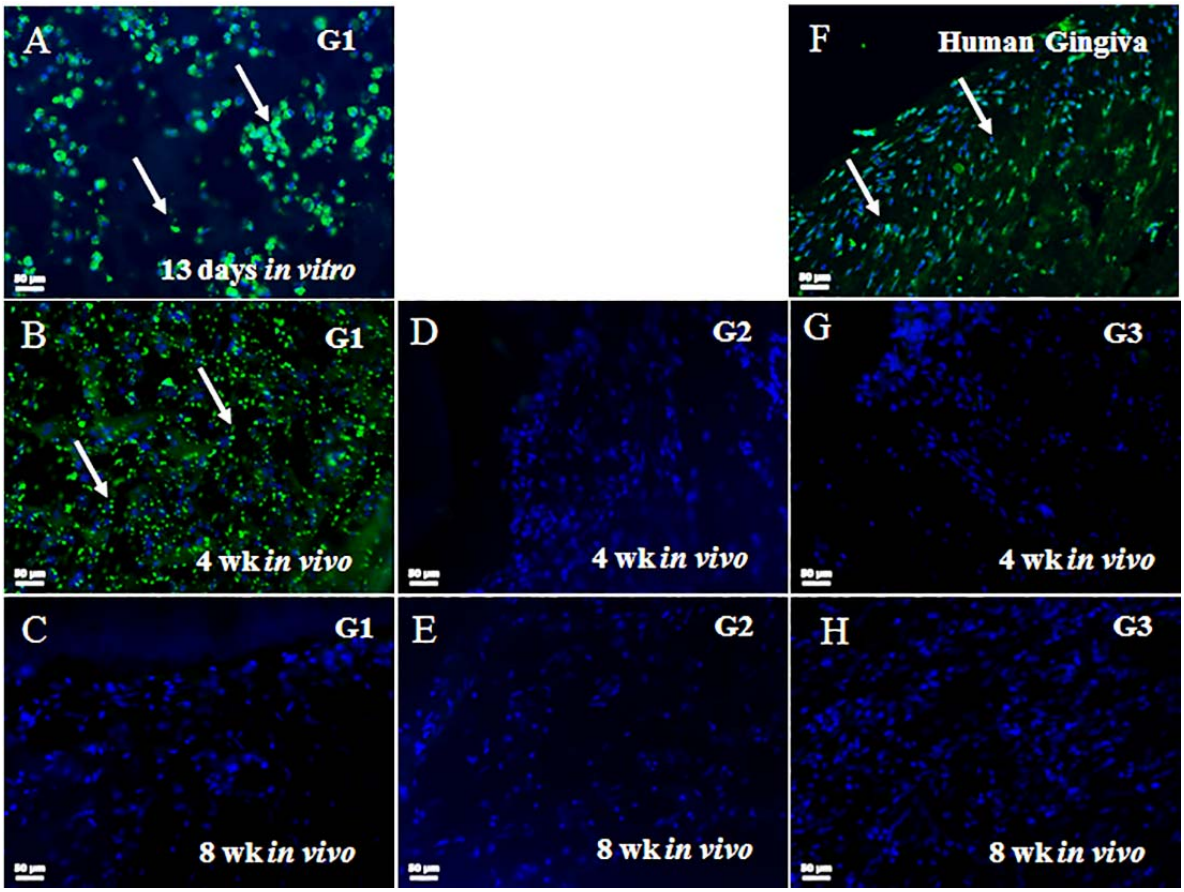
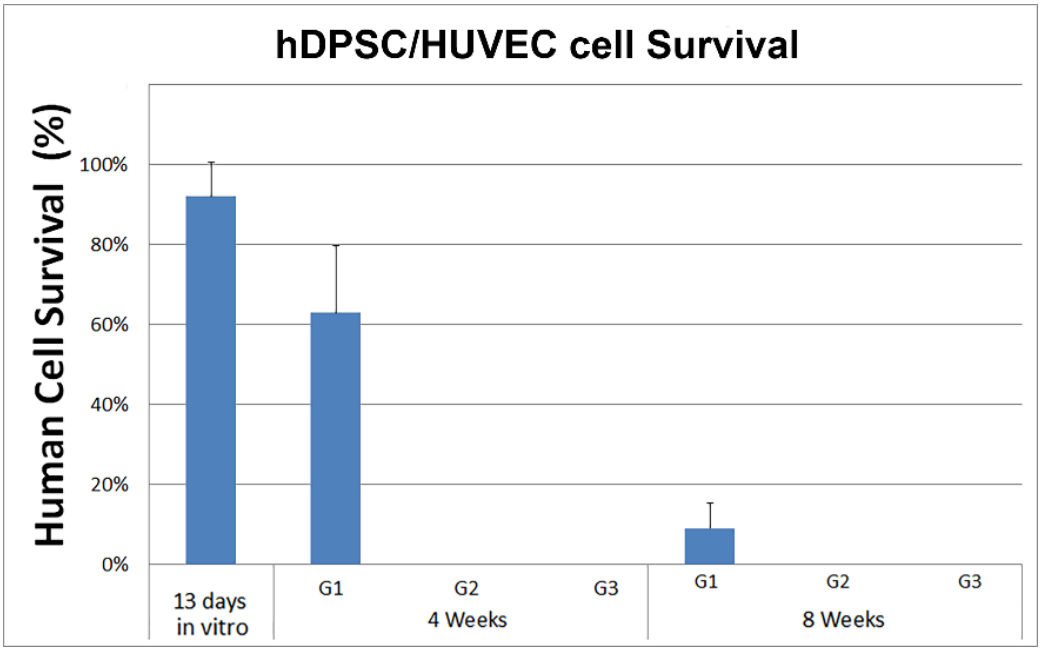
Appendix



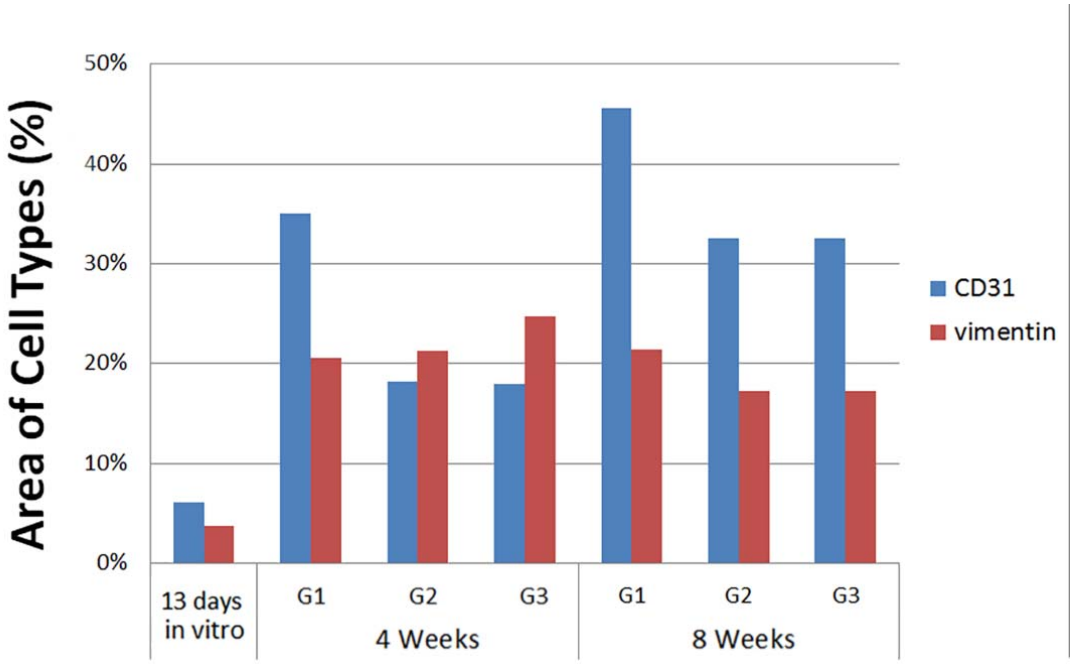
Appendix Figure 1. Negative controls for Immunofluorescent histochemical analyses. All of the no primary controls were negative.



Appendix Figure 2. Human cell survival in *in vivo* implanted constructs. (A) Robust rh-Mitochondria staining of GelMA encapsulated hDPSCs and HUVECs at 13 days *in vitro*. (B) Human DPSCs and HUVECs were also clearly detected in 4 wk *in vivo* implanted G1 constructs. (C) Weak signal in 8 wk implanted constructs indicated that implanted human cells were replaced by host cells. (D, E) rh-Mitochondria antibody identified human DPSC and HUVECs in 4 and 8 wk *in vivo* acellular GelMA implants. (F, G) 4 and 8 wk *in vivo* empty RS implants exhibited similar results as the acellular GelMA group. Both exhibited host cell infiltration and no rh-Mitochondrial marker expression. (H) Human gingiva positive control for the rh-Mitochondria antibody. Scale bars: A-H = 50 μm.



Appendix Figure 3. hDPSC/HUVEC Cell Survival. Quantification of rh-anti-mitochondrial positive cells at indicated time points.



Appendix Figure 4. Quantification of mesenchymal and endothelial cells in tooth root constructs. The area occupied by CD31 positive endothelial cells (red) and VM positive mesenchymal cells (green) was calculated at each of the indicated time points. These results showed fairly stable endothelial cell populations in 4W and 8W implanted constructs, and increased mesenchymal cell populations in all construct types at 8W as compared to 4W.