

Supporting Information

Injectable Catalyst-Free Poly (Propylene Fumarate) System Cross-Linked by Strain Promoted Alkyne-Azide Cycloaddition Click Chemistry for Spine Defect Filling

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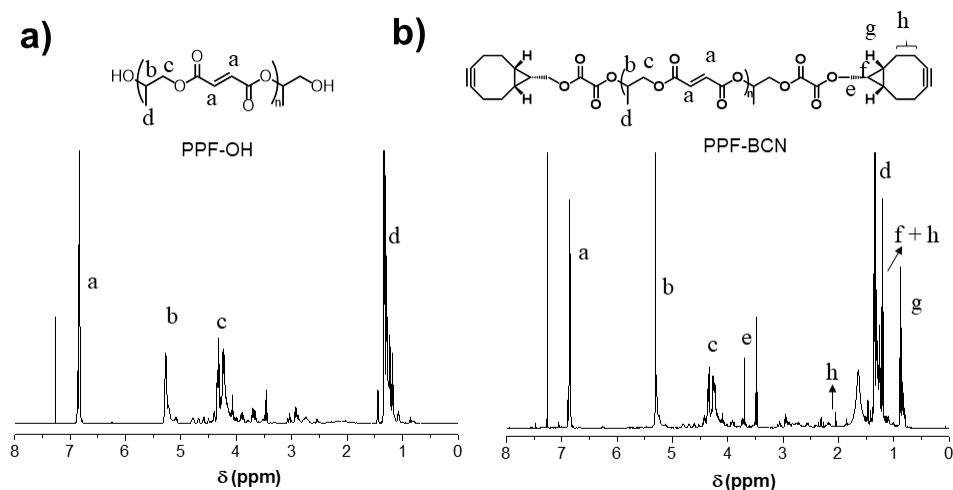


Fig. S1 ¹H NMR spectrum and corresponding peaks of a) PPF-OH and b) PPF-BCN polymers.

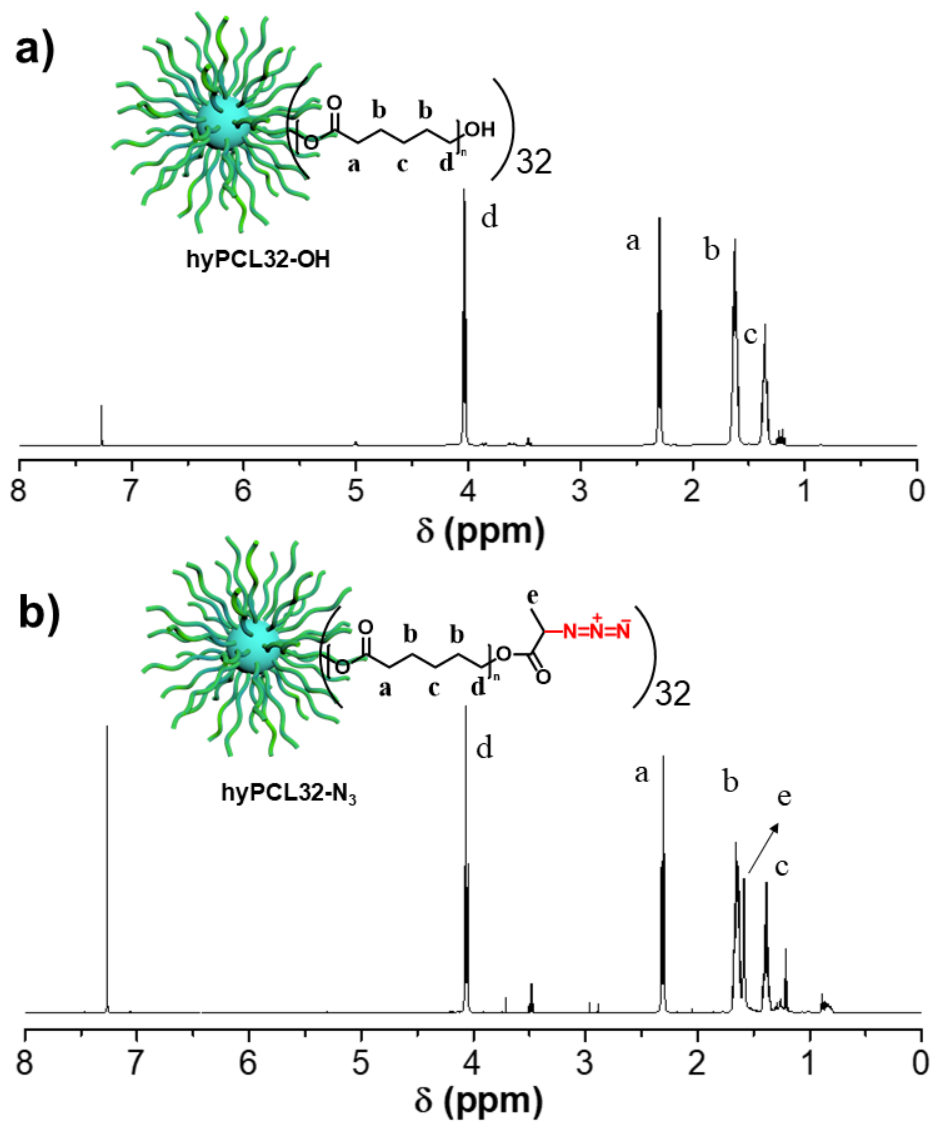


Fig. S2 ^1H NMR spectra and corresponding peaks of synthesized a) hyPCL32-OH and b) hyPCL32-N₃ dendrimer.

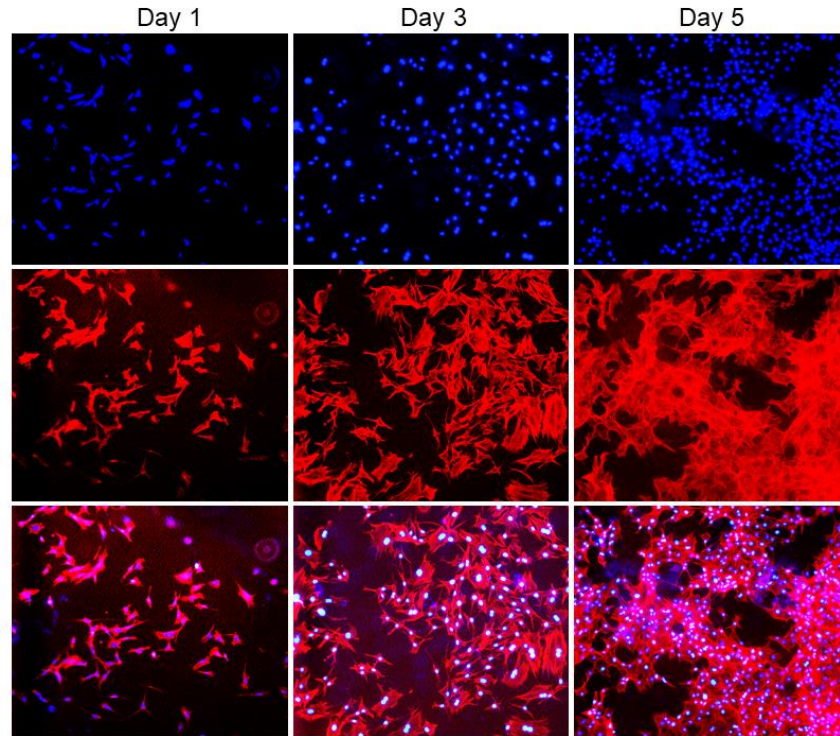


Fig. S3 Fluorescence microscopy images of MC3T3 pre-osteoblast cells after 1, 3, and 5 days of culture on crosslinked PFCL-click scaffolds. Cellular filaments were stained with rhodamine-phalloidin (RP, red), and nuclei with 4',6-diamidino-2-phenylindole (DAPI, blue).

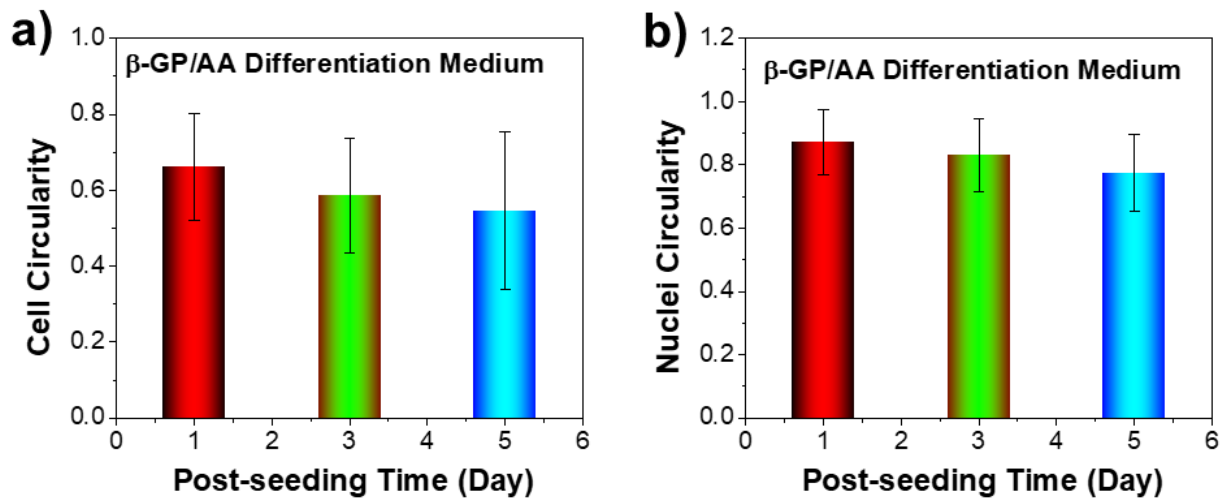


Fig. S4 a) Cell circularity and b) nuclei circularity determined from confocal images of MC3T3 pre-osteoblast cells cultured on crosslinked PFCL-click scaffolds with α -MEM/ β -GP/AA osteogenic medium.

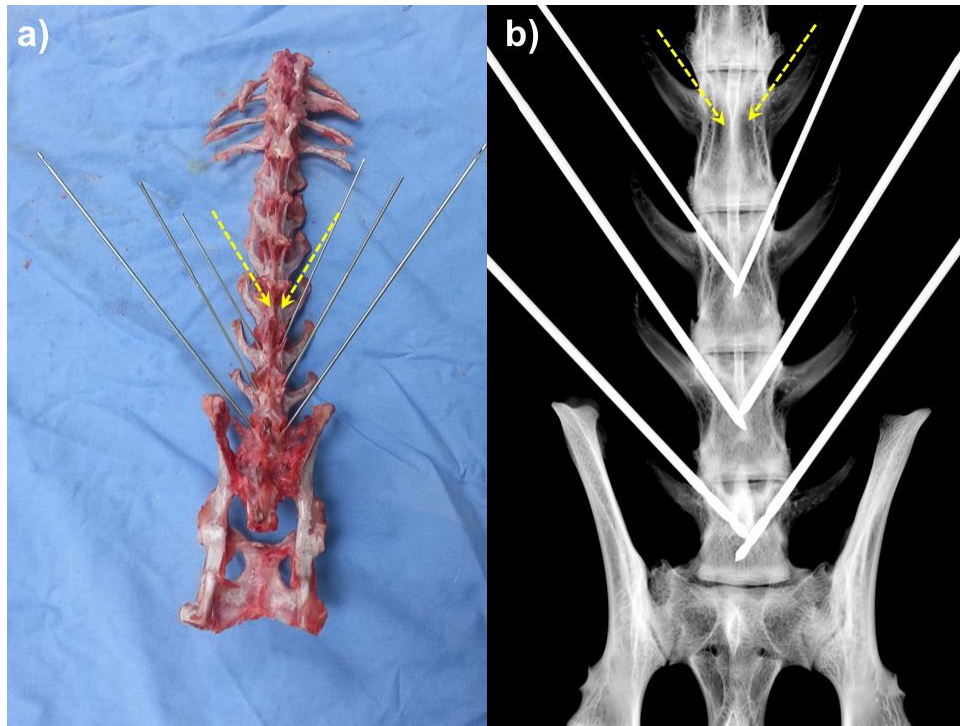


Fig. S5 a) Photograph of creating injection cavity sites on the lateral sides of the rabbit vertebral bodies. b) X-ray imaging of the drilling position. Arrows indicate the injection site.