



Supporting Information

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Development of Biocompatible HA Hydrogels Embedded
with a New Synthetic Peptide Promoting Cellular Migration
for Advanced Wound Care Management

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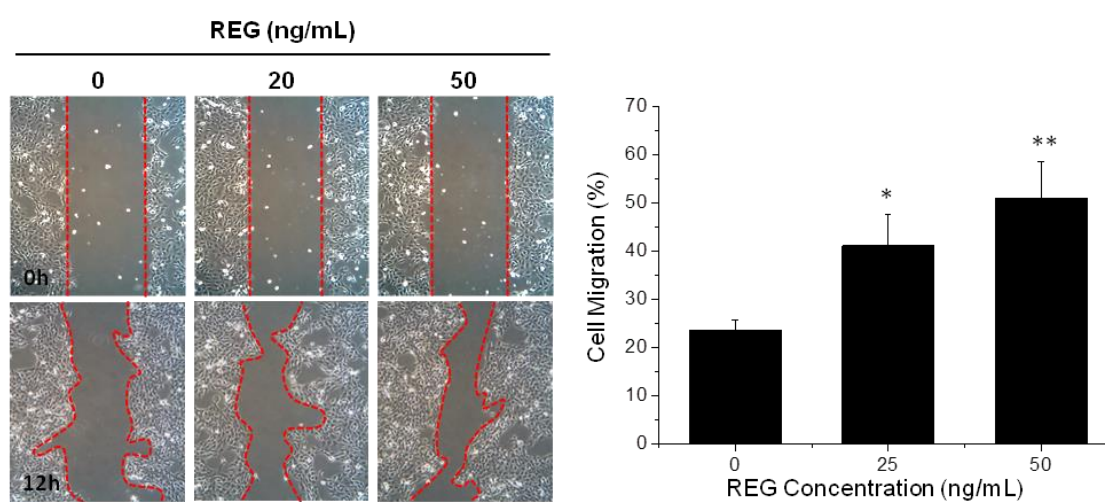


Figure S1. Wound scratch assay with HaCat keratinocytes and quantification of migrated cells. $n = 4$, * $p < 0.05$, ** $p < 0.01$ vs saline-treated cells.

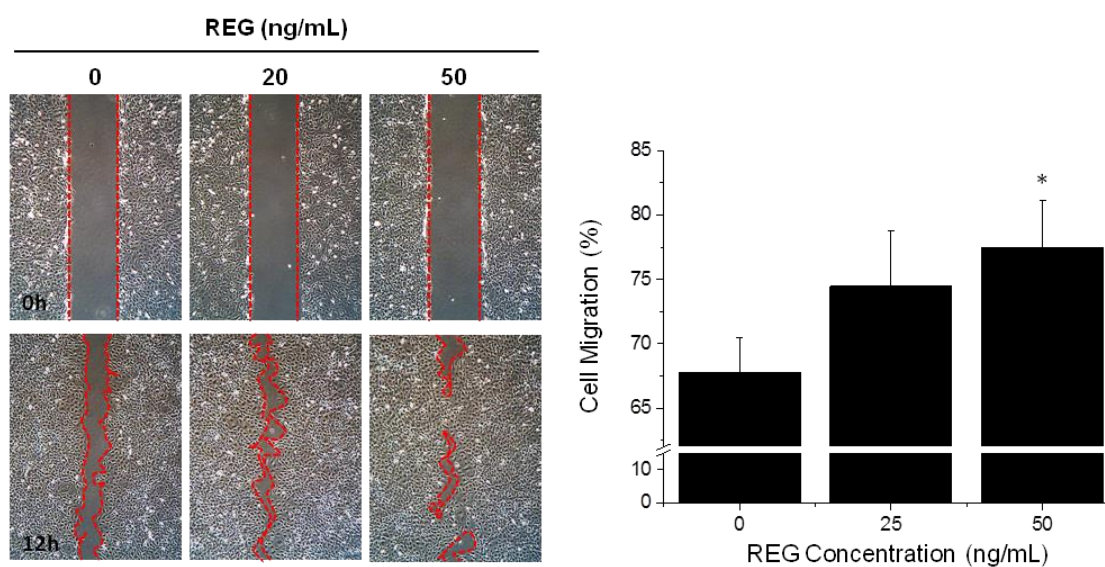


Figure S2. Wound scratch assay with SVEC4 endothelial cells and quantification of migrated cells. $n = 4$, * $p < 0.05$ vs saline-treated cells.

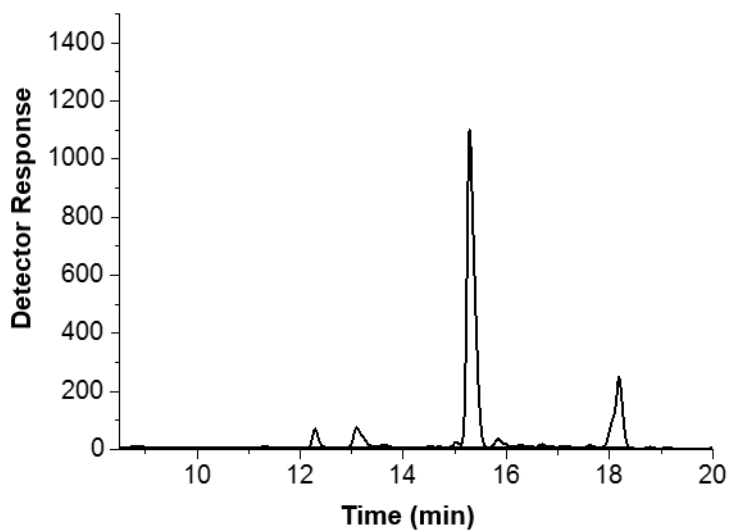


Figure S3. HPLC analysis of MMP2-activatable probe. The peak at 15.3 min retention time indicates a successful conjugation of MMP2 peptide probe.

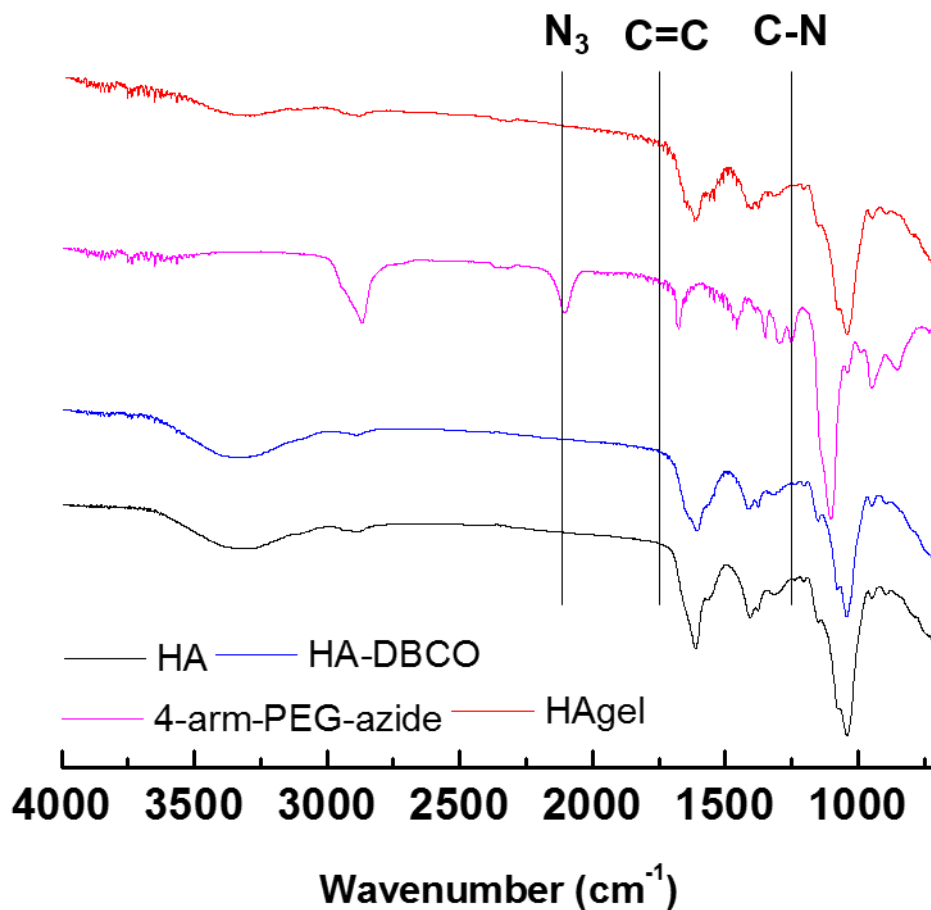


Figure S4. ATR FT-IR spectra of HA, HA-DBCO, 4-arm-PEG-azide and HAgel in the range of 4000 to 700 cm^{-1} .

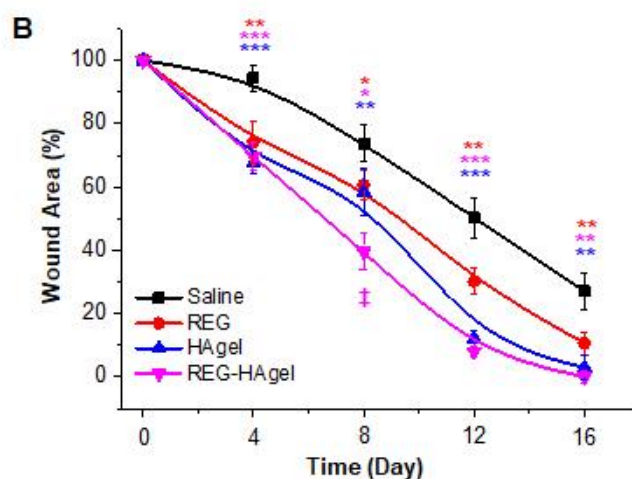
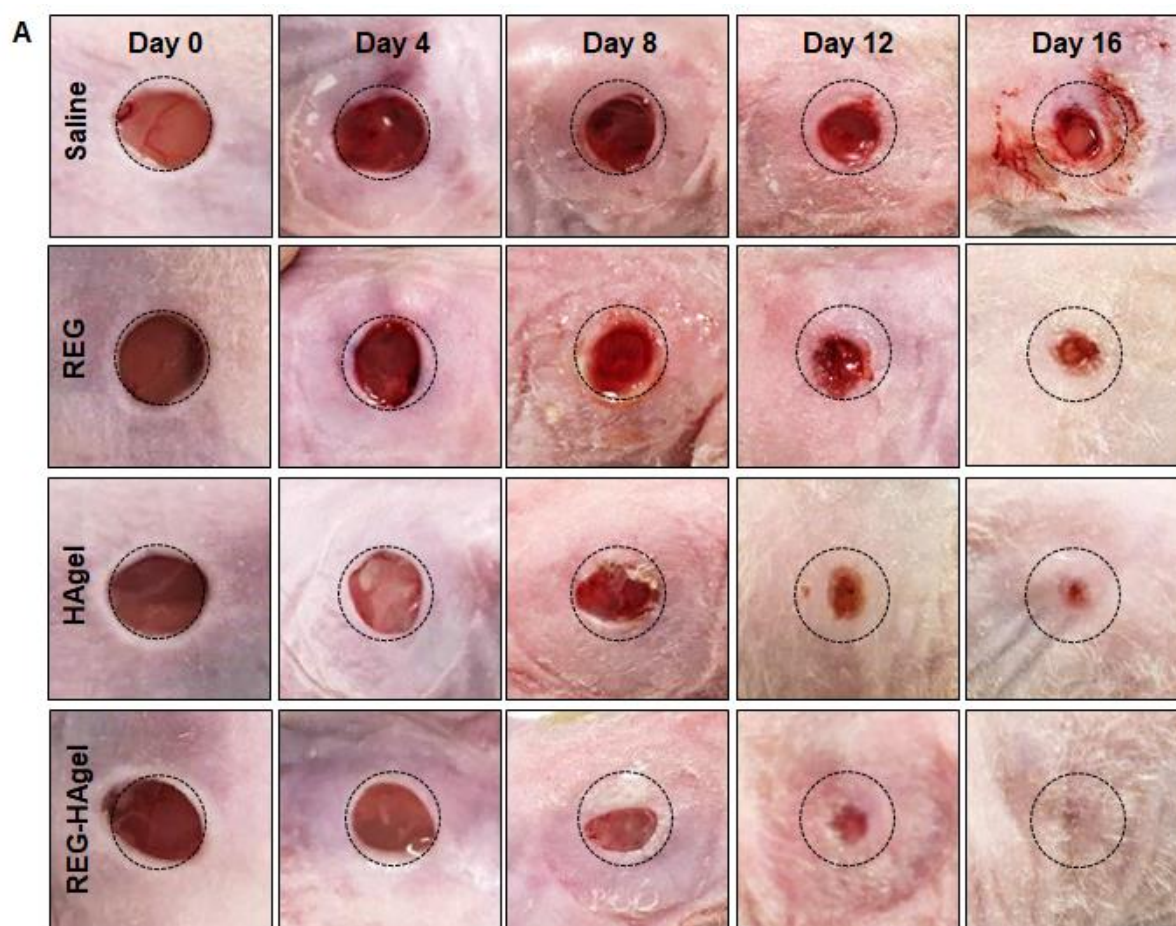


Figure S5. Therapeutic effect of REG, HAgel and REG-HAgel in Balb/c nude mouse. A) Representative photographic images of 6 mm wide full-thickness wounds over 16 days of experiment, and B) quantification of wound sizes. $n = 3$; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.005$ vs Saline. ‡ $p < 0.01$ vs HAgel.

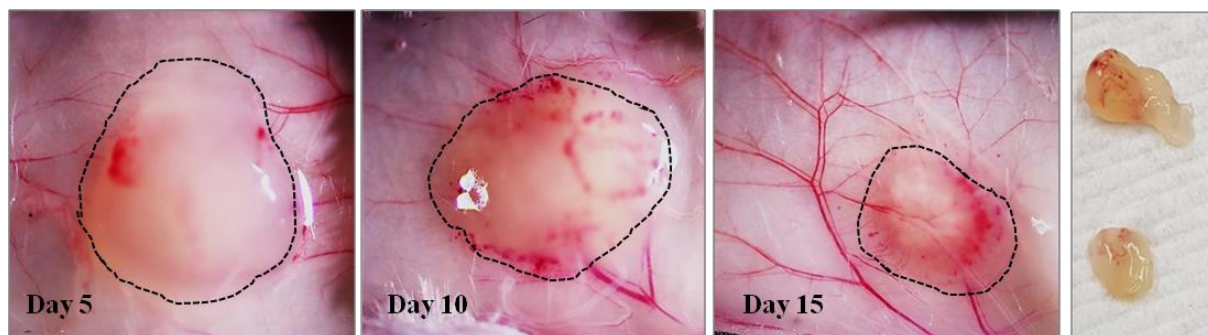


Figure S6. Optical images of subcutaneously implanted HA gel observed over 15 days.