

Supporting Information

Bioactive PCL microspheres with enhanced biocompatibility and collagen production for functional hyaluronic acid dermal filler

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Table S1. Mechanical properties of hydrogel fillers with microspheres

Sample	Complex viscosity (mPA)	Storage modulus G' (Pa)	Loss modulus G'' (Pa)
HA hydrogel	1,243,600	150.08	43.58
HA/PCL	1,533,900	182.07	63.28
HA/PCL/MH	1,287,600	151.75	56.15
HA/PCL/MH/APO	1,639,200	194.87	66.74
HA/PCL/MH/ATX	1,886,000	227.21	67.43

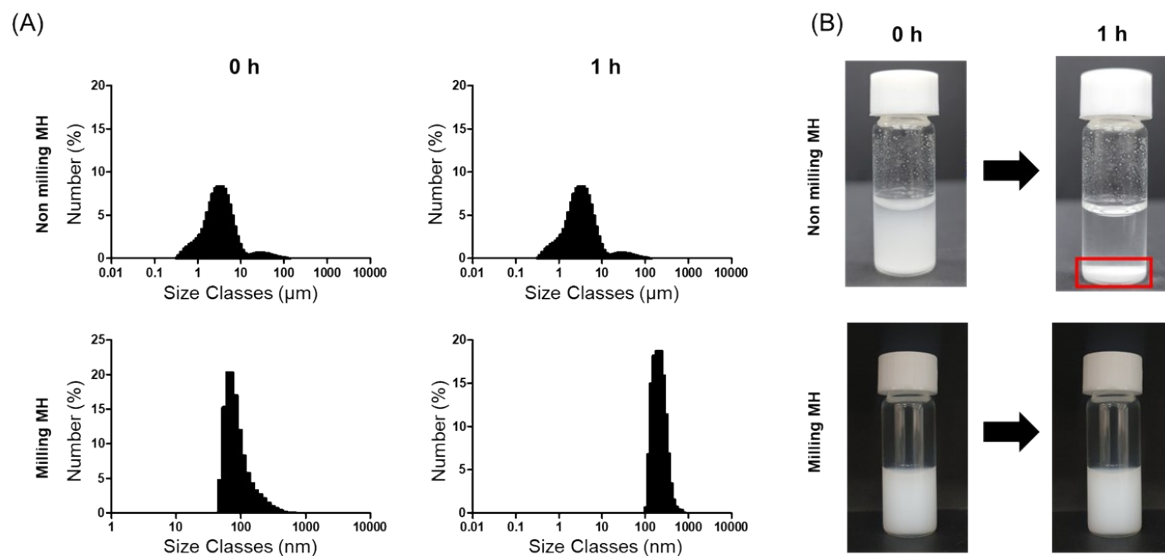


Figure S1. Milling of MH: (A) Size graph before and after milling of MH. (B) Dispersion Photograph of MH in water before and after milling.

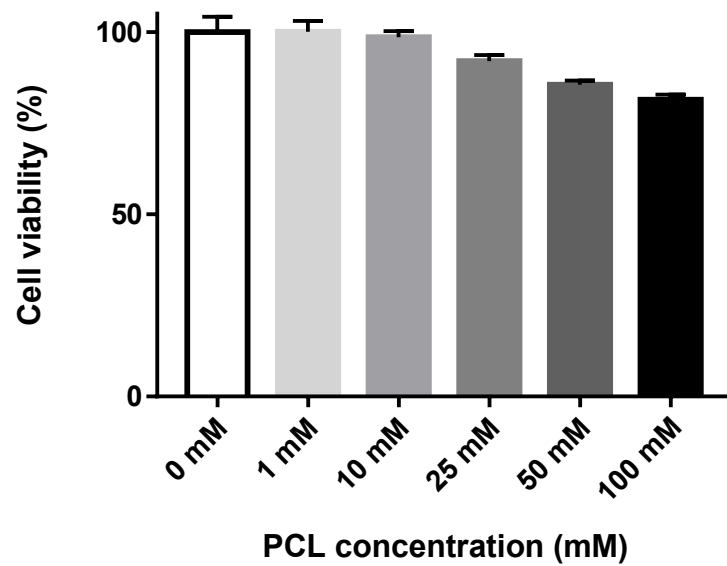


Figure S2. Cell viability of the various concentrations of PCL using hDFs by CCK-8 kit for 6 h.

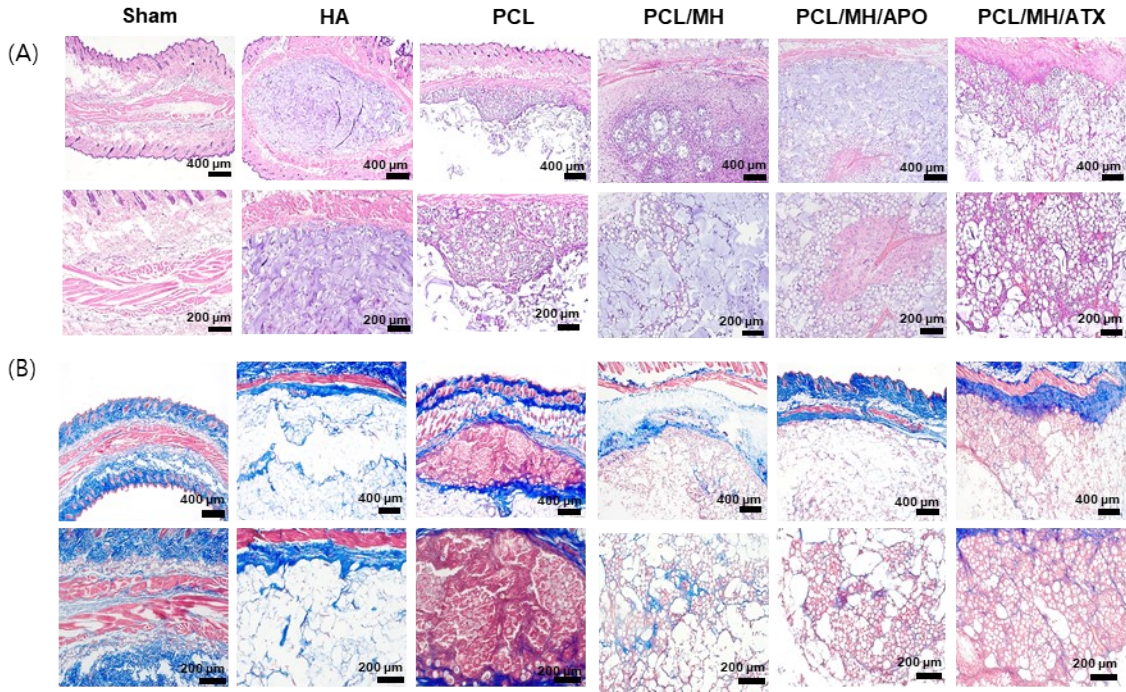


Figure S3. *In vivo* evaluation of PCL filler function: (A) H&E and (B) MT staining in a mouse model at 4 weeks post-implantation.

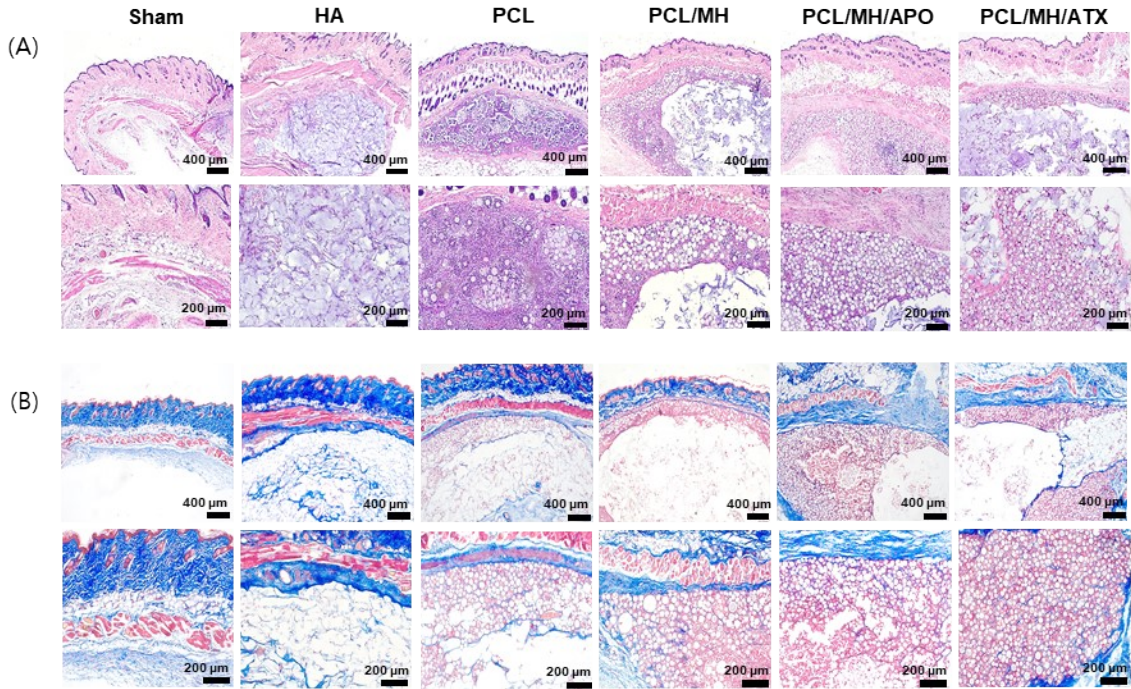


Figure S4. *In vivo* evaluation of PCL filler function: (A) H&E and (B) MT staining in a mouse model at 8 weeks post-implantation.