

**Supporting information for**

**Biodegradable polyurethane nerve guide conduits  
with different moduli influence axon regeneration in  
transected peripheral nerve injury**

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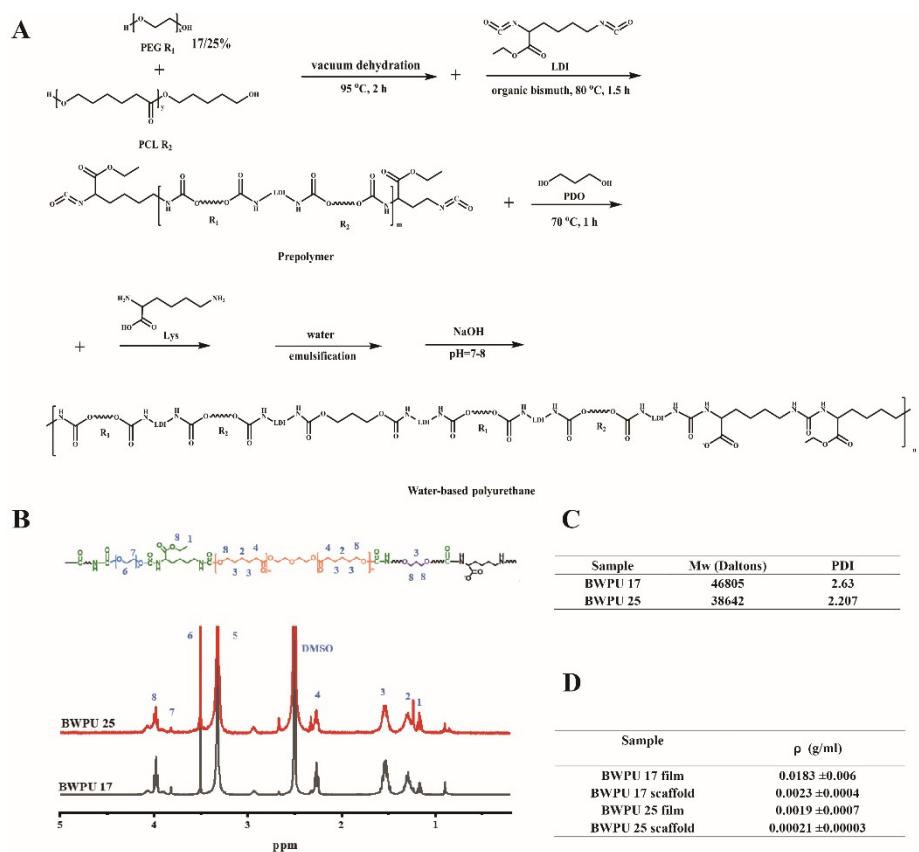
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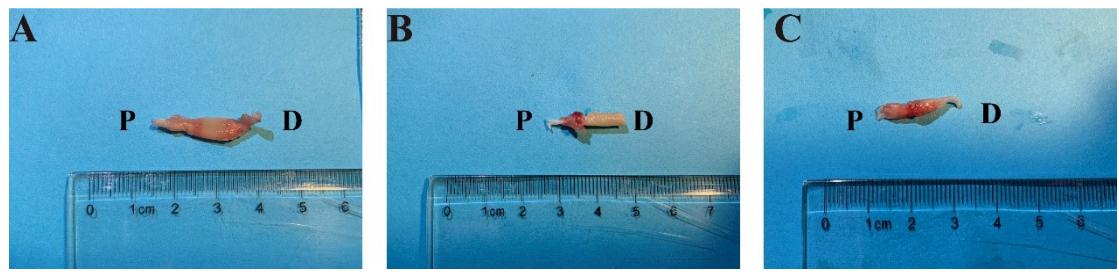
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**Figure S1.** A. Schematic of the synthesis of BWPU. B.  $^1\text{H}$ -NMR spectra of BWPU. C. Molecular weights of BWPU. D. Density of BWPU scaffolds and films.



**Figure S2.** Surgical procedures of sciatic nerve. A. expose 10mm of sciatic nerve. B. excise sciatic nerve and suture BWPU NGCs. C. excise sciatic nerve and suture autologous nerve.



**Figure S3.** Visual inspection of sciatic nerve at 2 weeks post injury. A. BWPU 17, B. BWPU 25. C. autologous nerve. P: proximal, D: distal.