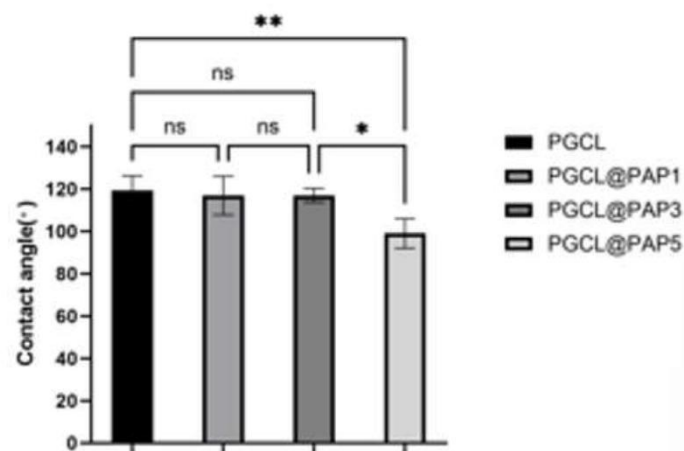
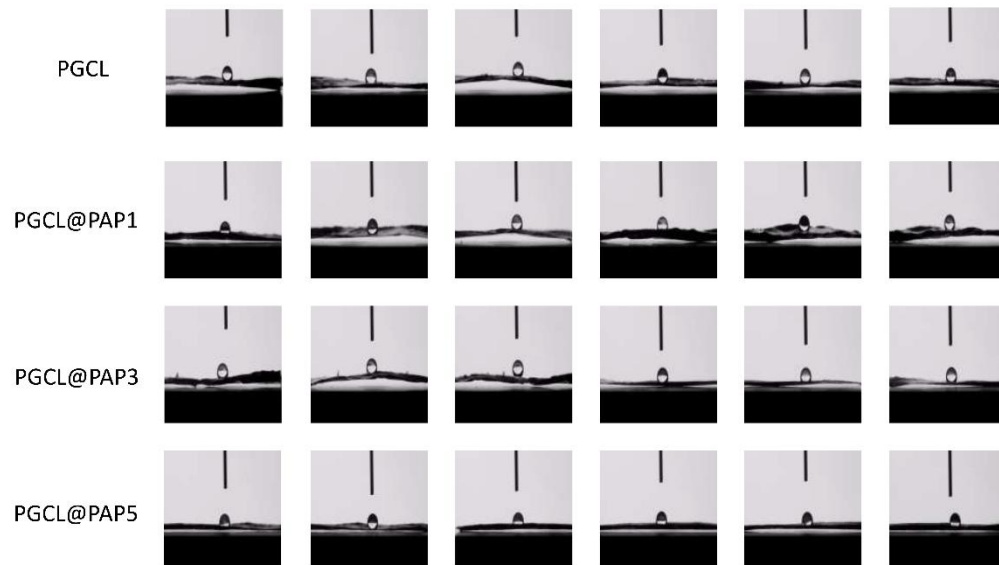


S₁ The average fiber diameter across each group of spun membranes				
	PGCL	PGCL@PAP1	PGCL@PAP3	PGCL@PAP5
Mean fiber diameter (nm)	654.9	572.3	562.6	396.5

S₂ Dynamic viscosity of solutions with different PAP contents				
	PGCL	PGCL@PAP1	PGCL@PAP3	PGCL@PAP5
Dynamic viscosity(mPa.S)	196	194	192	188

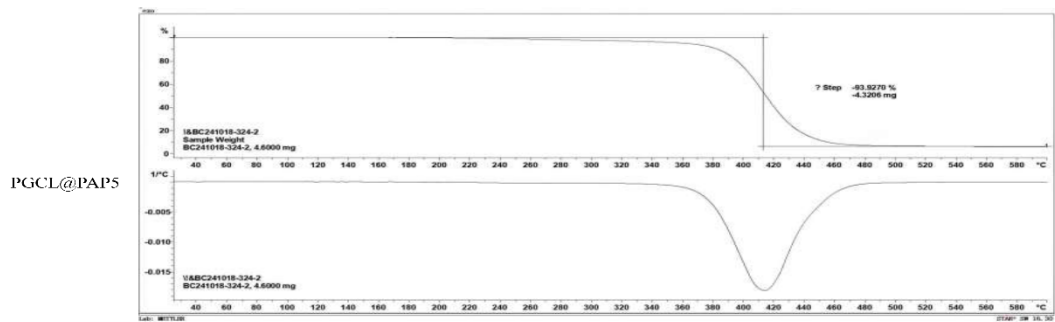
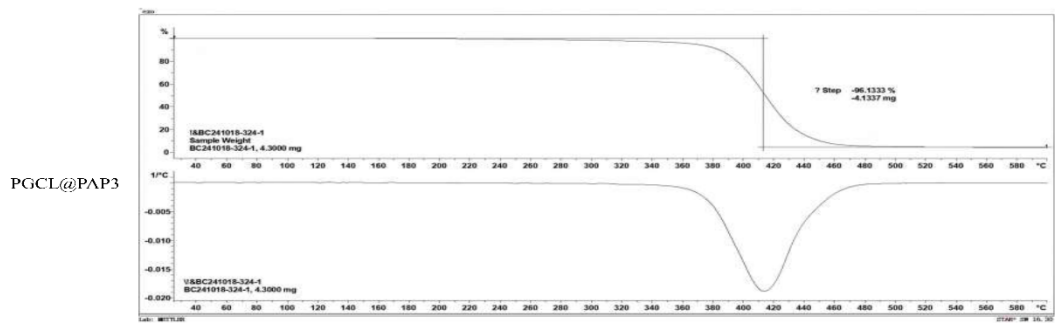
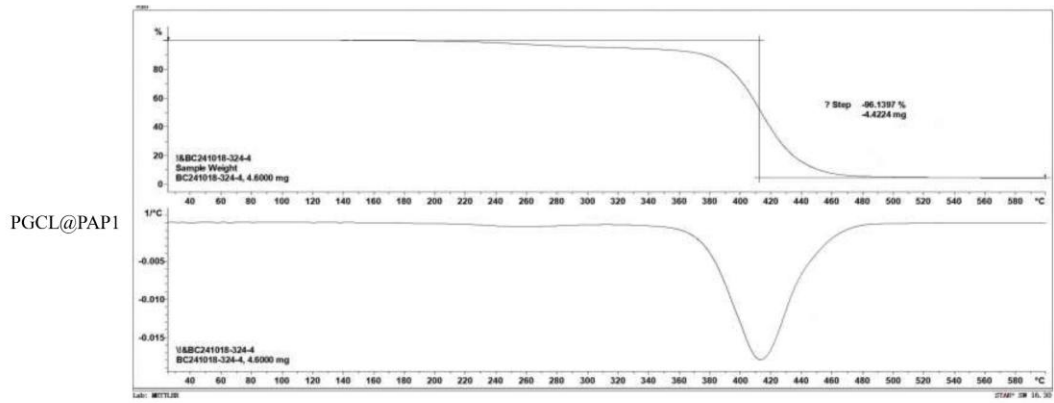
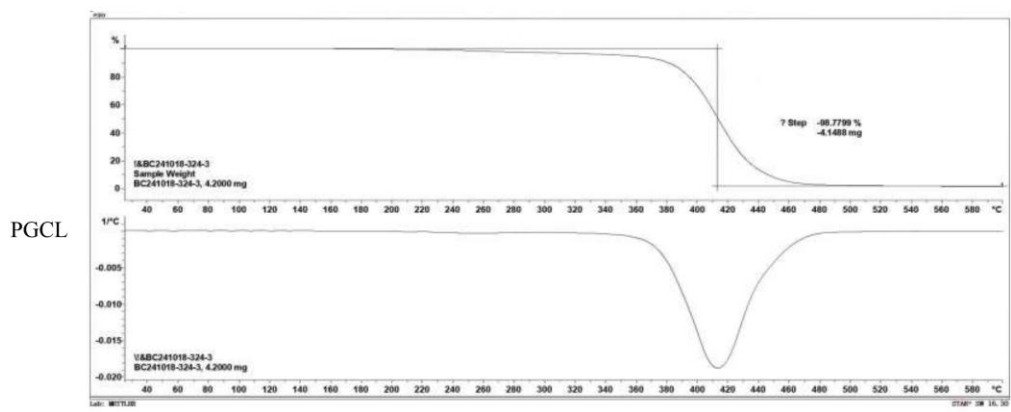
S₃ Tests on the fiber diameter and mechanical properties of each spinning membrane group							
	Fm(N)	σ_t (MPa)	ϵ_m (%)	Et (MPa)	ϵ_b (%)	Fb(N)	Ub(mJ)
PGCL	1.55	0.172	24	3.99	210	0.016	19.3
PGCL@PAP1	2.20	0.152	28	1.90	210	0.012	24.4
PGCL@PAP3	2.12	0.163	14	2.16	220	0.022	25.0
PGCL@PAP5	2.10	0.200	20	4.18	240	0.024	27.8

S₄ Conductivity of each spinning membrane group				
	PGCL	PGCL@PAP1	PGCL@PAP3	PGCL@PAP5
Conductivity ($10^{-6} \text{ S} \cdot \text{cm}^{-1}$)	N. A	0.23	1.56	3.89



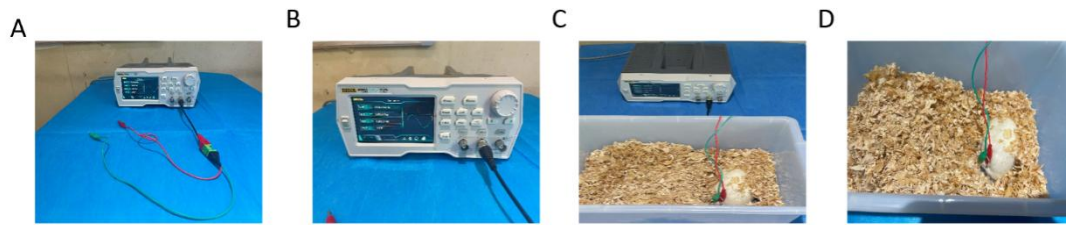
S1: Image depicting the contact angle test for each group of spun membranes.

S2: Measurement of contact angles for each category of spun membranes.



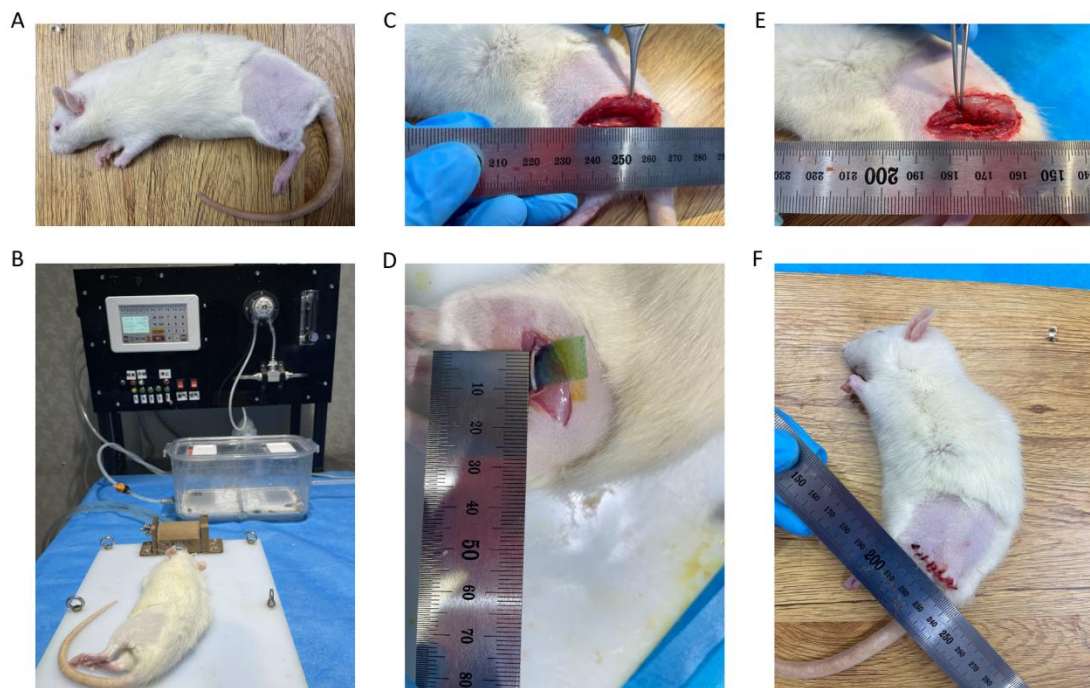
S₃: Thermogravimetric analysis for each category of spun membranes.

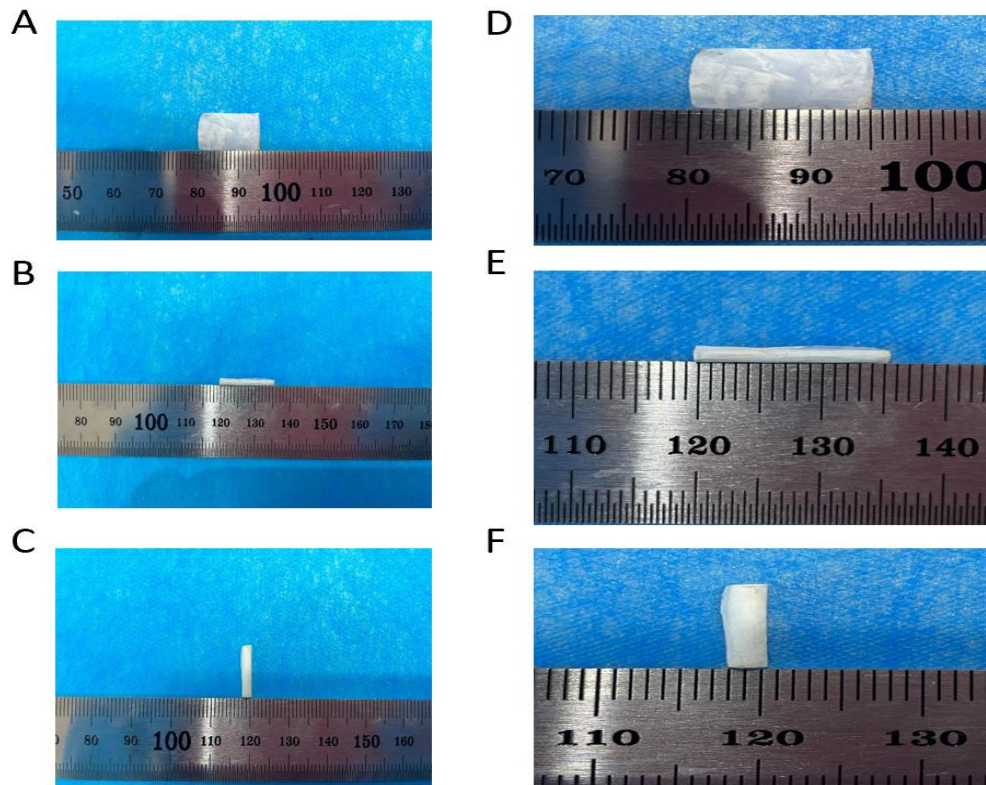
Postoperative electrical stimulation:



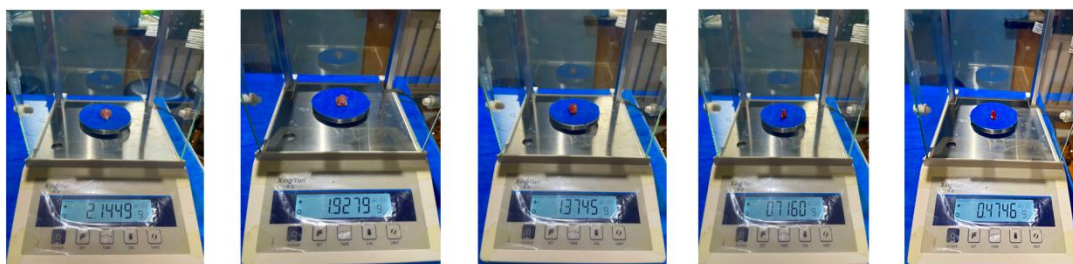
The graphic illustrates the sequential procedure of electrical stimulation post-surgery.

Experimental animal models:





Schematic representation illustrating the development of the animal model for sciatic nerve injury and the context of its electrical stimulation therapy.



Hydrated mass of the gastrocnemius muscle in each cohort.