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Supporting Information

Co-delivery of Simvastatin and Demineralized Bone Matrix Hierarchically from Nanosheet-based Supramolecular Hydrogels for Osteogenesis

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Figures

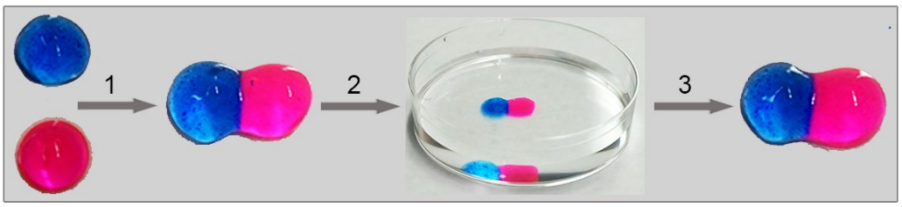

Figure S1. Self-healing of two SNHs after attachment directly: (1) red hydrogel and blue hydrogel were attached directly; (2) the new hydrogel was immersed into deionized water for 10 min; (3) the hydrogel was transferred from deionized water and maintained its shape.

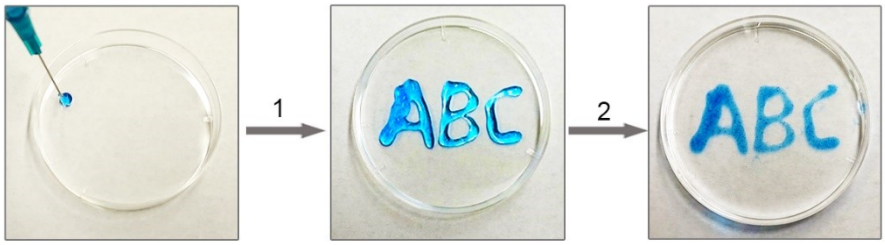

Figure S2. "ABC" gel could be formed after injection from the 23 G needle.

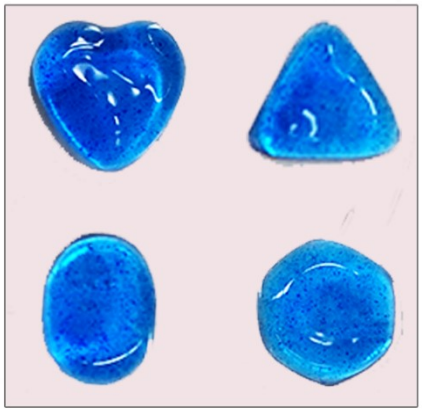

Figure S3. Hydrogels of different shapes could be obtained after injection from the 23 G needle.

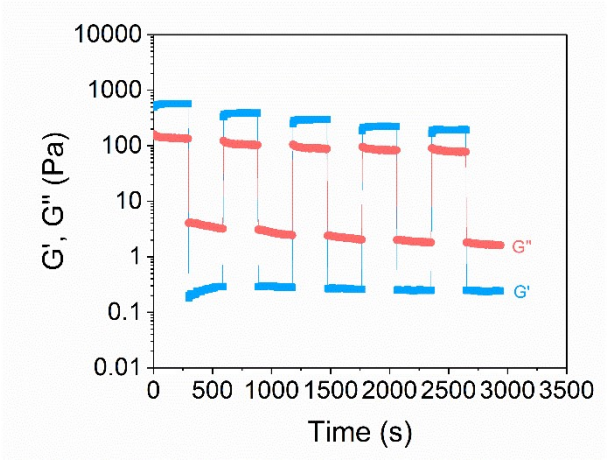

Figure S4. G′ and G″ values of hydrogels consisting of 3.0% SL, 0.1% ASAP and 0.5% GC binder when alternate step strain switched from small strain (γ = 1.0%) to large strain (γ = 300%).

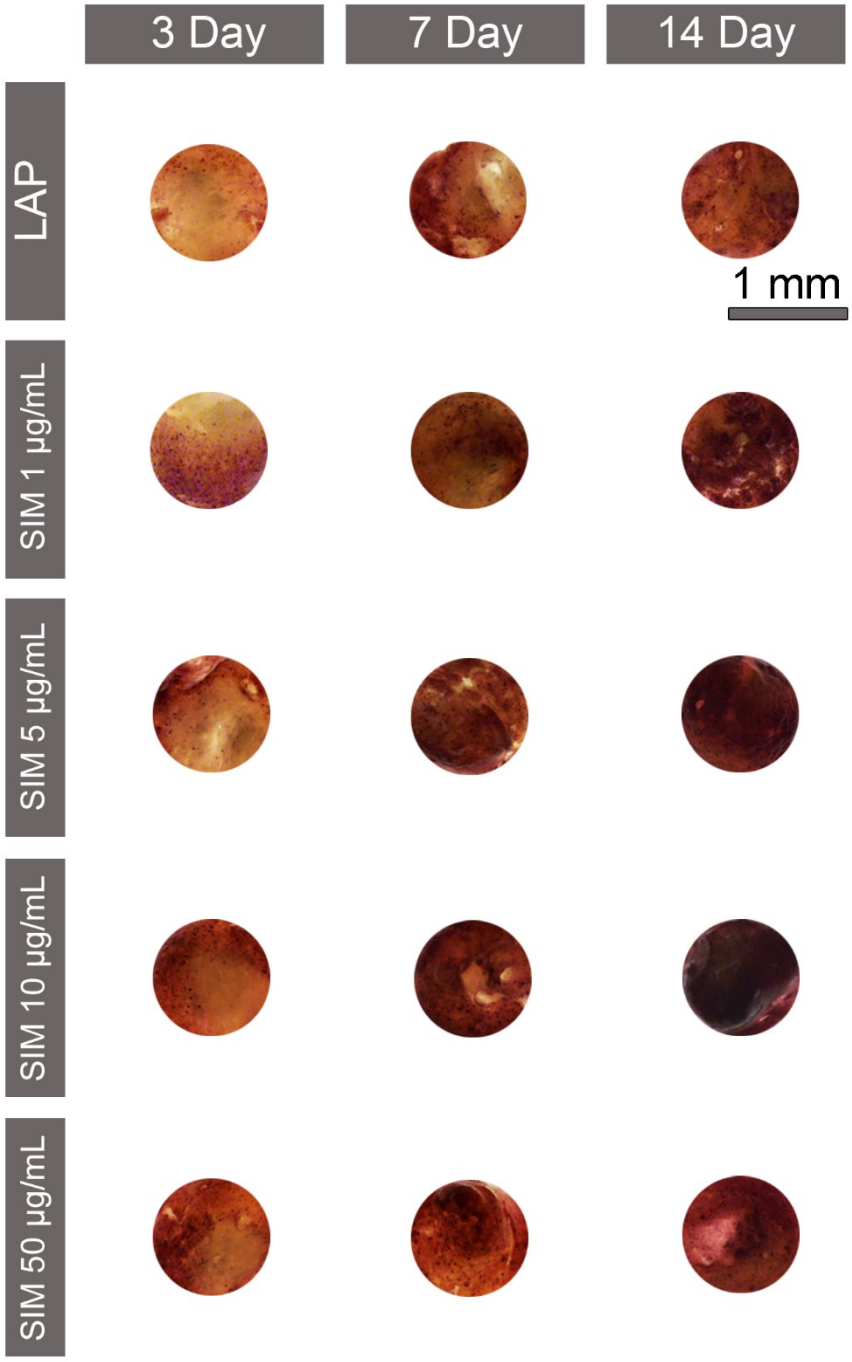

Figure S5. ALP expression of SNHs containing SIM from 0 to 50 µg/mL after incubation in osteogenic medium at day 3, 7, or 14. Scar bar represents 1 mm.

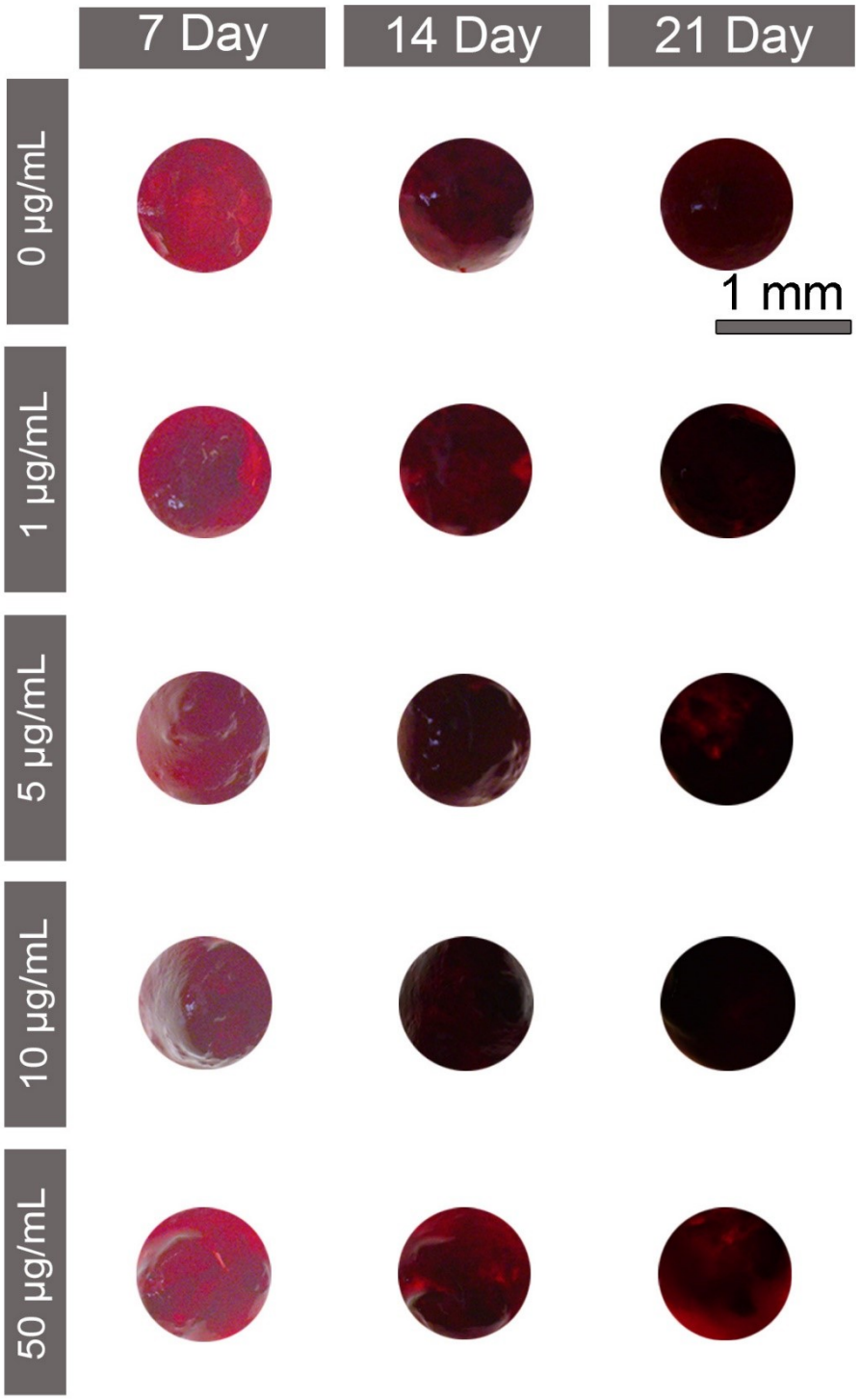

Figure S6. Mineralization of SNHs containing SIM from 0 to 50 µg/mL after incubation in osteogenic medium at day 7, 14, or 21. Scar bar represents 1 mm.

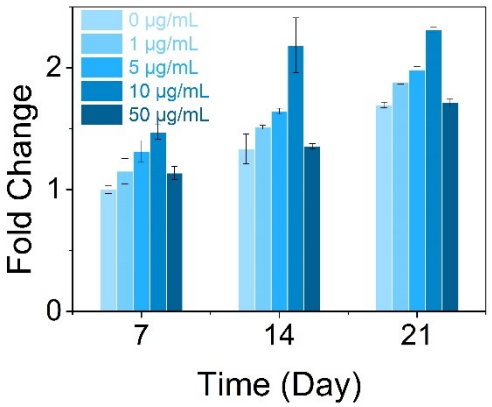

Figure S7. Quantification of mineralization for SNHs containing SIM from 0 to 50 μg/mL after incubation in osteogenic medium at day 7, 14, or 21 (n=3).

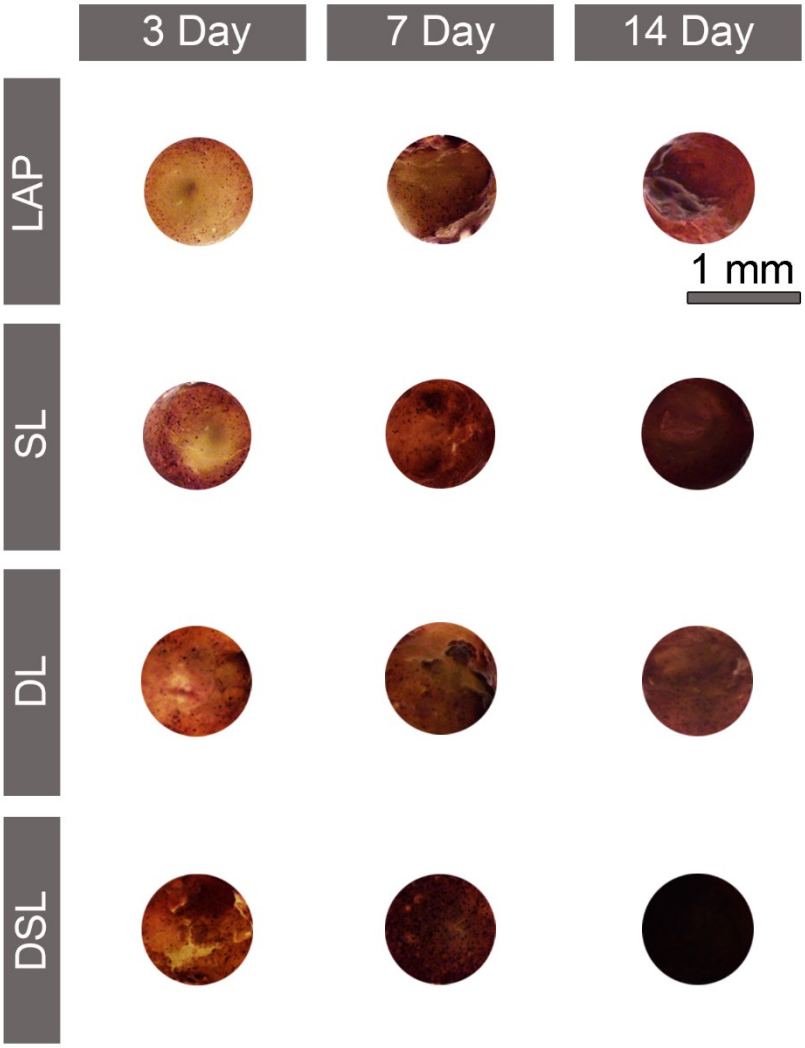

Figure S8. ALP expression of NHs, SNHs, DNHs and DSNHs after incubation in osteogenic medium at day 3, 7, or 14. Scar bar represents 1 mm.

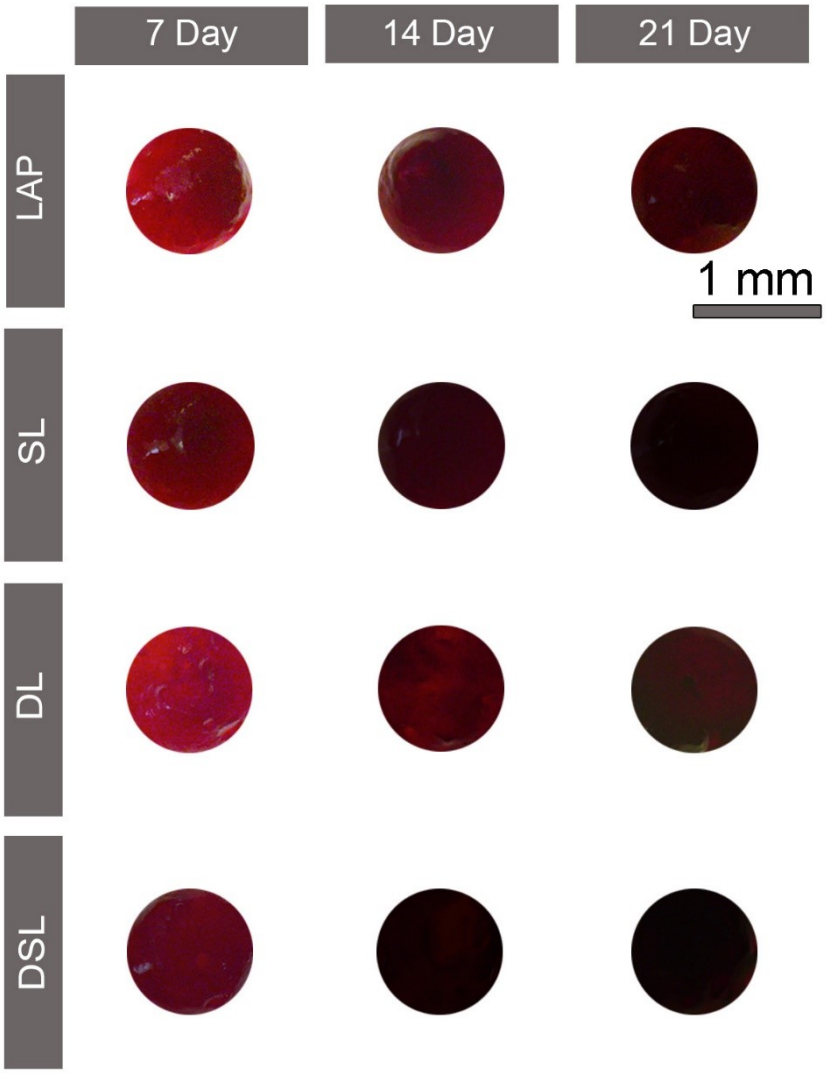

Figure S9. Mineralization of NHs, SNHs, DNHs and DSNHs after incubation in osteogenic medium at day 3, 7, or 14. Scar bar represents 1 mm.

Tables

Table S1. Sequences of primers for qPCR assay.

Primers	Forward	Reverse
GAPDH	AGGTCGGTGTGAACGGATTTG	TGTAGACCATGTAGTTGAGGTCA
ALP	GTTGCCAAGCTGGGAAGAACAC	CCCACCCCGCTATTCCAAAC
Runx2	CGGTCTCCTTCCAGGATGGT	GCTTCCGTCAGCGTCAACA
OPN	GGGGACTATGCACCTGAGC	GACTGTCGAAATGGGCTACCT
OCN	GGGAGACAACAGGGAGGAAAC	CAGGCTTCCTGCCAGTACCT
BMP-2	GGGACCCGCTGTCTTCTAGT	TCAACTCAAATTCGCTGAGGAC