

## Supporting information

### Tissue-engineered vascular graft based on a bioresorbable tubular knit scaffold with flexibility, durability, and suture-ability for implantation

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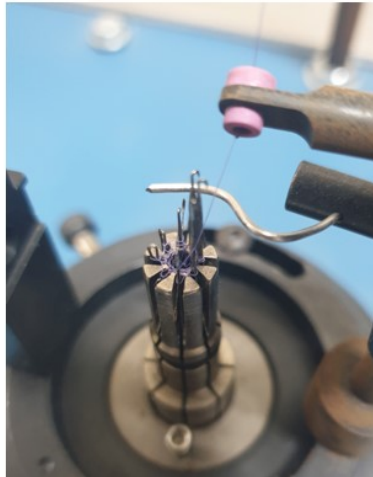
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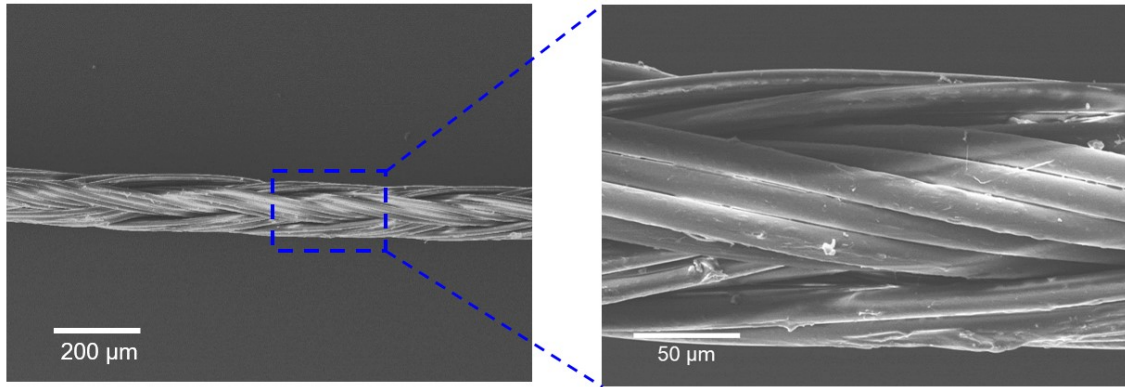
**KEYWORDS:** Tissue-engineered vascular graft (TEVG), polyglycolic acid, tubular knit, flexibility, durability, suture-ability.

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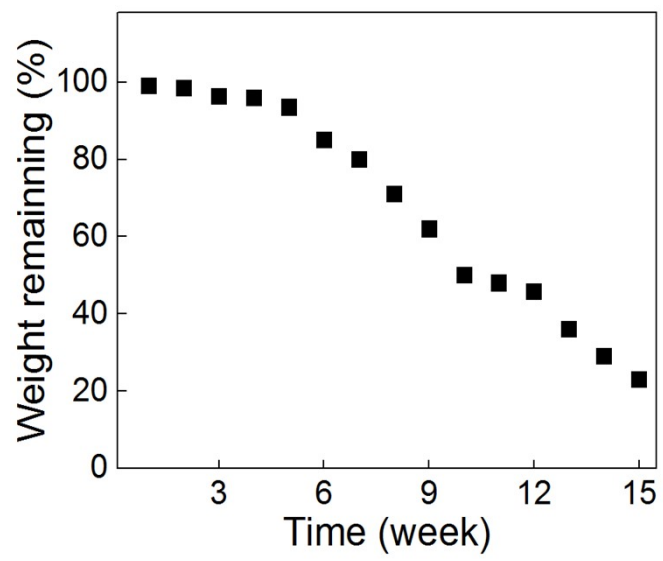
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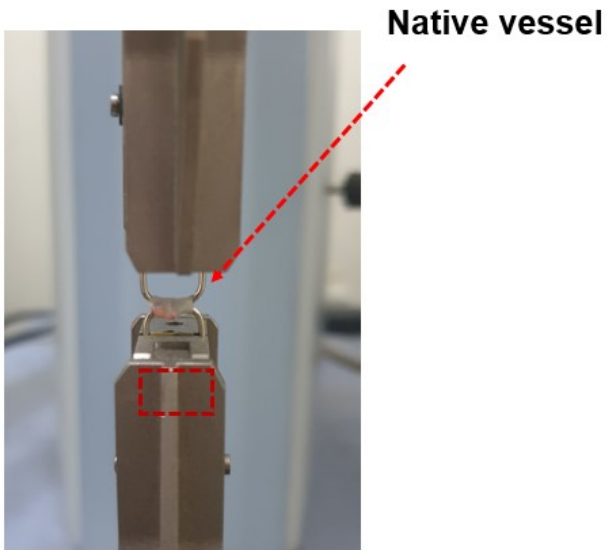
**Figure S1.** Tubular knit scaffold is manufactured by knitting PGA suture fiber from knitting machine.



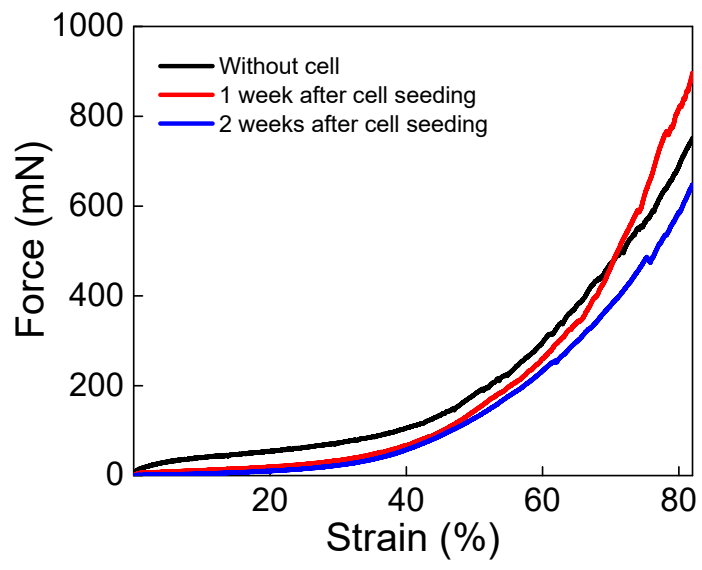
**Figure S2.** Scanning electron microscope (SEM) image of PGA suture fiber (130 μm thickness) composed of the bundle of PGA microfiber.



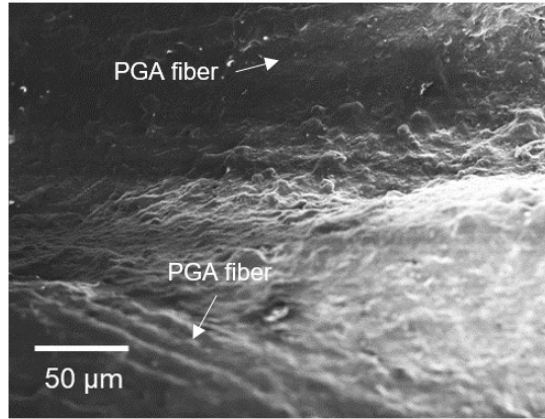
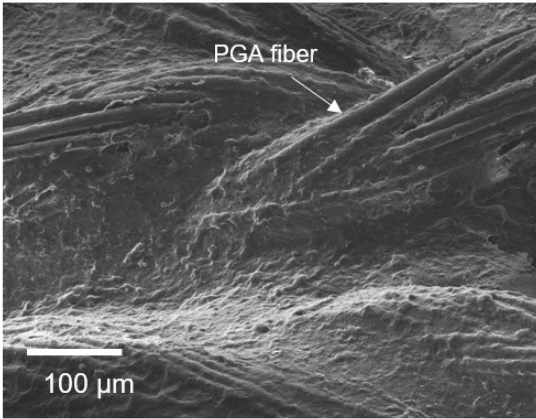
**Figure S3.** Biodegradable experiment of tubular knit scaffolds made of 130  $\mu\text{m}$  PGA suture fiber in PBS.



**Figure S4.** Optical image of native vessel for stretching test of circumferential stress.



**Figure S5.** Force-strain curve for tubular knit scaffold (black color) and cell cultured tubular knit scaffold (1 week and 2 weeks).



**Figure S6.** SEM image of the tissue engineered vascular grafts using tubular PGA knit scaffolds 8 days after cell seeding.