

Supplementary Materials

Electrospun Fibers Loaded with Pirfenidone: An Innovative Approach for Scar Modulation in Complex Wounds

Erika Maria Tottoli ¹, Laura Benedetti ^{2,3}, Federica Riva ⁴, Enrica Chiesa ¹, Silvia Pisani ¹, Giovanna Bruni ⁵, Ida Genta ^{1,3}, Bice Conti ^{1,3}, Gabriele Ceccarelli ^{2,3} and Rossella Dorati ^{1,*}

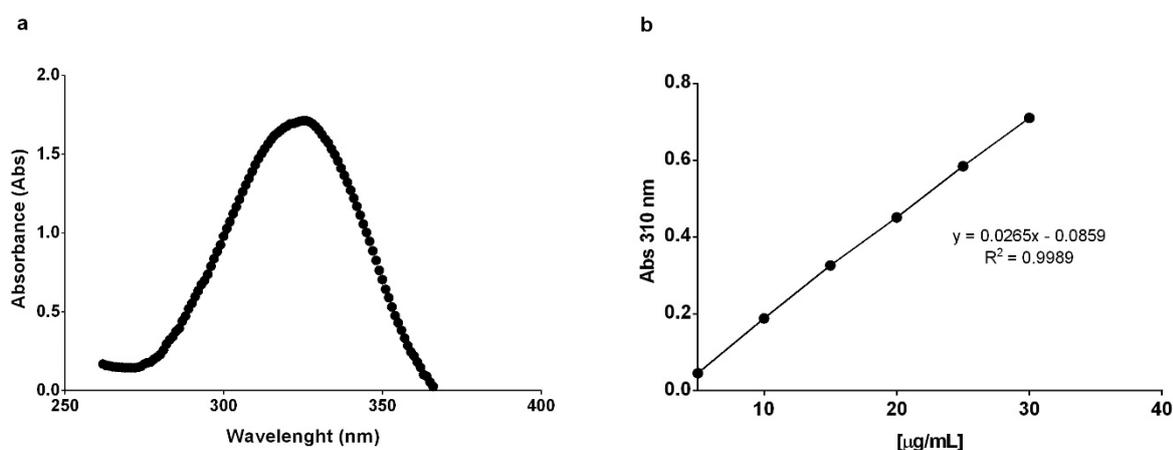


Figure S1. UV-Vis spectrum of Pirfenidone standard solution in PBS 1 X pH 7.4 (20.0 $\mu\text{g/mL}$) (a). Pirfenidone UV-Vis calibration curve at different concentration (5–30 $\mu\text{g/mL}$) measured at 310 nm (b). Standard deviations are not noticeable as <0.01 , plot b.

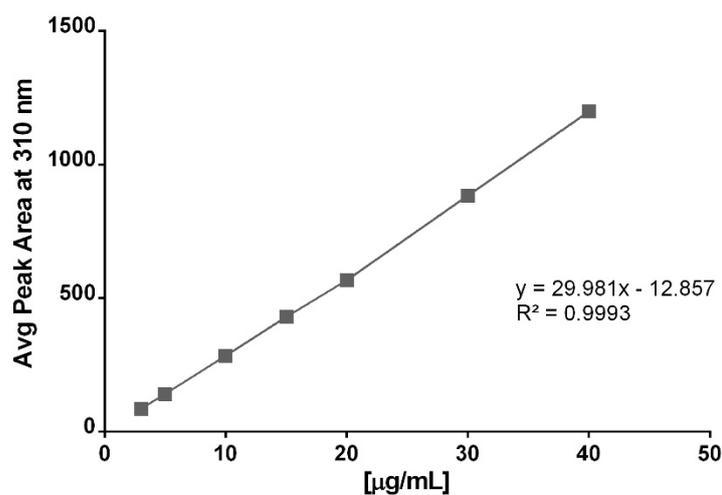


Figure S2. Calibration curve of PF solutions of different concentrations (3.0–40 $\mu\text{g/mL}$) measured at 310 nm at 25°C. Standard deviations are not noticeable as <5.00 .

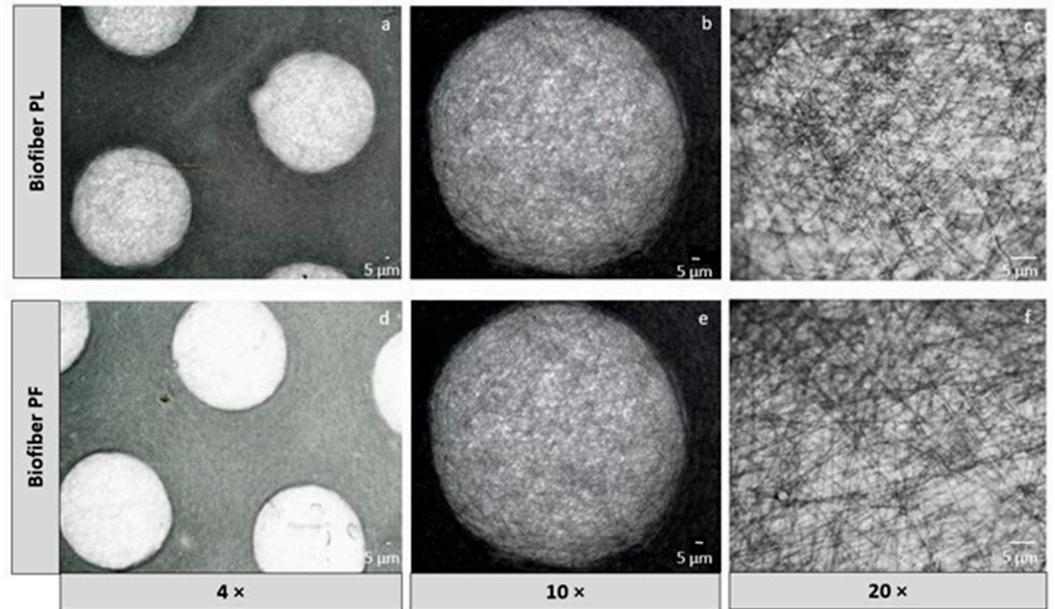


Figure S3. Optical microscope images at different magnifications (4, 20 and 20 ×) of placebo (Biofiber PL, a-c), and advanced medicated dressing loaded with Pirfenidone 1.5% w/w (Biofiber PF, d-f).

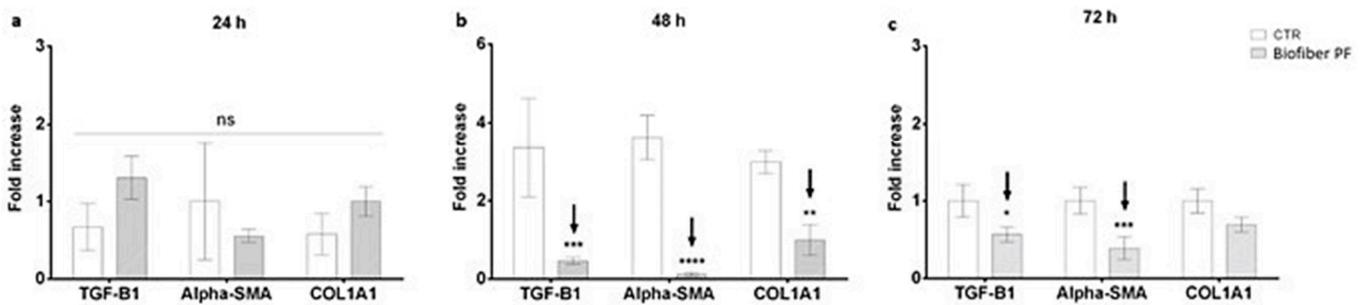


Figure S4. Gene expression analysis of HSF treated with Biofiber for 24, 48 and 72 h. (a) qRT-PCR at 24 h. (b) qRT-PCR at 48 h. (c) qRT-PCR at 72 h. Results are normalized to the housekeeping gene (Glyceraldehyde-3-Phosphate Dehydrogenase (GAPDH)). Statistically significant values are indicated as * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$. Analysis of variance test was performed to evaluate data significance.