Electronic Supplementary Materials

For https://doi.org/10.1631/jzus.A23D0045

Biomimetic microchannel network with functional endothelium formed by sacrificial electrospun fibers inside 3D gelatin methacryloyl (GelMA) hydrogel models

Haoyu SUN, Haiyang MA, Li WANG, Yang LIU, Tian HOU, Wenjie TANG, Qing YU, Meiwen AN, Meiling WEN

Institute of Biomedical Engineering, College of Biomedical Engineering, Taiyuan University of Technology, Taiyuan 030024, China

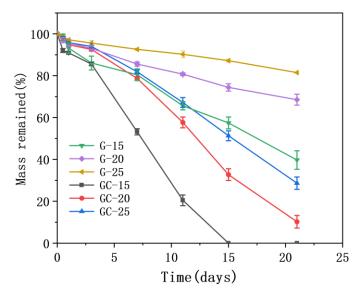


Fig. S1 Degradability of pure GelMA hydrogel and microchannel network GelMA hydrogel scaffolds after swelling ratio.

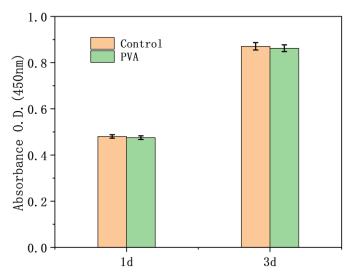


Fig. S2 Cell viability on PVA fiber. Proliferation of HUVECs in PVA fiber extracts.

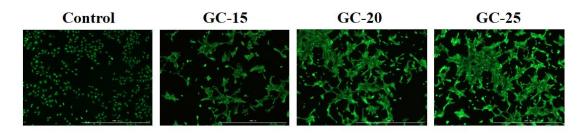


Fig. S3 Representative images of live/dead stained HUVECs in the blank and GC-15, GC-20, and GC-25 scaffold surface at the 3 day time points. Scale bars represent $1000 \mu m$.

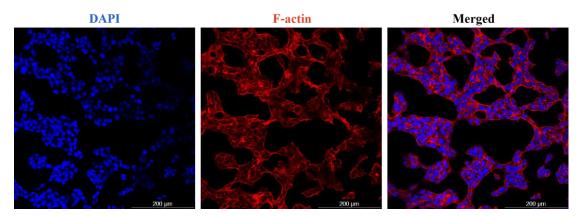


Fig. S4 Representative images of DAPI/F-actin stained HUVECs in GC-20 scaffold surface at the 3 day time points. Scale bars represent 200 μm .

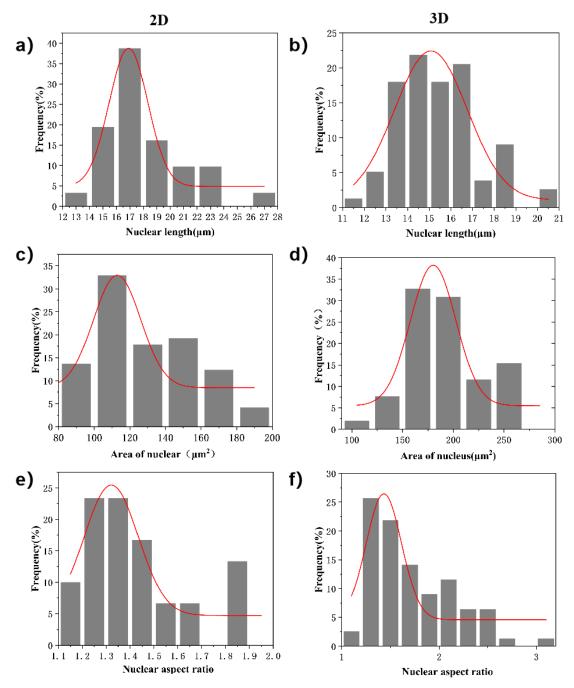


Fig. S5 Quantification of nuclear morphology of HUVECs on the scaffold surface (2D) and intra-scaffold microchannel (3D) after ring/tubing formation.