

## Supplementary Information

### ***In vivo* biocompatibility of an electrospun, biodegradable dual-carrier containing antibiotic and growth factor in a mouse model - Implications for rapid wound healing**

<sup>1,2</sup>Charu Dwivedi, Himanshu Pandey<sup>2,3</sup>, Avinash C. Pandey<sup>2</sup>, Sandip Patil<sup>4</sup>, Pramod W. Ramteke\*<sup>1</sup> Peter Laux<sup>5</sup>, Andreas Luch<sup>5</sup> and Ajay Vikram Singh\*<sup>5,6</sup>

<sup>1</sup>Department of Biological Sciences, Sam Higginbottom University of Agriculture, Technology and Sciences, Allahabad- 211007 (India).

<sup>2</sup>Nanotechnology Application Centre, Faculty of Science, University of Allahabad, Allahabad- 211002 (India).

<sup>3</sup>Department of Pharmaceutical Sciences, Faculty of Health Sciences, Sam Higginbottom University of Agriculture, Technology & Sciences, Allahabad- 211007 (India)

<sup>4</sup>E-Spin Nanotech Pvt Ltd, Kanpur- 208016 (India).

<sup>5</sup>Department of Chemical and Product Safety, German Federal Institute for Risk Assessment (BfR), Max-Dohrn-Strasse 8-10, 10589, Berlin, Germany

<sup>6</sup>Physical Intelligence Department, Max Planck Institute for Intelligent Systems, 70569 Stuttgart, Germany.

\*Corresponding author email: \*Ajay Vikram Singh- Ajay-Vikram.Singh@bfr.bund.de, Charu Dwivedi\* charucas0505@gmail.com; Pramod W. Ramteke\* pwranteke@gmail.com\*.

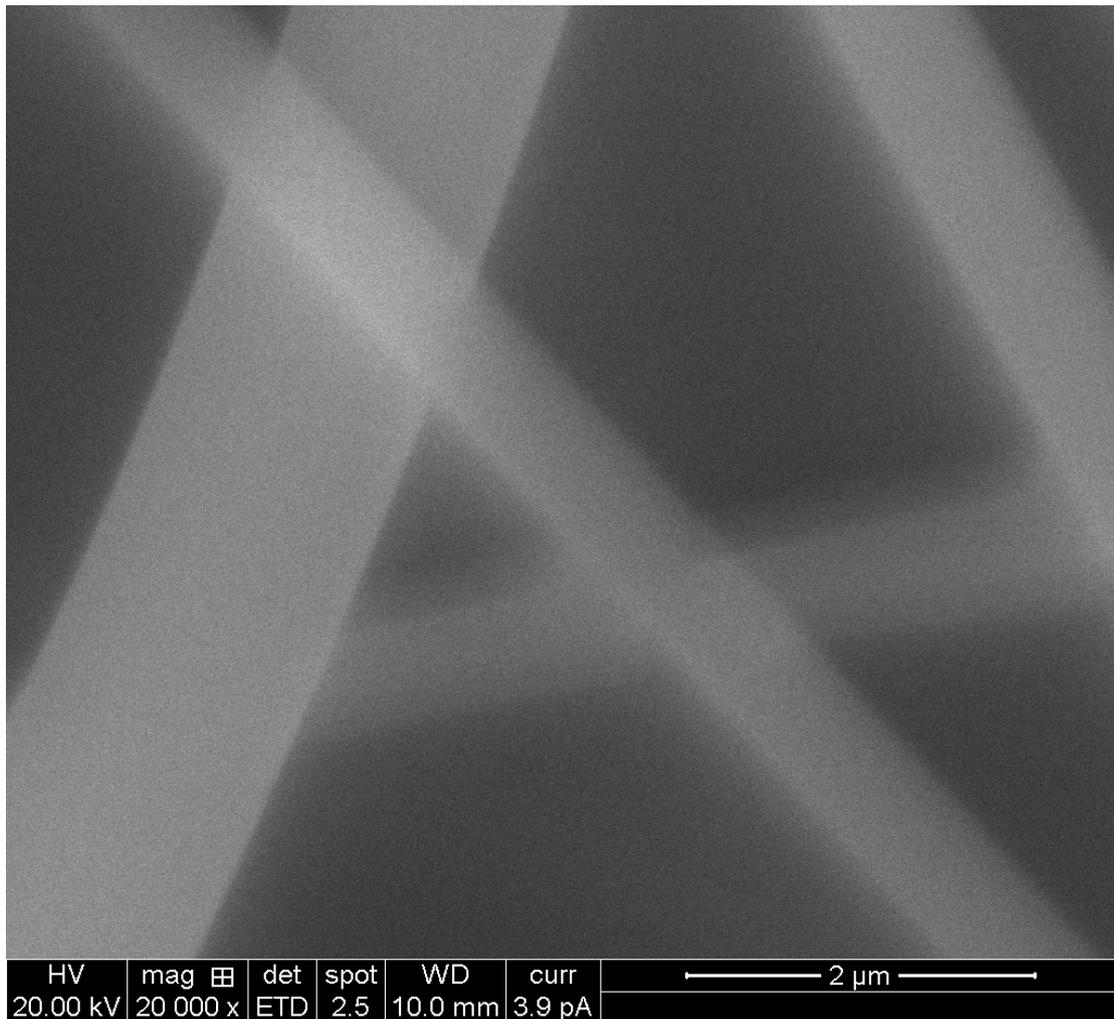


Figure S1. The SEM of nanofibrous scaffolds after gentle rinsing and dehydration.

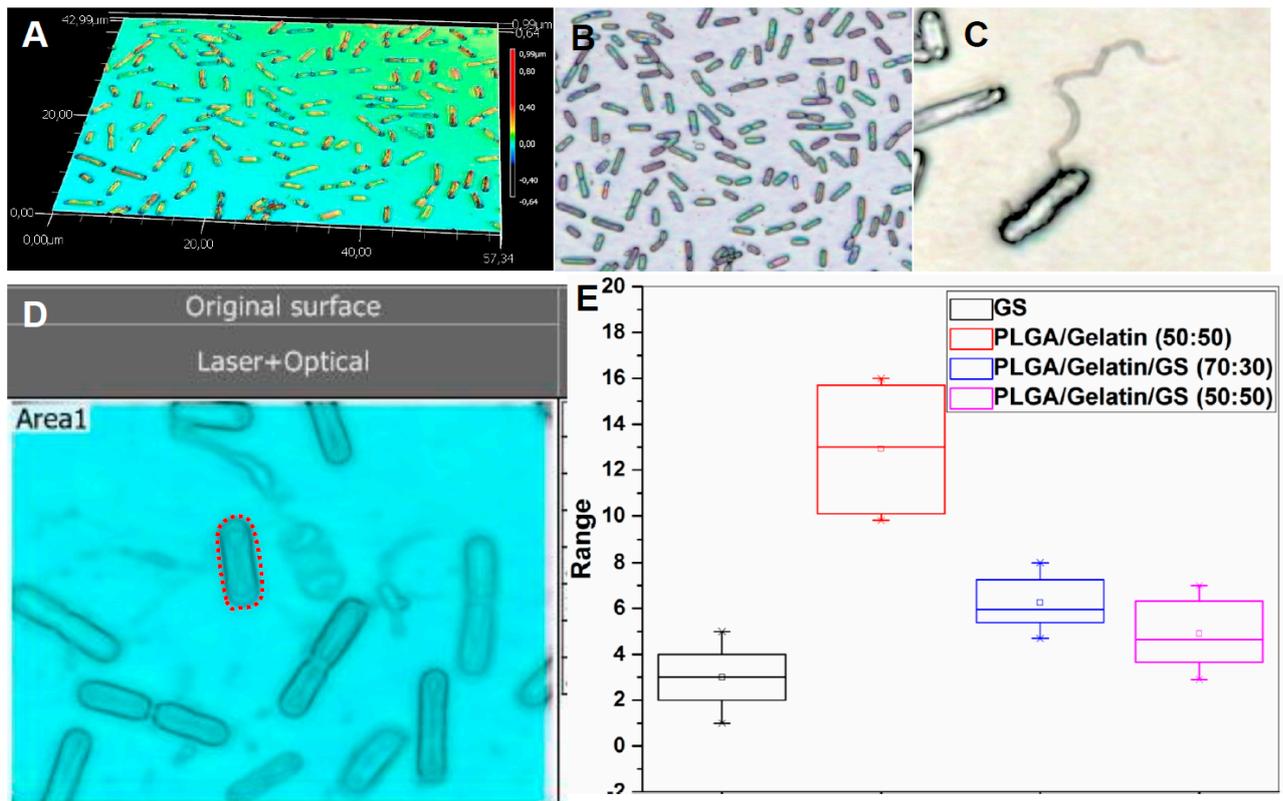


Figure S2. Quantitative analysis of bacterial biovolume on nanofibrous scaffolds. (A-B) 3D height map and optical micrograph of control bacterial cells showing normal morphology and flagella (C). (D-E) Example of extracting individual bacterial biovolume from the optical images (cells shown in dotted red line in D as an example) to quantify the biovolume of bacteria on different surfaces.