Supplementary Information

Injectable Supramolecular Polymer-Nanoparticle Hydrogels Enhance Human Mesenchymal Stem Cell Delivery

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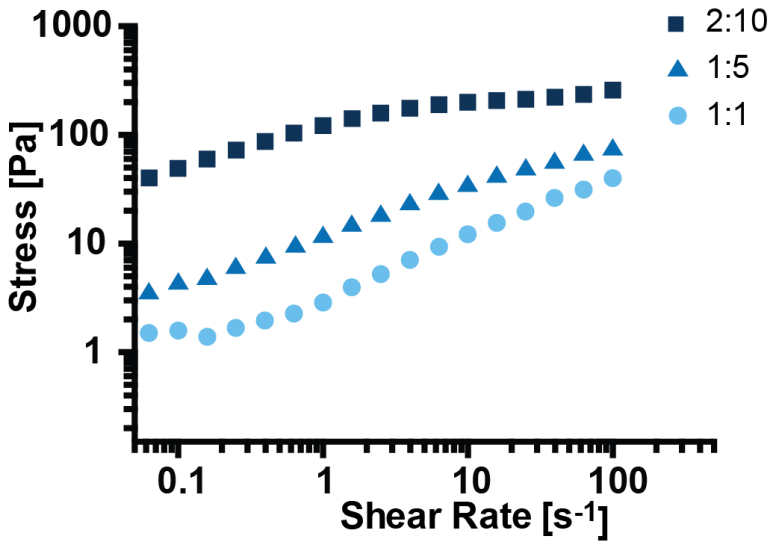

Figure S1: Steady shear rate sweeps from low to high shear rate of various PNP formulations. Stress as a function of shear rate.

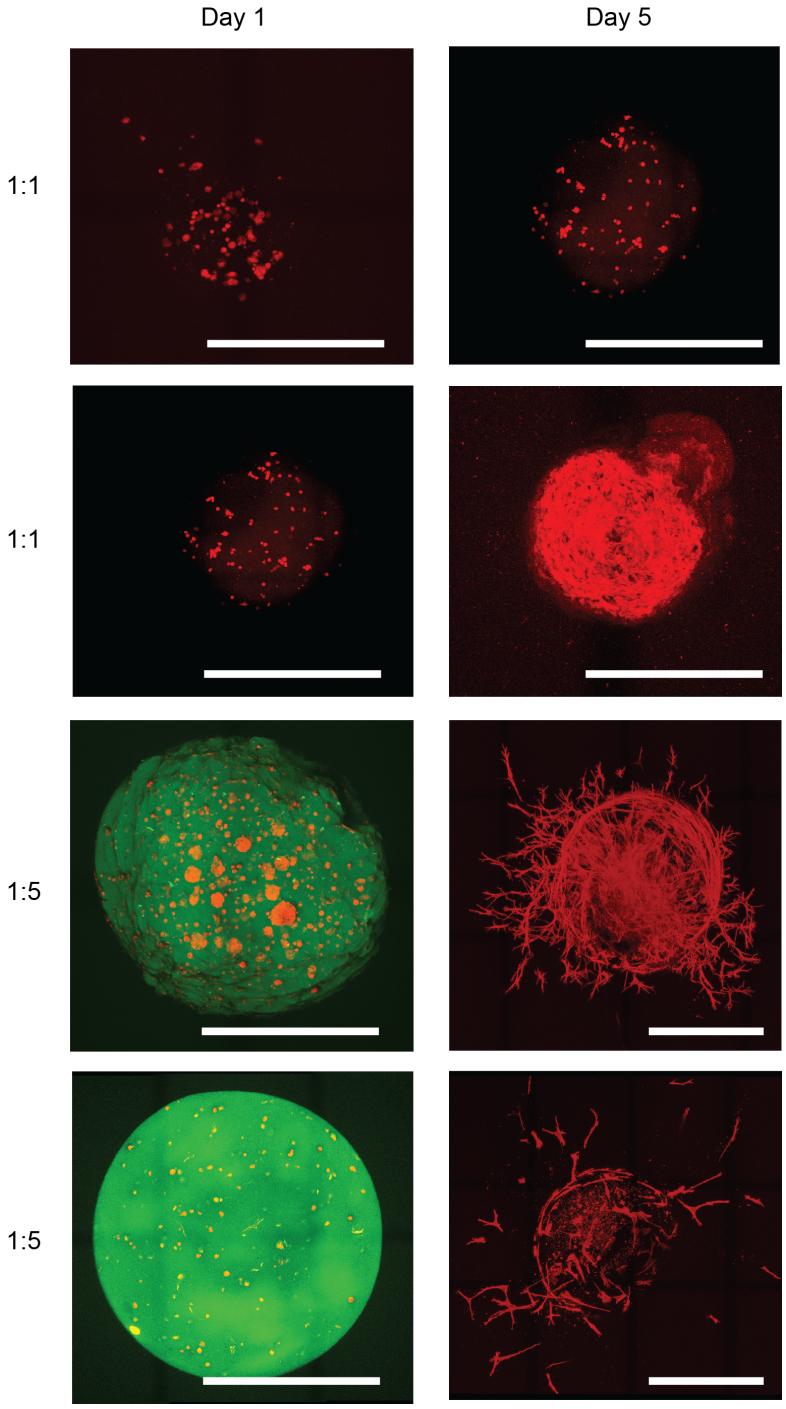

Figure S2: Maximum intensity confocal images of hMSCs encapsulated and delivered in 1:1 and 1:5 PNP hydrogels into collagen hydrogels across a 500 μm z-stack. Cellular actin is stained with TRITC phalloidin (red) and the HPMC-C_{12} is modified with 1 wt% FITC (green). Images are from below. All scale bars represents 500 μm.

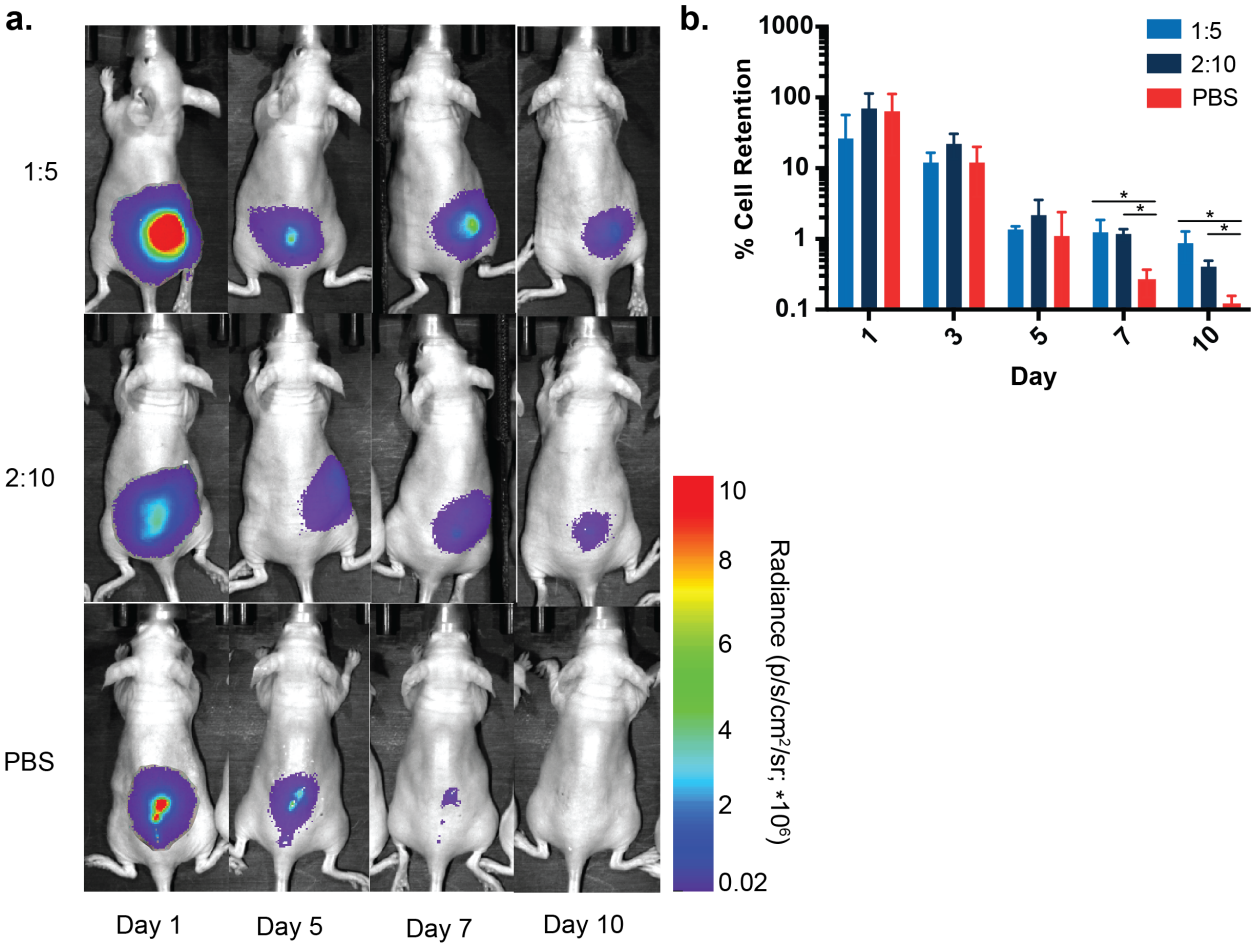

Figure S3: a. Representative images of hMSC cell retention in athymic nude mice across 10 days in PNP formulations and a bolus control. **b.** Proportion of initial cells retained locally over time (data shown as mean ± s.d.; n=3).

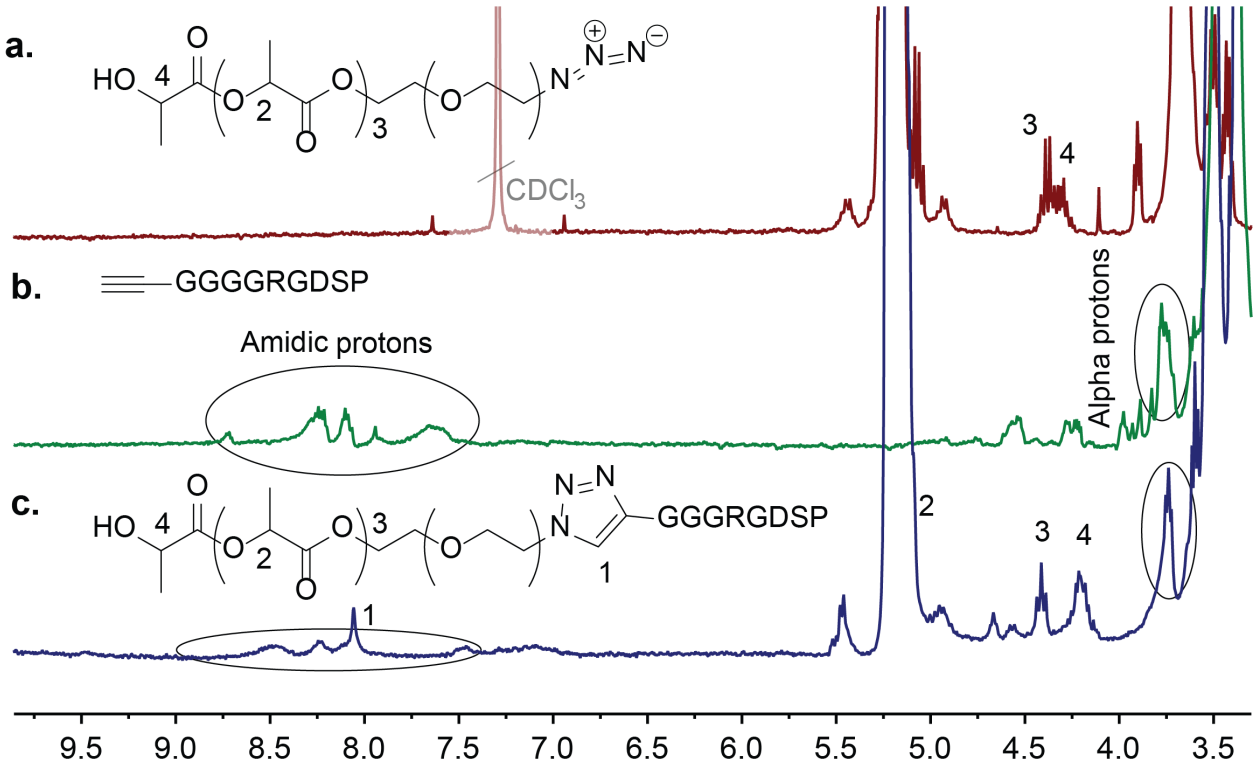

Figure S4: **a.** ^{1}H-NMR ($CDCl_3$) of N_3-PEG-PLA. **b.** ^{1}H-NMR (DMSO-*d*6) of propargylglycine-GGGRGDSP. **c.** ^{1}H-NMR (DMSO-*d*6) of RGD-PEG-PLA copolymer showing the emergence of the triazole proton at 8.05 ppm, indicating coupling of the RGD moiety to the PEG-PLA polymer.