A combinatorial cell-laden gel microarray for inducing osteogenic differentiation of human mesenchymal stem cells

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Supplementary Figures



Supplementary Figure 1: Cell distribution within miniaturized hydrogel constructs. (a) Representative bright field images of printed gelatin methacrylated (GE) hydrogels embedded with hMSCs after 1 day of culture. The cell nuclei of the hMSCs was stained with DAPI. (b) Confocal images of stained hMSC-laden GE microgels) along with cross-sectional views.



Supplementary Figure 2: (a) Representative florescence images along with (b) quantified data showing hMSCs viability within GE microgels after 7 days of culture.

Control Inducing →

Day 7



GE

GE



Supplementary Figure 3: Representative high-magnification images of ALP stained gels in Figure 4(a).



Supplementary Figure 4: Linear correlation between the ALP expression of microarray platform and macroscale constructs.



Supplementary Figure 5: Bright field images of the calcified hydrogels constructs cultured in control and inducing media.