Injectable and Thermoresponsive Pericardial Matrix Derived Conductive Scaffold for Cardiac Tissue Engineering

Kaveh Roshanbinfar\textsuperscript{a,b}, Jöns Hilborn\textsuperscript{b}, Oommen P. Varghese\textsuperscript{b} and Oommen P. Oommen\textsuperscript{b,c,*}

Figure S1. Live and dead staining of HL-1 cardiomyocytes cultured on cell culture plastic (control), PM and PMNT gels on day 1 (left panel) and on day 11 (right panel)
Figure S2. Immunostaining images of the cardiomyocytes cultured on the gels for Sarcomeric alpha actinin (green) and Connexin43 (red) at the (a) 20X magnification for control group, PM and PMNT, (b) Nuclear counterstaining by DAPI (c) 60X PM and (d) 60X PMNT.
Video V1: Cardiomyocytes cultured on gelatin-fibronectin coated wells (2D control). Cells do not show any sign of beating.

Video V2: Cardiomyocytes cultured on pericardial matrix gel. Cells show signs of beating in different clusters.
Video V3: Cardiomyocytes cultured on pericardial matrix gel doped with MWCNT (PMNT gels). Cells exhibit enhanced beating compared with the control group and PM group.