SUPPORTING INFORMATION

Regulation Effects of Biomimetic Hybrid Scaffolds on Vascular Endothelium Remodeling

Qilong Zhao,[1] *Huanqing Cui,*[1] *Juan Wang,*[1] *Hongxu Chen,*[1] *Yunlong Wang,*[1] *Lidong Zhang*,*[2], *Xuemin Du*,*[1] *and Min Wang*[3]

[1]Institute of Biomedical & Health Engineering, Shenzhen Institutes of Advanced Technology (SIAT), Chinese Academy of Sciences (CAS), Shenzhen, China.

[2]Department of Chemistry and Molecular Engineering, East China Normal University, Shanghai, China

[3]Department of Mechanical Engineering, The University of Hong Kong, Hong Kong, China

SUPPLEMENTARY FIGURES

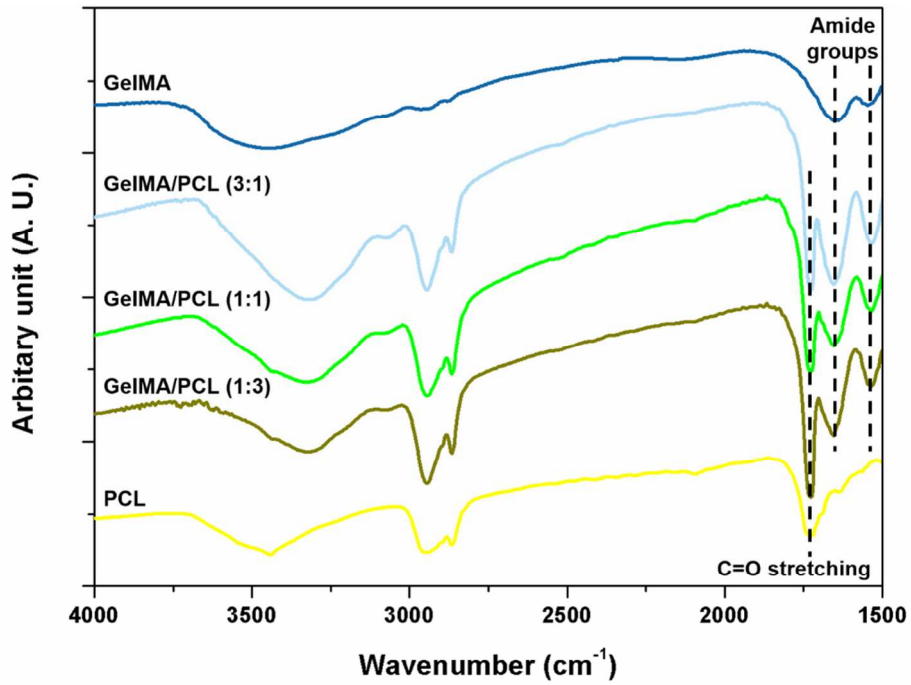

Figure S1. FTIR spectra of GelMA, PCL and GelMA/PCL hybrid scaffolds with different GelMA/PCL mass ratios (3:1, 1:1 or 1:3) fabricated by blend electrospinning. Characteristic band of PCL appeared at about 1740 cm^{-1} attributed to the stretching of C=O bond in ester groups, where GelMA showed characteristic peaks at around 1640 cm^{-1} and 1540 cm^{-1}. FTIR spectra verified the existence of both PCL and GelMA in the hybrid scaffolds, as well as their varying GelMA/PCL mass ratios.

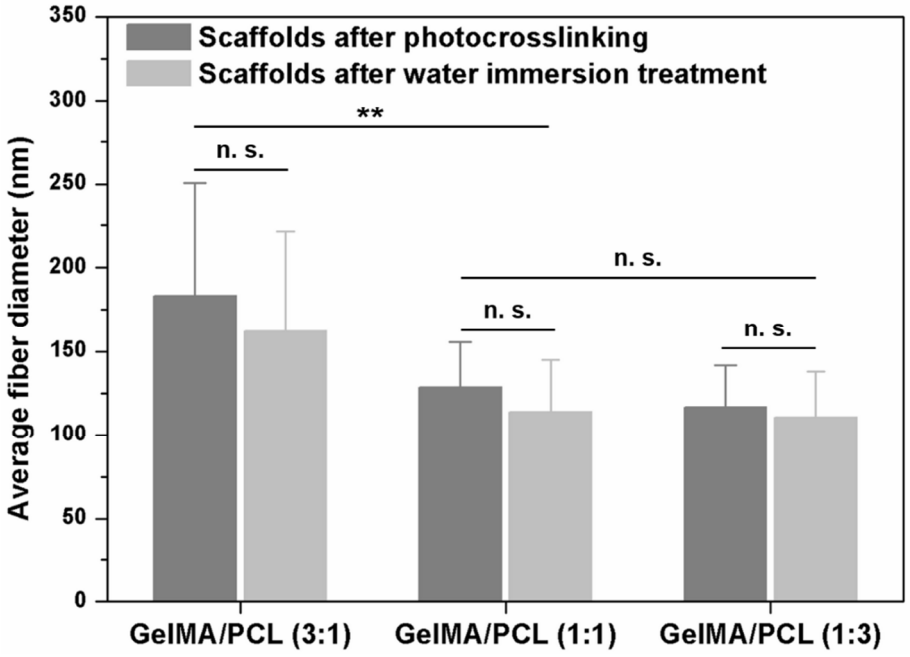

Figure S2. Fiber diameters of electrospun GelMA/PCL hybrid scaffolds with different GelMA/PCL mass ratios (3:1, 1:1 or 1:3) before and after the water immersion treatments. The average fiber diameter of the GelMA/PCL (3:1) scaffolds is significantly higher than those of the GelMA/PCL (1:1) and the GelMA/PCL (1:3) scaffolds. And the average fiber diameters of each type of the hybrid scaffolds before and after the water immersion treatments all exhibited no statistically significant difference, demonstrating successful crosslinking of GelMA and desirable structural stability of the hybrid scaffolds at the aqueous environment.