Electronic Supplementary information for

Synthesis, characterization and evaluation of collagen scaffold crosslinked with functionalized silver nanoparticles for clinical wound healing applications: in vitro and in vivo studies

Abhishek Mandal, a,b Santhanam Sekar, b N. Chandrasekaran, a Amitava Mukherjee, a* Thotapalli P. Sastry b*

aCentre for Nano-Biotechnology, VIT University, Vellore 632014, India.
bBio-Products Laboratory, Council of Scientific and Industrial Research (CSIR)-Central Leather Research Institute (CLRI), Adyar, Chennai 600020, Tamil Nadu, India.

*a E-mail address: amitav@vit.ac.in
Tel #: +91-416-220-2620

*b E-mail address: sastrytp@hotmail.com
Fax #: +91-44-24911589; Tel #: +91-44-24420709
**Figure S1** Schematic representation of the synthesis, functionalization and crosslinking of silver nanoparticles with succinylated collagen.
**Figure S2** SDS-PAGE of succinylated collagen (SC) solution.

![SDS-PAGE Image]

- 200 kDa
- 116 kDa
- 97.4 kDa

**Figure S3** Fluorescence spectra of a) bare and b) aminosilane functionalized silver nanoparticles.
**Figure S4** Particle size distribution of a) silver nanoparticles (AgNPs) and b) functionalized silver nanoparticles (FAgNPs), respectively.

![Particle size distribution graph](image)

**Figure S5** Percentage of amine content of the scaffolds produced in this study, in relation to non-cross-linked collagen scaffolds. Values are presented as mean ± SD (n = 3) (*p < 0.01)

![Percentage of amine content graph](image)
Figure S6 X-ray photoelectron spectroscopy (XPS) spectra of FSCSC scaffold.

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**Figure S6:** X-ray photoelectron spectroscopy (XPS) spectra of FSCSC scaffold.