## **Supporting Information**

## Injectable Hydrogels for Bone Regeneration with Tunable

## Degradability via Peptide Chirality Modification

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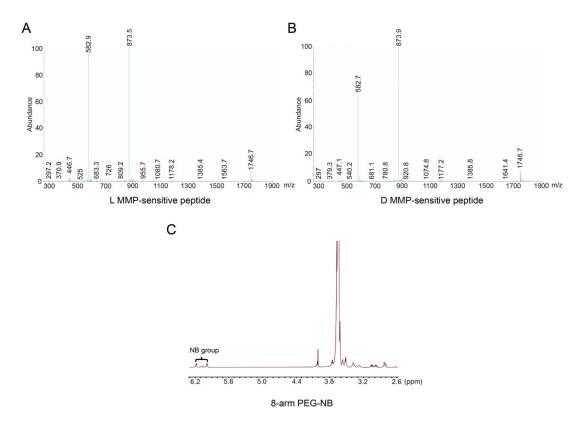
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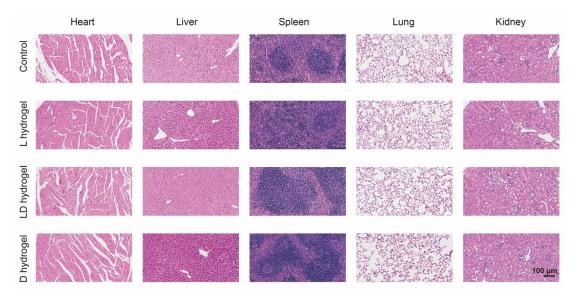
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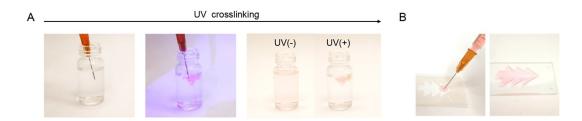
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**Fig. S1** (A) and (B) The mass spectra result of L and D MMP-sensitive peptides. (C) <sup>1</sup>H-NMR spectrum of 8-arm PEG-NB.



**Fig. S2** Histology of major organs (heart, liver, spleen, lung, and kidney) after 12-week hydrogels implantation in vivo.



**Fig. S3** (A) Photographs of the solution before and after hydrogel transition by UV irradiation. (B) Demonstration of the hydrogel's injectability and plasticity.