

Dialdehyde pectin-crosslinked and hirudin-loaded decellularized porcine pericardium with improved matrix stability, enhanced anti-calcification and anticoagulant for bioprosthetic heart valves

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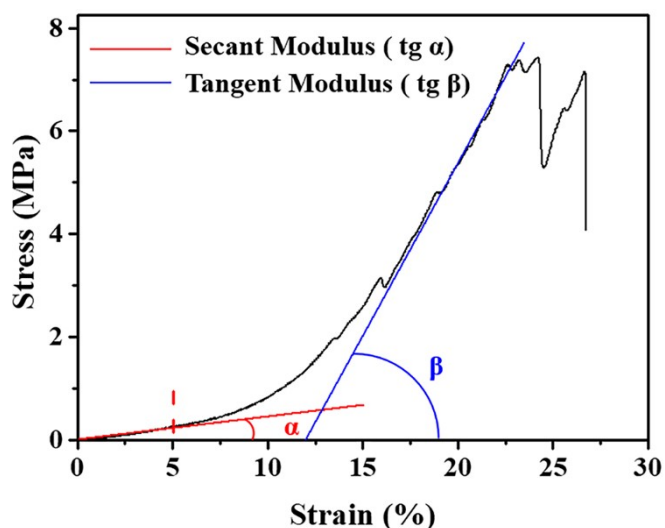


Fig. S1 The illustration for the calculation for the secant modulus and tangent modulus based on the stress-strain curve.

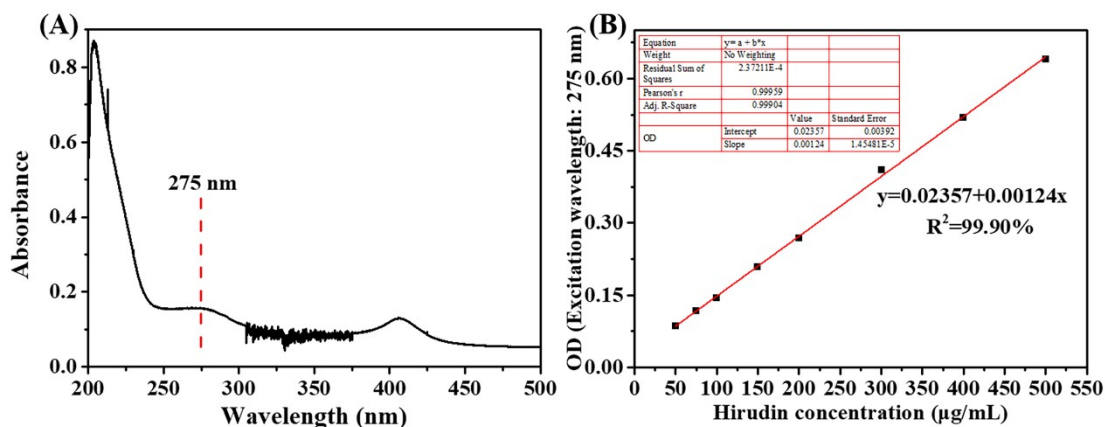


Fig. S2 Standard curve of hirudin.

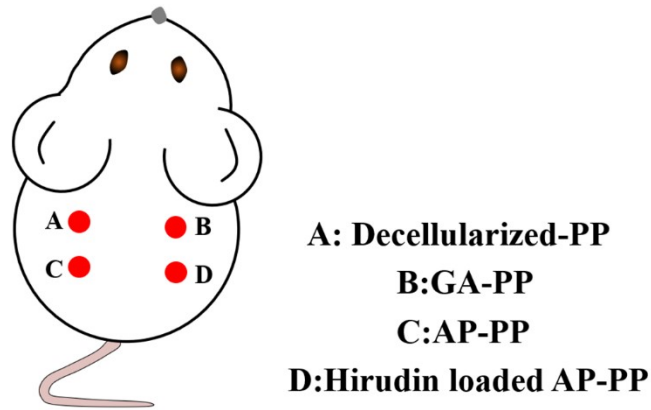


Fig. S3 Schematic diagram of pericardium samples implanted on the back of SD rats.

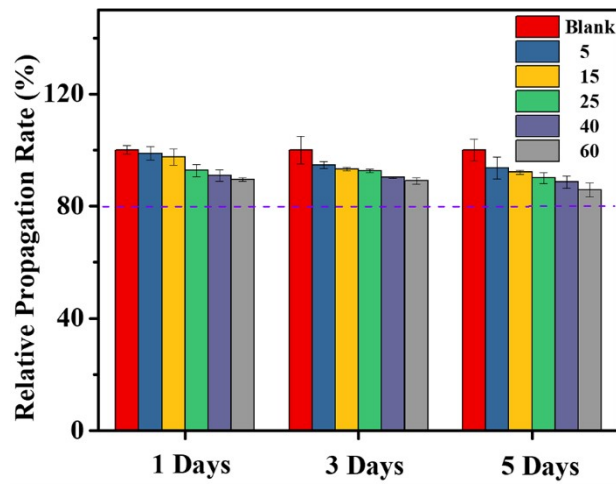


Fig. S4 cytotoxicity of PP crosslinked with AP at the concentration of 2% on HUVECs.

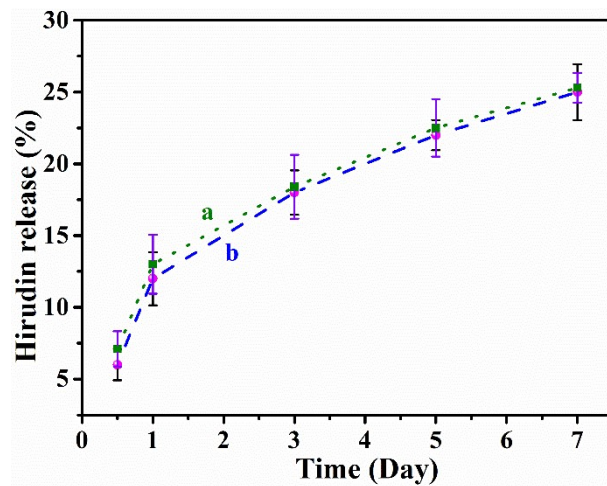


Fig. S5 hirudin release behavior of hirudin-loaded pericardium sample: a pH=6.5 and b pH=7.4, respectively.

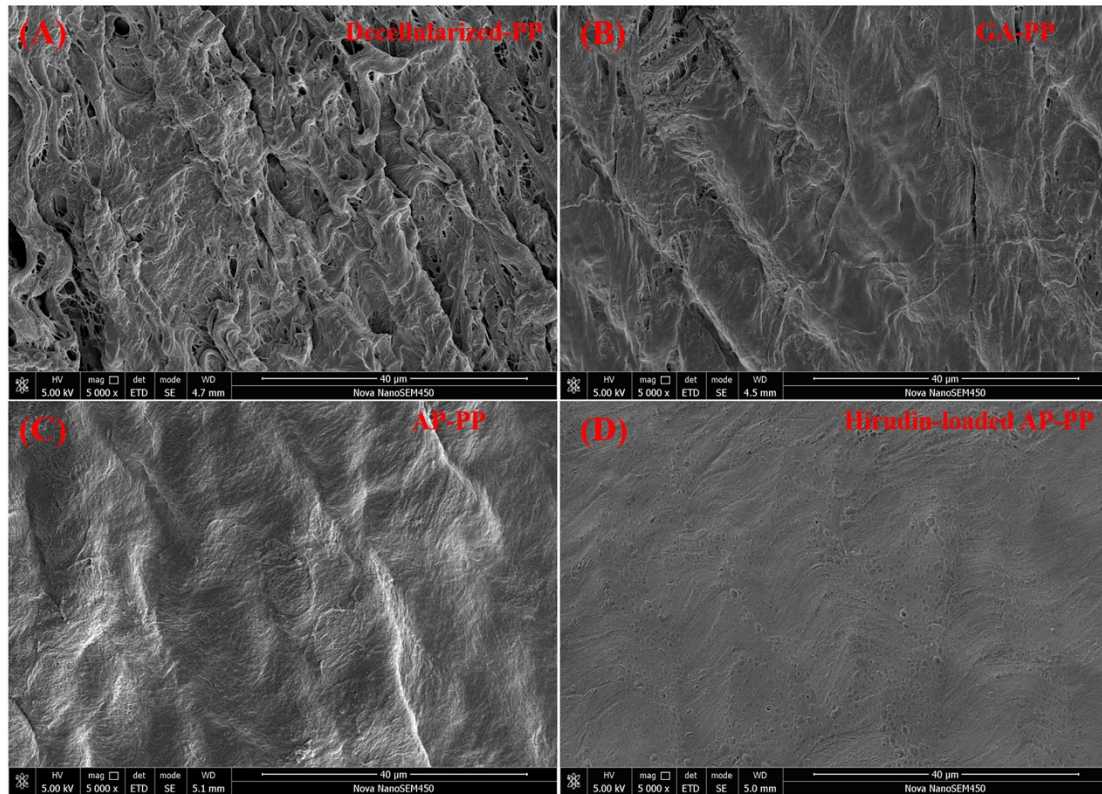


Fig. S6 SEM image of decellularized PP and cross-linked PP.

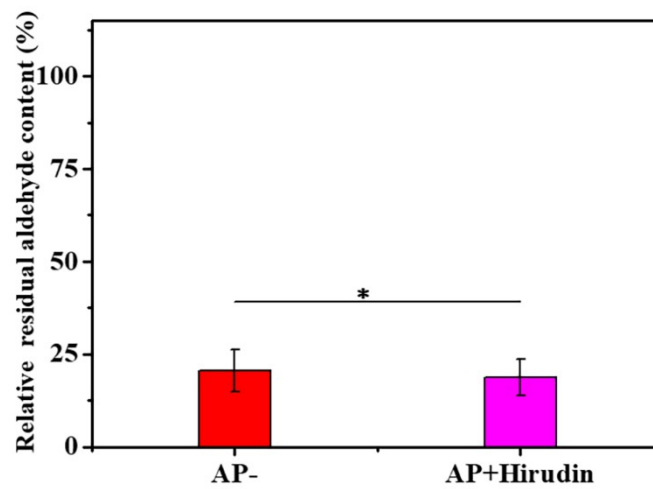


Fig. S7 Relative residual aldehyde content of AP-PP and AP+Hirudin-PP, respectively.

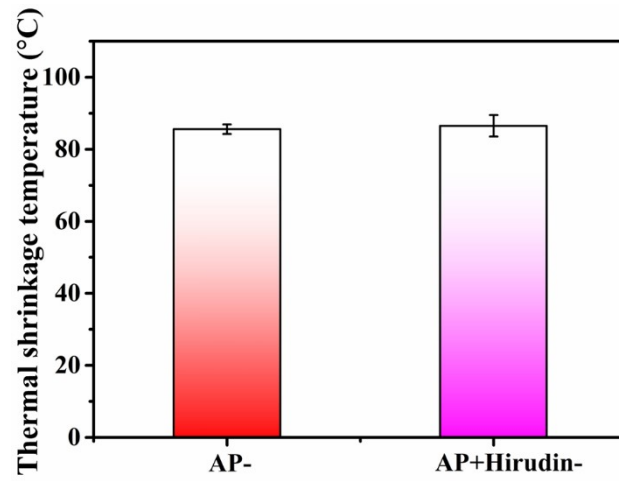


Fig. S8 Thermal shrinkage temperature of AP-PP and AP+Hirudin-PP (n=6).

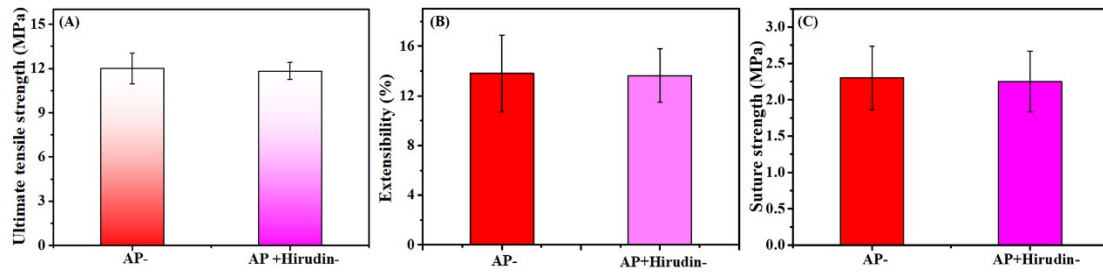


Fig. S9 (A) Ultimate tensile strength, (B) extensibility and (C) suture strength of AP-fixed PP and AP+Hirudin-PP, respectively (n = 6).