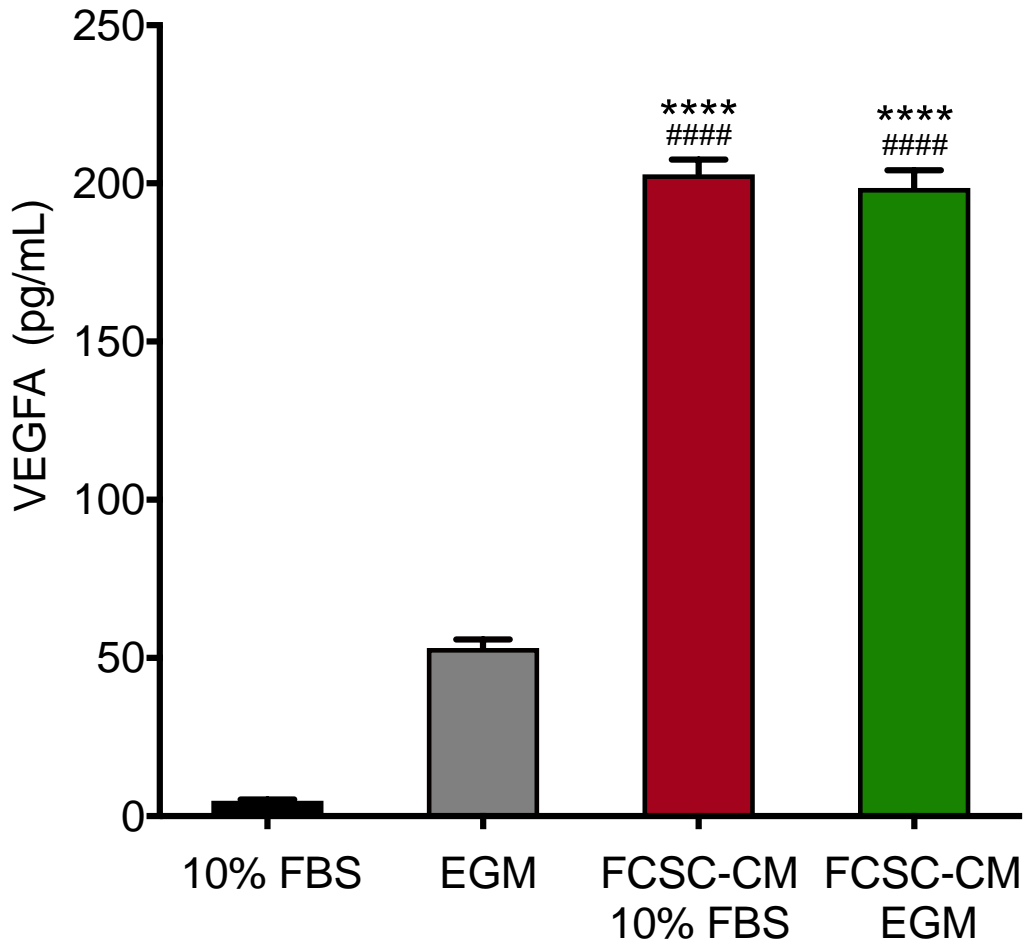


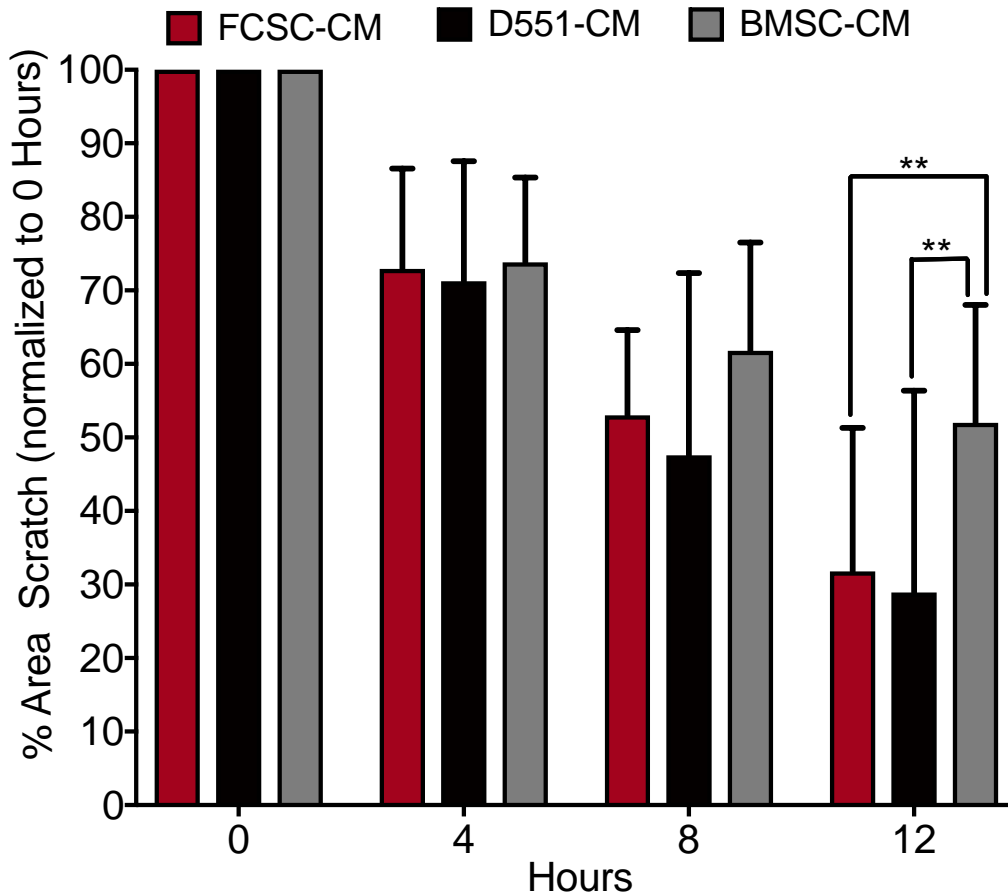
Fibrocartilage Stem Cells Engraft and Self-Organize into Vascularized Bone

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Appendix

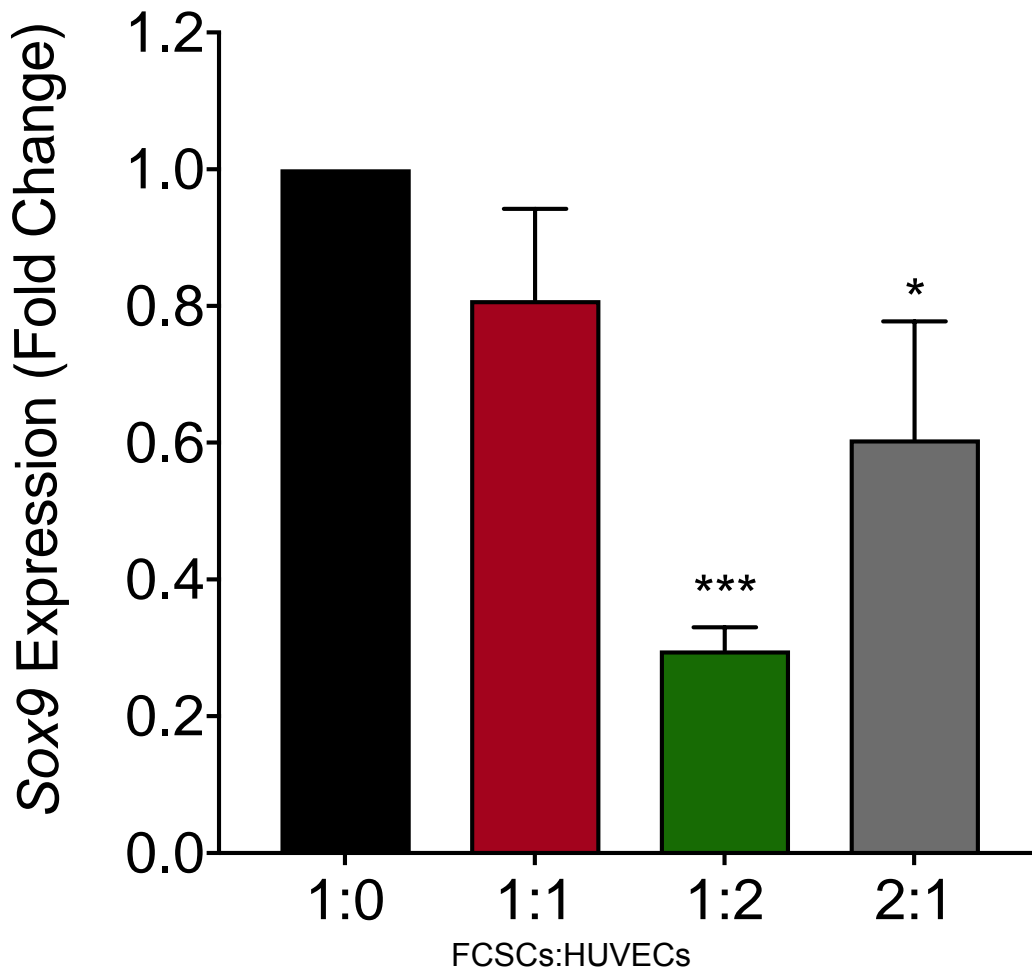


Supplemental Figure 1: FCSCs secrete VEGF-A. ELISA was used to measure VEGF-A (pg/mL) in FCSC-conditioned media 3 days after reaching 100% confluency in 10%FBS and endothelial growth media (EGM). Data are mean concentration VEGF-A in FCSC-conditioned media normalized to VEGF-A contained in corresponding media and relative to 10% FBS or EGM \pm SD; n=3 experiments; *p \leq 0.03, **p \leq 0.002, ***p \leq 0.0002, ****p \leq 0.0001; two-way ANOVA followed by Tukey's post hoc test.

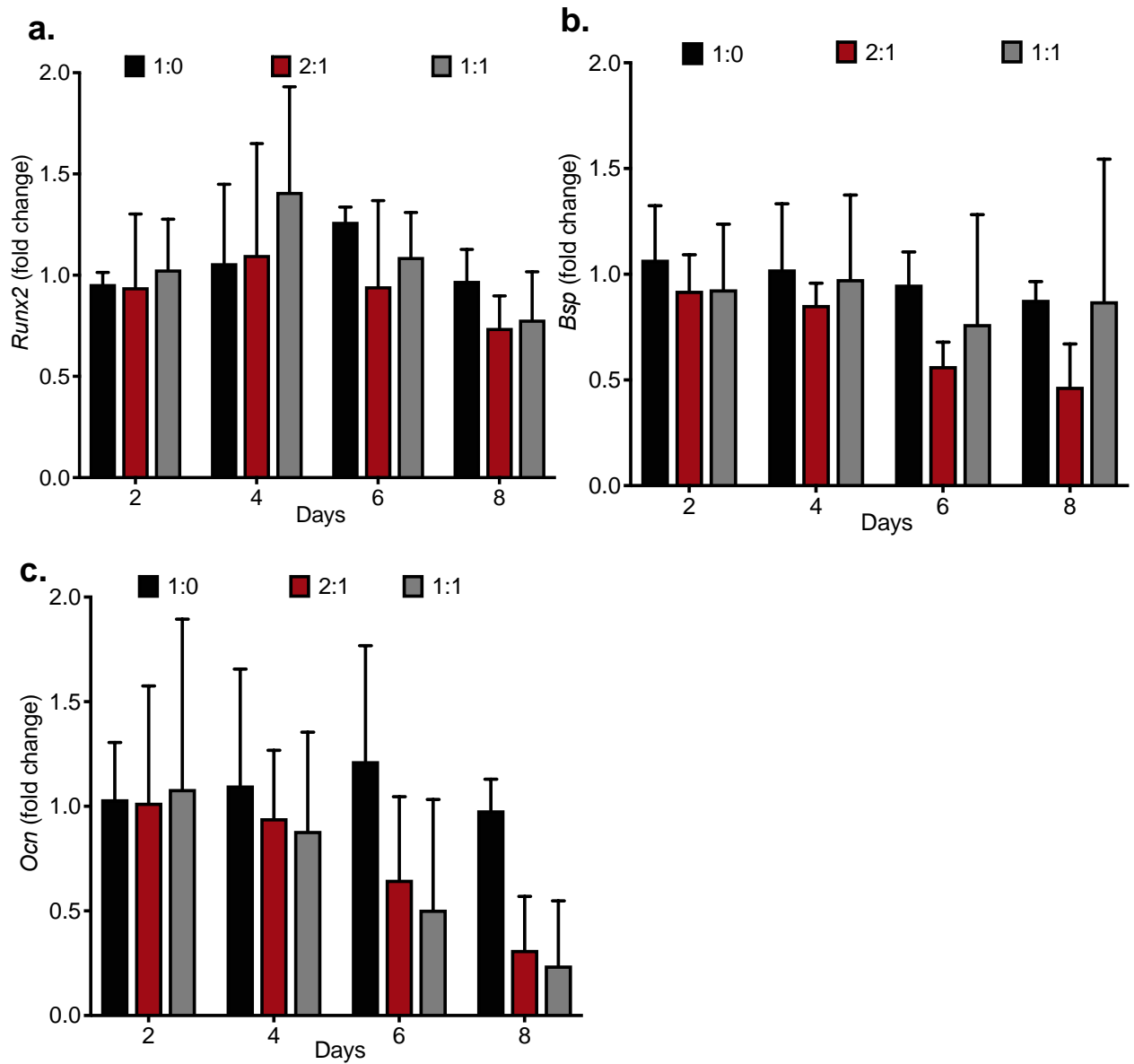


Supplemental Figure 2: FCSCs do not enhance HUVEC migration in scratch assay.

Scratch assay was used to measure HUVEC migration cultured conditioned media derived from fibrocartilage stem cells (FCSC-CM), and compared to D551 fibroblasts (D551-CM) and bone marrow stromal cells (BMSC-CM) every 4 hours for 12 hours. Data are mean \pm SD; n=12; *p \leq 0.03, **p \leq 0.002, ***p \leq 0.0002, ****p \leq 0.0001; two-way ANOVA followed by Tukey's post hoc test.



Supplemental Figure 3: HUVECs inhibit expression of cartilage transcription factor Sox9 in FCSCs. FCSCs and HUVECs were mixed together at varying ratios in suspension, and cultured together using the same cell number in osteogenic media for 1 week. Data is qRT-PCR of FCSCs for Sox9. Data are normalized to *GAPDH* and mean fold change relative to 1:0 FCSCs alone \pm SD; n=3 experiments; * $p \leq 0.03$; *** $p \leq 0.0002$; two-way ANOVA followed by Tukey's post hoc test.



Supplemental Figure 4: HUVECs do not enhance osteogenic differentiation of FCSCs in non-contact Transwell® assay. qRT-PCR of (a) *Runx2*, (b) *Bsp* and (c) *Ocn* in FCSCs cultured on transwell inserts with various concentrations of HUVECs after 2, 4, 6, and 8 days. Data are normalized to GAPDH and mean fold change relative to FCSCs alone \pm SD; n=4 experiments; two-way ANOVA followed by Tukey's post hoc test.