Supporting Information

Pre-mounted dry TAVI valve with improved endothelialization potential using REDV-loaded PEGMA hydrogel hybrid pericardium

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Figures and legends

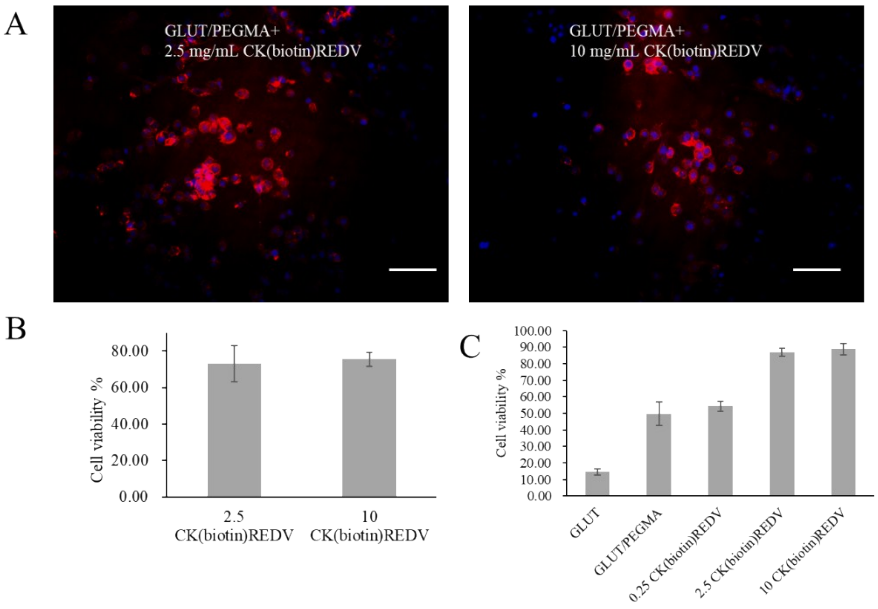

Fig. S1. A. Tissues seeded with human umbilical vein endothelial cells and dyed with DAPI (nucleus: blue) and TRITC-phalloidin (cytoskeleton: red) were characterized by fluorescence microscopy. Scale bar: 10 μm. B. Cell viabilities of HUVECs in each group at day 1 are shown. Hundred percent viability corresponds to absorbance values obtained from control medium. C. B. Cell viabilities of HUVECs in each group at day 7 are shown.

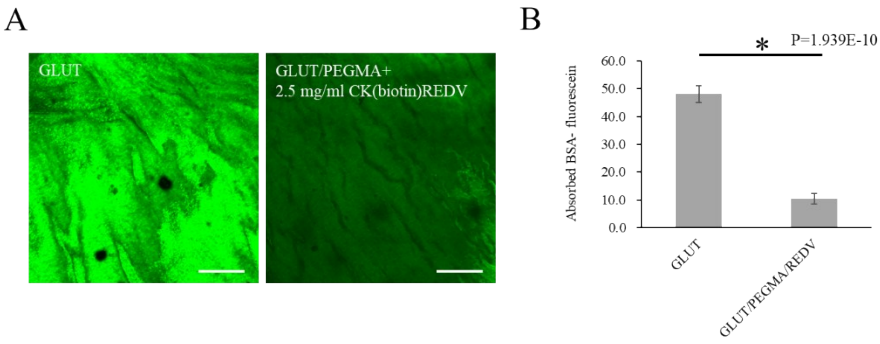

Fig S2. A. Representative fluorescence microscope images of absorbed FITC-BSA on the tissues. Scale bar = 100 μm; B. Quantification of absorbed fluorescein-labeled BSA on pericardia

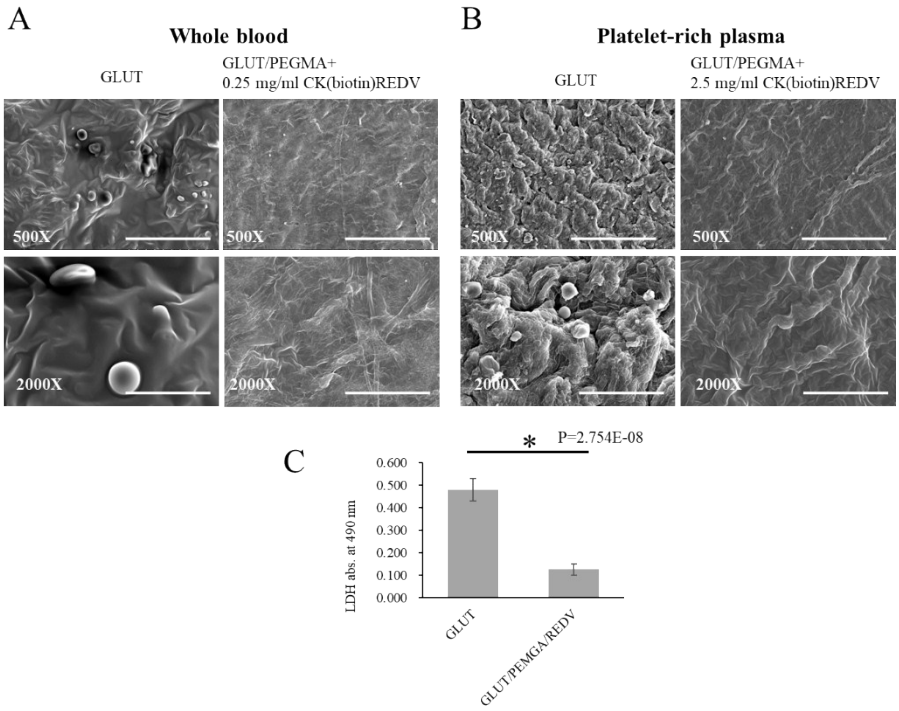

Fig. S3. Representative SEM images (500X and 2000X) of adherent whole blood (A) and platelets (B) on the tissues in each group. Scale bar = 100 μm (500X) or 20 μm (2000X); C. Lactate dehydrogenase was quantified to determine the number of adherent platelets. LDH: lactate dehydrogenase. *Significant difference ($p < 0.05$) between two groups ($n = 6$)

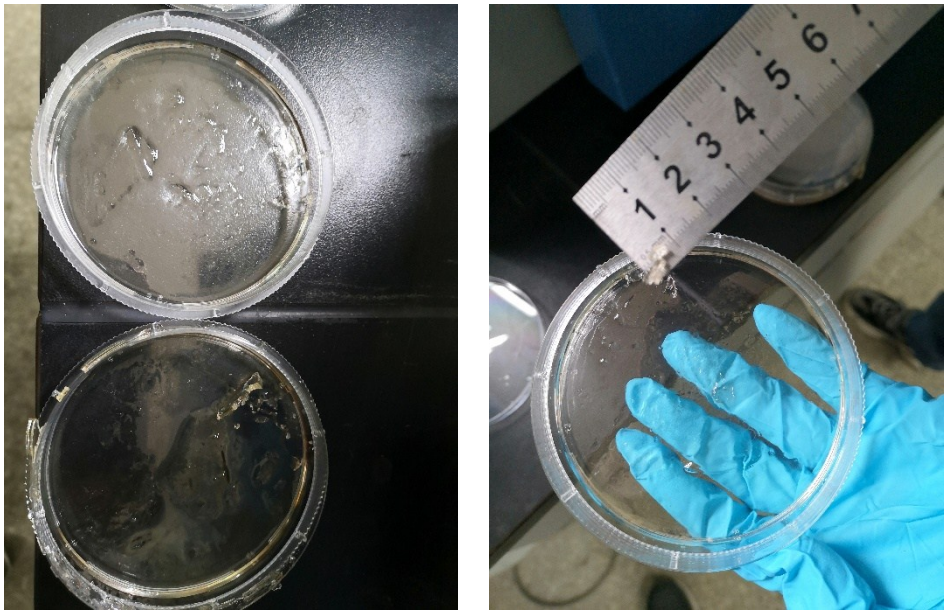

Fig. S4. Pictures of 20% PEGMA hydrogel. The hydrogel was brittle and easily broke into pieces, making it impossible to make dog-bone or rectangle shape samples for uniaxial tensile testing and suture strength testing.