

Supporting Information

Construction of myocardial patch with mesenchymal stem cells and poly (CL-co-TOSUO)/collagen scaffolds for myocardial infarction repair by coaxial electrospinning

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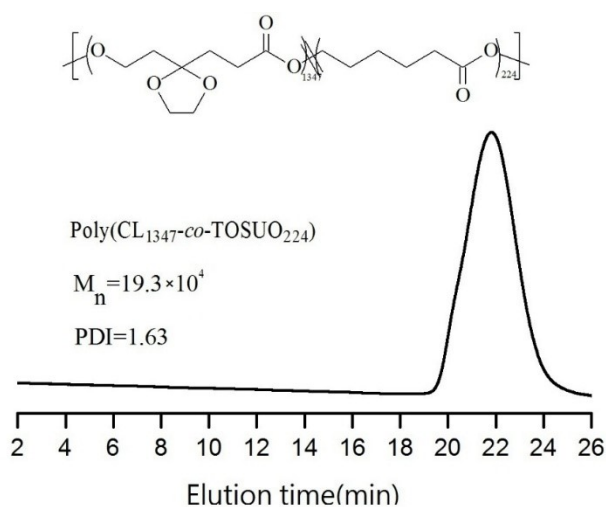


Figure S1. The structure and the molecular characteristics of the elastic PCT from gel permeation chromatography. The composition of PCT shown as Poly (CL₁₃₄₇-co-TOSUO₂₂₄), a number-average molecular weight (M_n) of 19.3 kg/mol, and polydispersity index of 1.63.



Figure S2. Time series photographs of the rats' back skin following the subcutaneous transplantation of coaxial electrospun fibrous PCT/collagen scaffolds. At week 1, fibrous membranes were formed on the surface of the nanofiber, and they adhered to the skin. After 3 weeks, the nanofibers were gradually degraded, the fibrous membranes still covered the nanofiber, but it had no adhesion to the skin. After 3 weeks of transplantation, the nanofiber was degraded into small powder debris. The nanofibers were completely degraded, and the tissue was completely recovered at week 5.

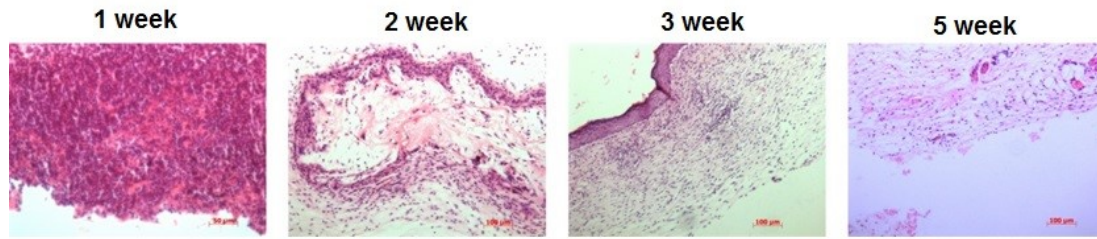


Figure S3. Representative histopathological images of the rats' skin following the transplantation of coaxial PCT/collagen nanofibers scaffolds. Serious inflammation occurred after the implantation of PCT/collagen nanofibers scaffolds for 1 week, and most inflammatory cells were observed around the implanted nanofibers scaffolds. The inflammatory reaction reduced, and the accumulation layer of inflammatory cells thinned over time. After 3 weeks, the inflammatory response was scarcely observed, and the nanofibers scaffolds were almost degraded. No accumulation of inflammatory cells was observed and the tissue was completely recovered 5 weeks post-transplantation.