

Electronic Supplementary Information

Preparation of Polyaspartamide-based Adhesive Hydrogels via Schiff Base Reaction with Aldehyde-functionalized Dextran.

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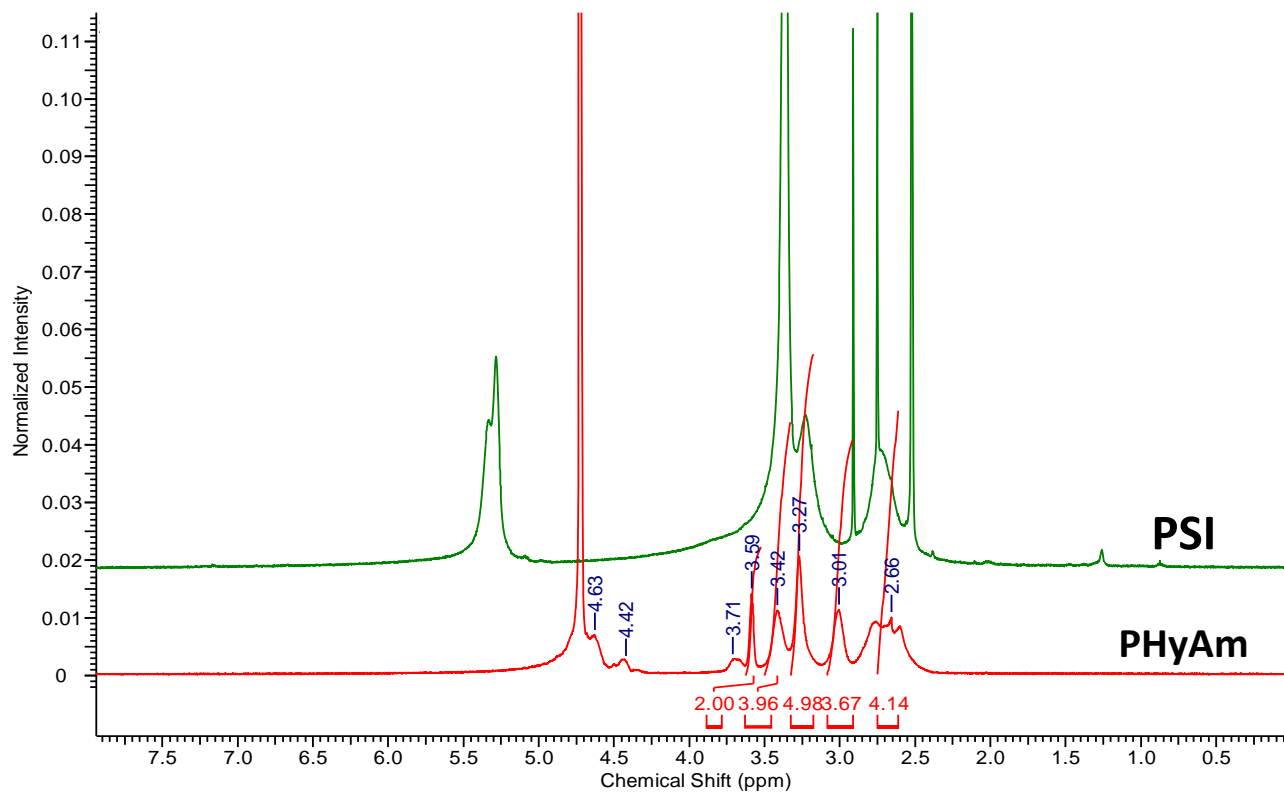


Figure S1. ¹H NMR spectrum of **PSI** and **PHyAm** polymers (500 MHz, D₂O).

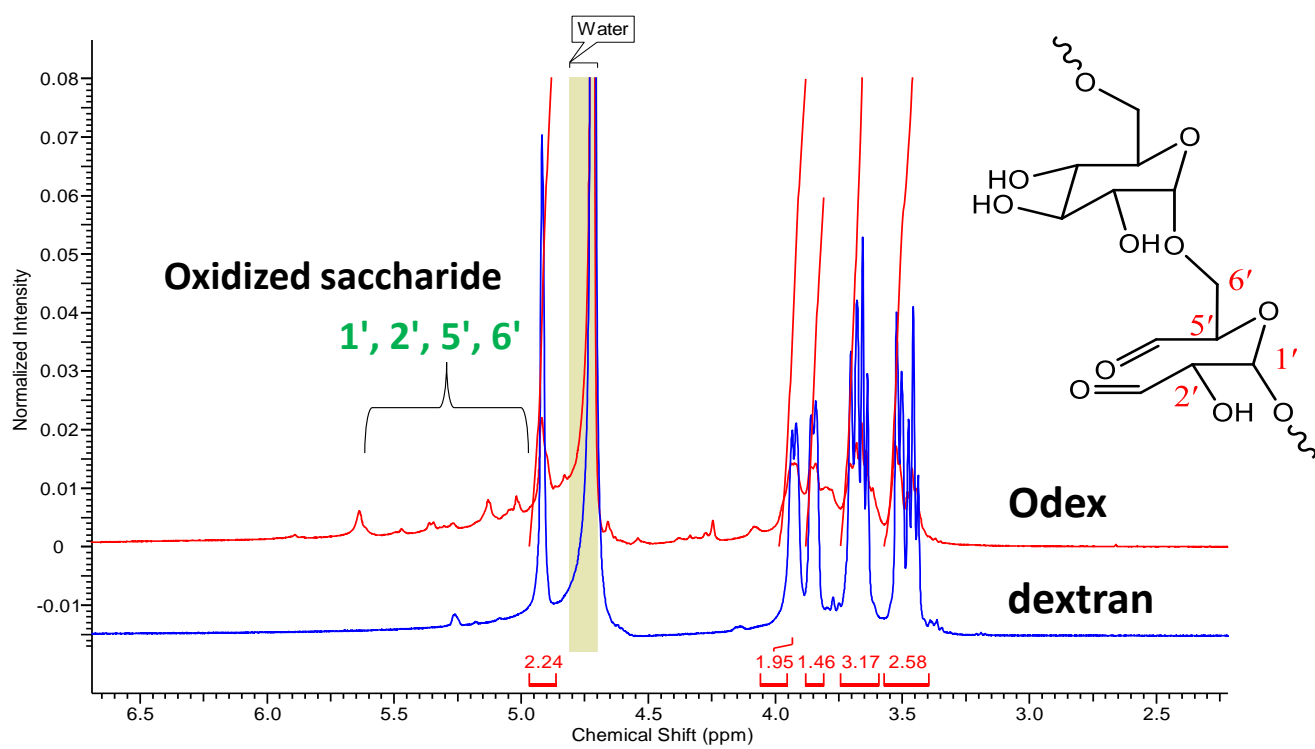


Figure S2. ^1H NMR spectrum of **dextran** and **Odex** polymers (500 MHz, D_2O).

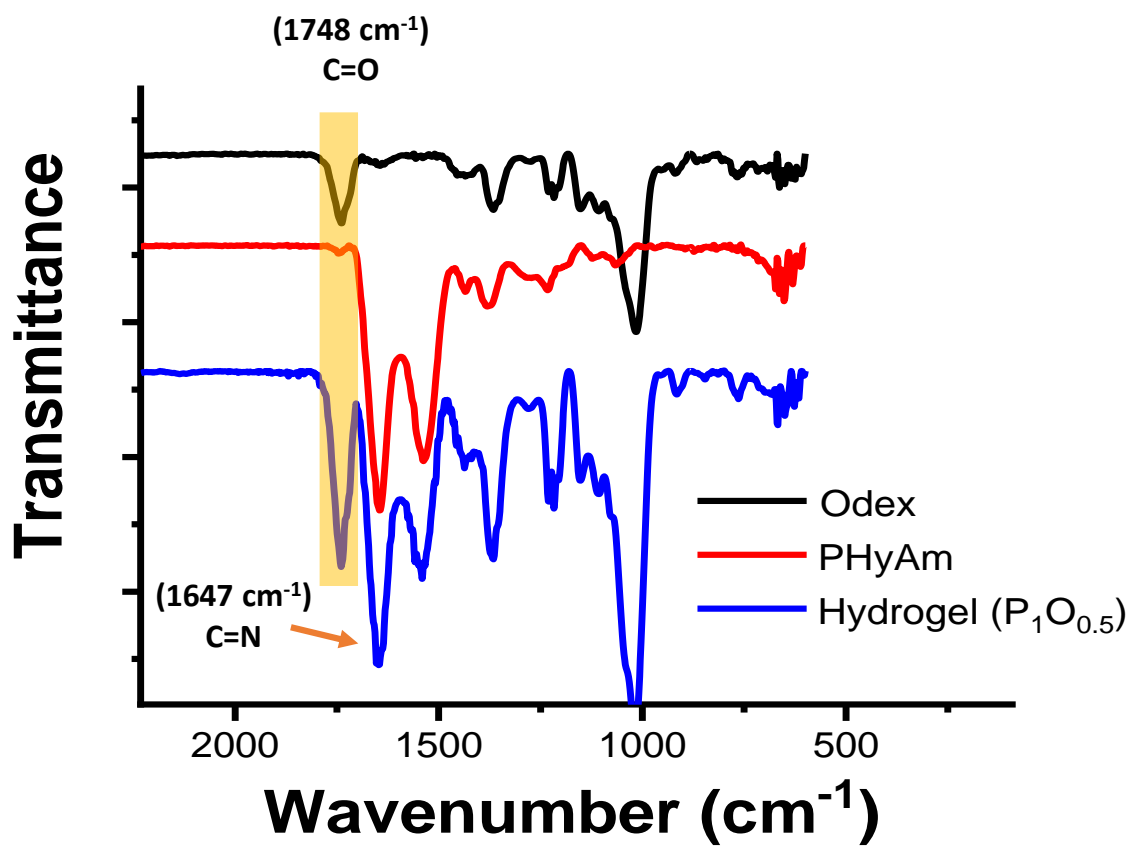


Figure S3. FT-IR data of Odex, PHyAm, and Hydrogel polymers.

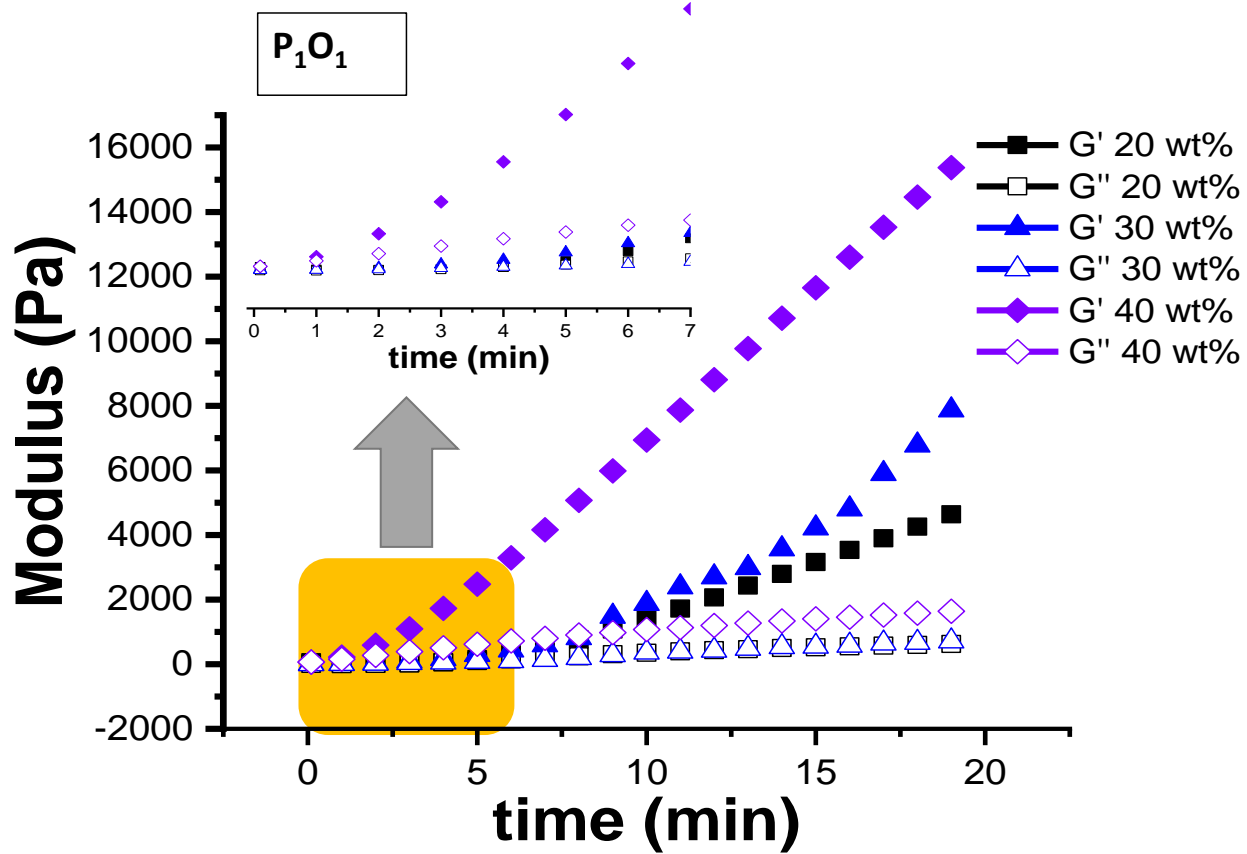


Figure S4. Oscillation time scan test of gelation time.

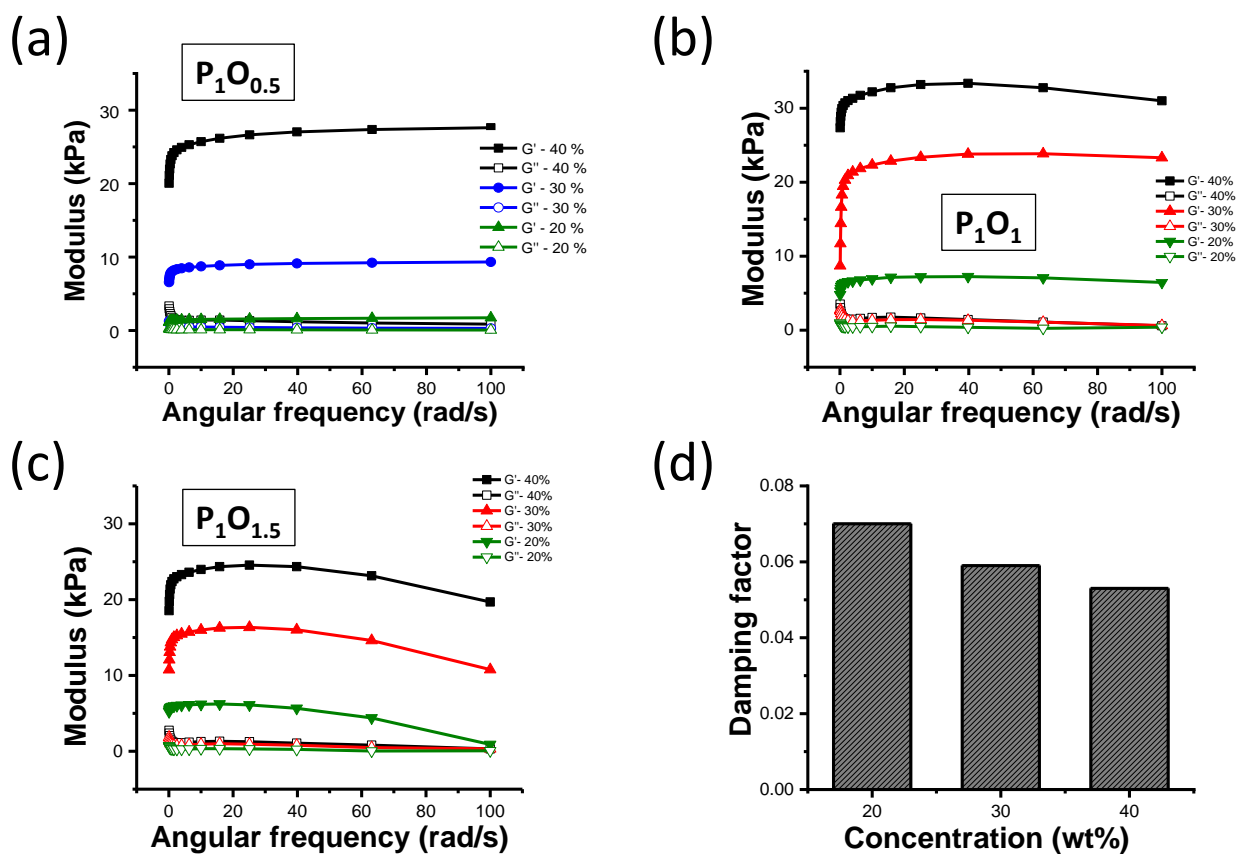


Figure S5. (a) Frequency dependence of the storage (G') and loss (G'') modulus of $P_1O_{0.5}$ hydrogel, (b) Storage (G') and loss (G'') modulus of P_1O_1 , (c) Storage (G') and loss (G'') modulus of $P_1O_{1.5}$ at concentrations of 20, 30, and 40 wt%. (d) Damping factor data of hydrogel at different concentrations 20, 30, and 40 wt%.

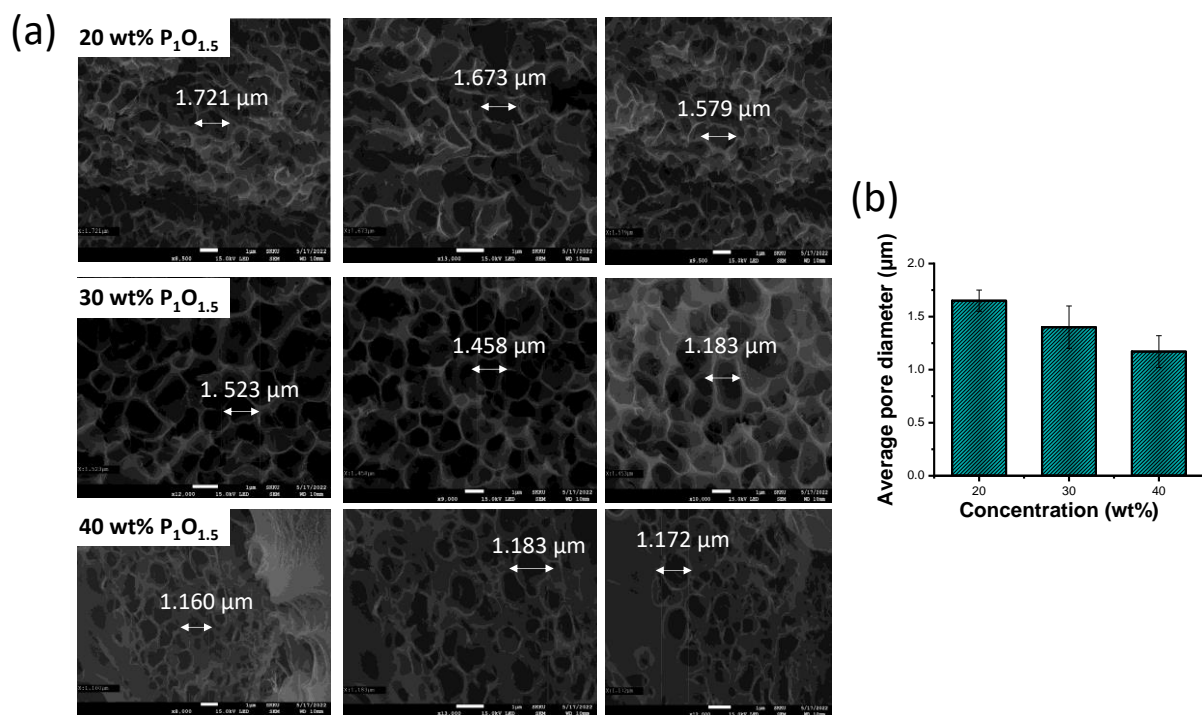


Figure S6. (a) SEM images of the $P_1O_{1.5}$ hydrogels formed at concentrations of 20, 30, and 40 wt%, the scale is 1 μm . (b) Average pore diameter of $P_1O_{1.5}$ hydrogel at concentrations of 20, 30, and 40 wt%.

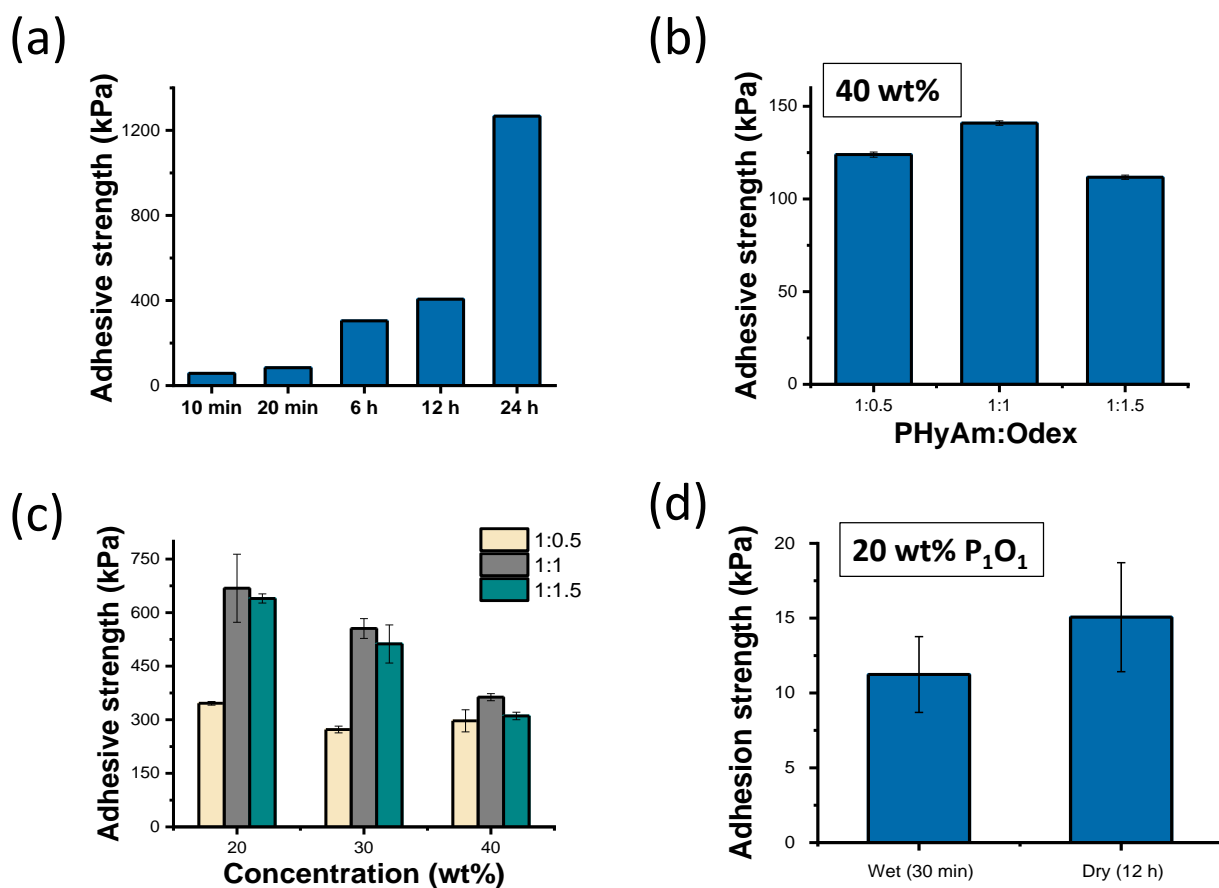


Figure S7. (a) Adhesion strength of hydrogel using 20 wt% P_1O_1 at different time on glass substrate. (b) Adhesion strength of hydrogel of different ratios after 10 min, (c) Adhesion strength of different ratios and concentrations after 12 h on glass substrate. (d) Wet and dry adhesion strength of hydrogel on porcine skin.