

Supporting Information

A novel 3D printed type II silk fibroin / polycaprolactone mesh for the treatment of pelvic organ prolapse

Jingya Wu^{1,†}, Hai Yao^{2,†}, Lili Yu², Huawen Li¹, Yan Zuo¹, Wenjun Liu³, Chunye Zhang², Caili Fu^{2,*} and Mubiao Liu^{1,*}

¹Department of Gynecology, Zhuhai People's Hospital (Zhuhai Hospital Affiliated with Jinan University), Zhuhai, 519050, China

²Center For Peak of Excellence on biological Science and Food Engineering, National University of Singapore (Suzhou) Research Institute, Suzhou, 215004, China

³Department of Research and Development, Zhejiang Zhongwei Medical Research Center, Hangzhou, 310018, China

[†]The authors contributed to the work equally

^{*}Corresponding author: liumb1972@126.com, Caili.Fu@nusri.cn.

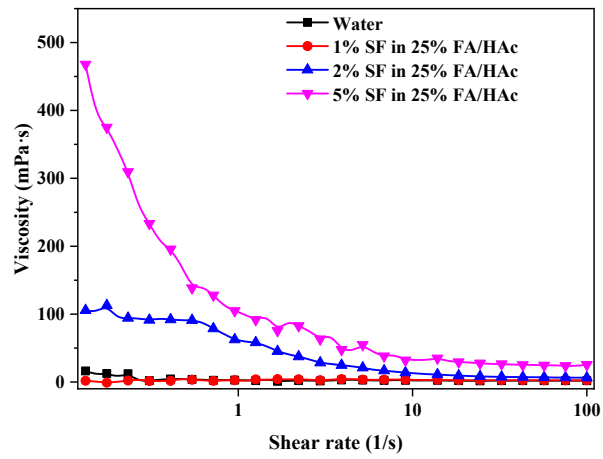


Figure S1. Ink viscosity with different SF contents (1%, 2% and 5%).

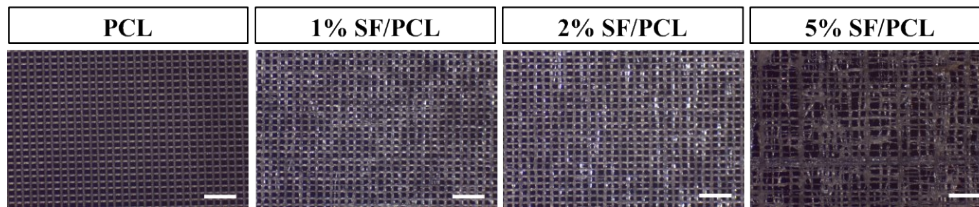


Figure S2. EHPD meshes of PCL, 1% SF/PCL, 2% SF/PCL and 5% SF/PCL (Scale bar=500 μ m).

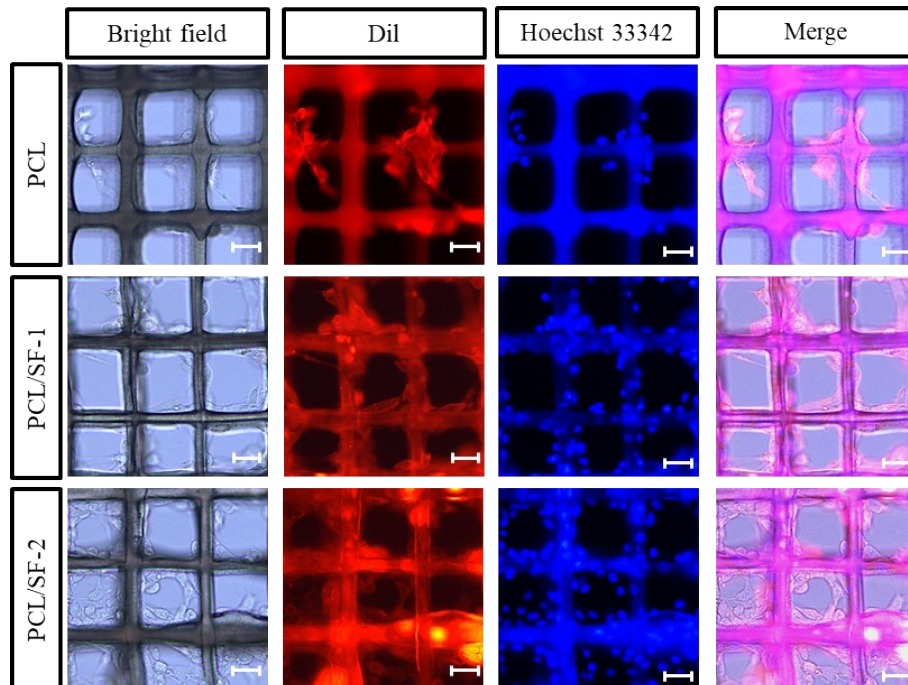


Figure S3. Fluorescent images of cell seeded in meshes after 5 days culture (Scale bar=50 μ m).

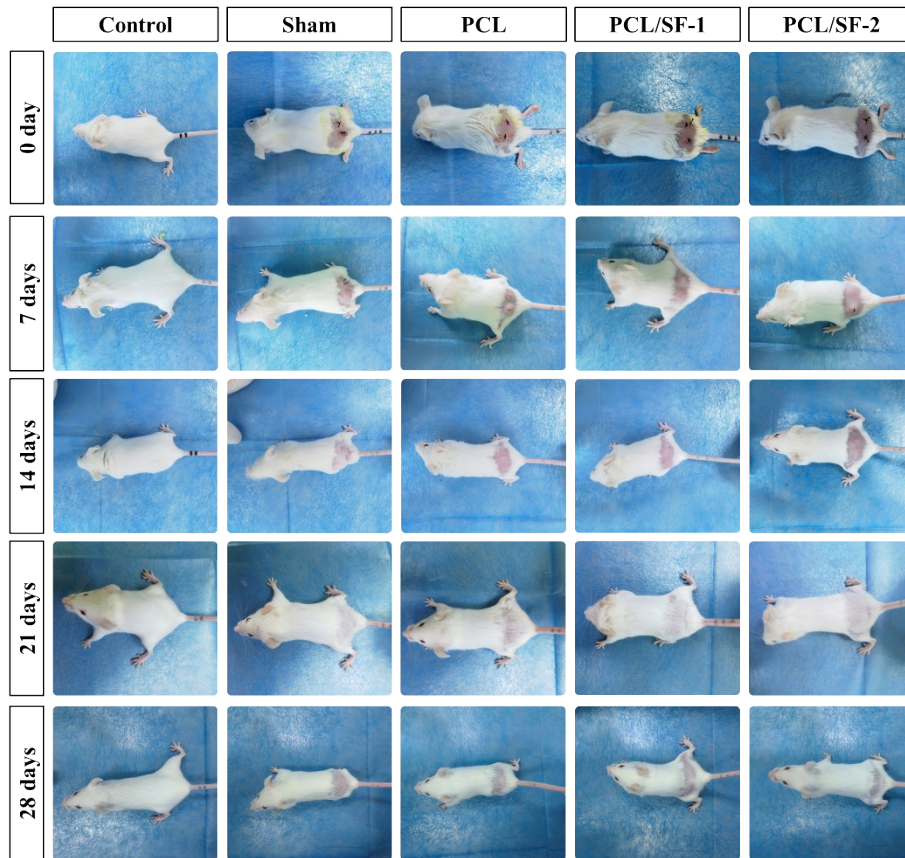


Figure S4. The images of wounds after 0, 7, 14, 21 and 28 days.

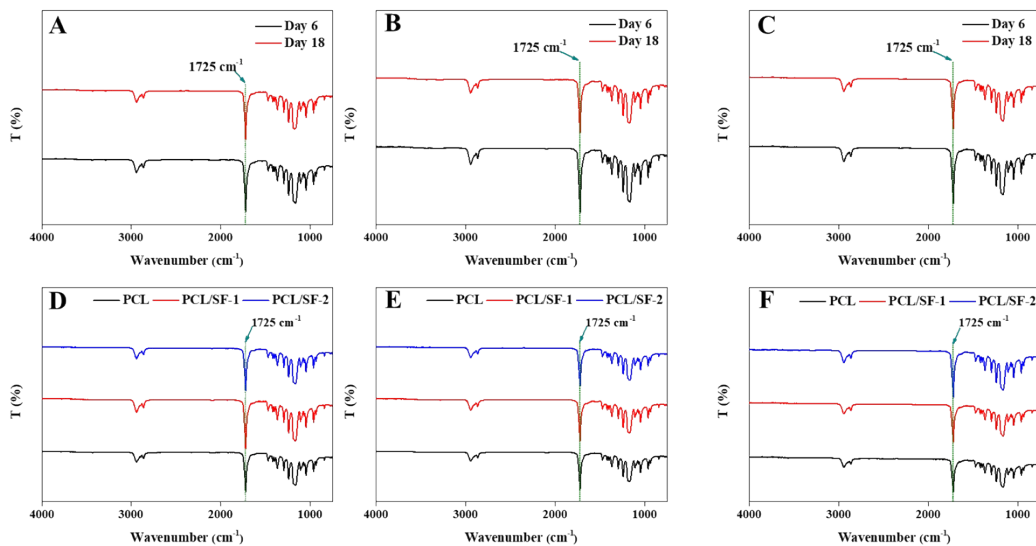


Figure S5. The structural changes in the composition of PCL and PCL/SF meshes. Infrared spectra of PCL (A), PCL/SF-1 (B) and PCL/SF-2 (C) mesh degradation in vitro on day 6 and day 18; Comparison of infrared spectra of different meshes on day 6 of in vitro degradation (D); Comparison of infrared spectra of different meshes on day 18 of in vitro degradation (E); Comparison of infrared spectra of different meshes on day 5 of cell co-culture (F).