## **Supplementary Information**

## **Polyester Derived from Recycled Poly(ethylene terephthalate)**

## Waste for Regenerative Medicine

Kishor Sarkar<sup>‡</sup>, Sai Rama Krishna Meka<sup>†</sup>, Amrit Bagchi<sup>†</sup>, N. S. Krishna<sup>§</sup>,

Giridhar Madras<sup>‡</sup>, S. G. Ramachandra<sup>§</sup>, Kaushik Chatterjee<sup>†\*</sup>

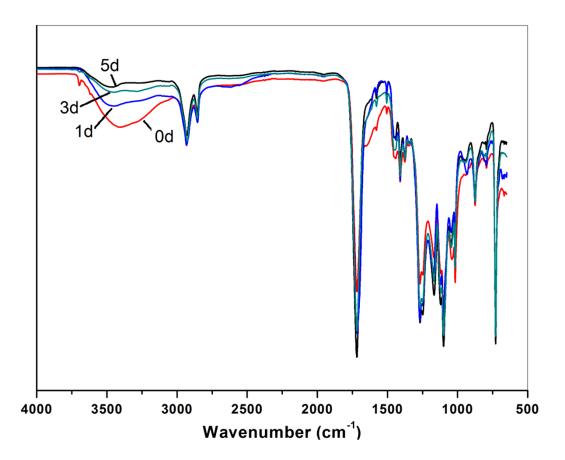


Fig. S1 FTIR spectra of BCSM-2 polyester elastomer before and after post-polymerization at different time points

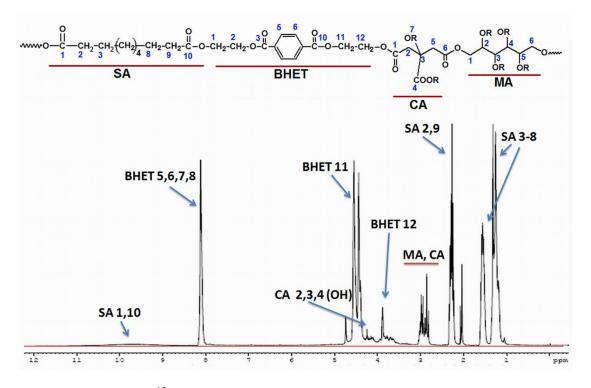


Fig. S2 <sup>13</sup>C NMR spectra of purified BCSM-2 pre-polymer

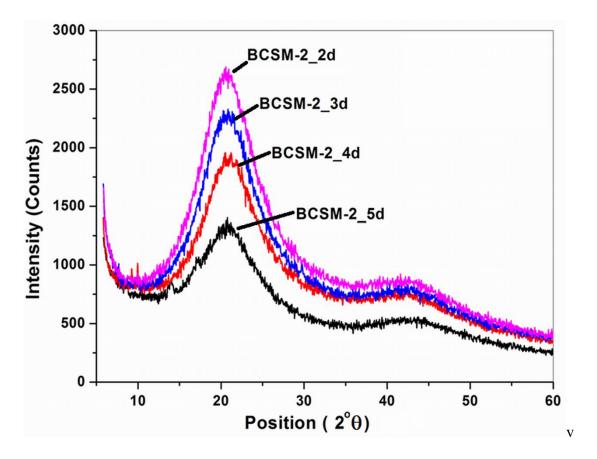


Fig. S3 X-ray diffraction patterns of BCSM-2 polyester at different post-polymerization time points.

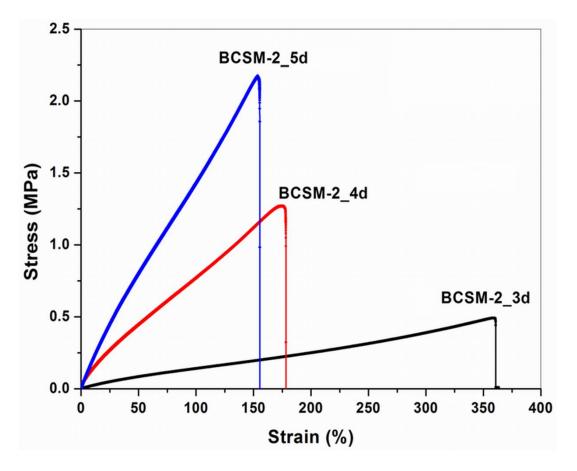


Fig. S4 Representative stress-strain plot of BCSM-2 polyester at different postpolymerization time points

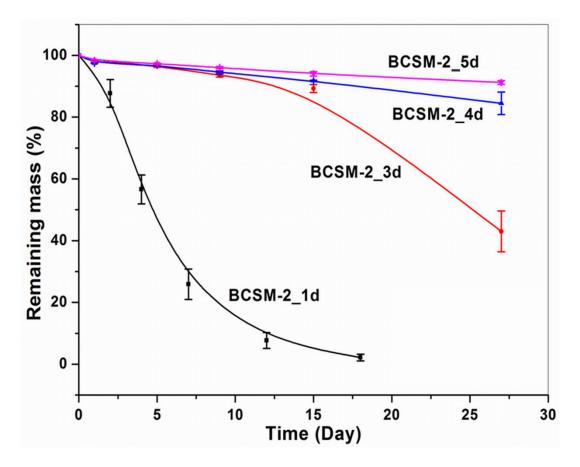


Fig. S5 In vitro hydrolytic degradation profile of BCSM-2 at different post-polymerization time points

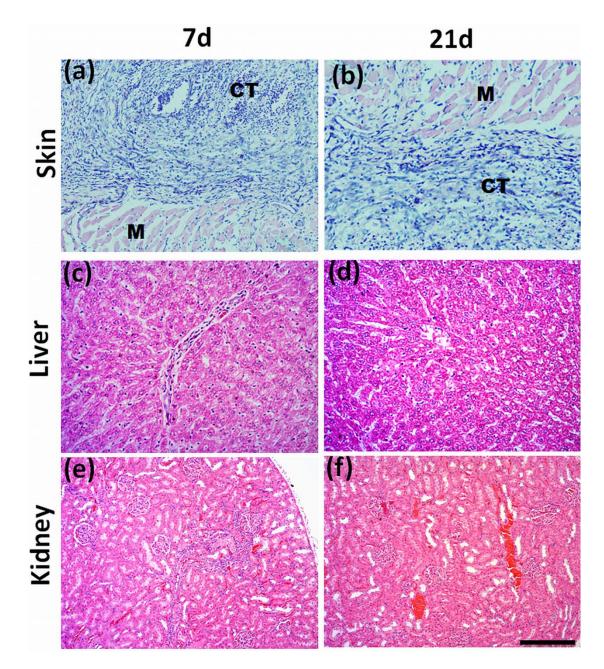


Fig. S6 Micrographs of Sprage-Dawley rat subcutaneous tissue response without implants after 7 days (a) and 21 days (b), showing loose connective tissue matrix with mild inflammation with infiltration of inflammatory cells. The histopathology study of liver (c, d) shows mild vacuolar degeneration of hepatocyte with granular nucleus, mild vascular congestion, aggregation of neutrophils/granuloma formation in the sinusoidal areas around the hepatocytes. The histopathology study of kidney (e, f) shows moderate degree of congestion, glomerular and tubular degeneration with necrosis with mixed inflammatory reaction in the cortex. M=Muscular Tissue, CT=Connective Tissue. Scale bar is 50 µm.