

S-Figure 1. Representative images showing cell viability assay results on three types of materials: (A) Tissue culture plate; (B) PCL/gelain coaxial fibre; (C) PCL fibre. arterial endothelial cells were stained with Live/Dead assay kit and examined under fluorescent microscopy. For each material, the top image illustrates live cells with green fluorescence and the bottom image illustrates dead cells with red fluorescence.



S-Figure 2. Transmission electron microscopy (TEM) images of vascular grafts consisting of coaxial PU-gelatin fibers with the PU-to-gelatin ratio of 1:5 (A), 2:10 (B) and 2:8 (C). The arrows illustrate the core and sheath boundaries.



S-Figure 3. Representative images in the bottom panel illustrate the difference in the graft compliance within the physiological pressure range.

	PU:gelatin (1:5)	PU:gelatin (2:10)	PU:gelatin (2:8)
Average fiber diameter (nm)	210±70	410±110	390±80
Average burst pressure (mmHg)	540±140	384±160	426±190
Average compliance (%/100mmHg)	7.9±1.8	32±8.6	36±7.8

S-Table 1. Physical and mechanical properties of vascular grafts made of coaxial PU-gelatin fibers