A bacterial cellulose-based multifunctional wound dressing as a new form of photodynamic therapy

(Supporting information)

Phototoxicity towards L929 cell line was executed as described in this study. The experiments were divided into a light group and dark group. All the materials were separated into five groups: BC, BCC_{60}-005, BCC_{60}-010, BCC_{60}-050 and BCC_{60}-100. Each group had six parallel samples. In detail, L929 cells (Cell Bank of the Chinese Academy of Sciences, Shanghai, China) were propagated in 1640 culture medium (Gibco, USA) with 10% fetal bovine serum (FBS, Life Technologies, Gibco, USA). The BC and BCC_{60} composites were placed in 24-well plates after being sterilized in an autoclave (HIYAMAMA HVA-110, Japan). Then the L929 cells were seeded on the composites at a density of 3.0×10^5 cells/well and inoculated for 1 d at 37°C in an incubator with 5% CO_2. During inoculation, white light was irradiated on the light group for 1 h, while the dark group remained in the dark. At the determined time points, the CCK-8 working solution (1640: CCK-8=10:1) was added to each sample and incubated at 37°C for 1 h. Subsequently, the supernatant medium was extracted, and the absorbance of the CCK-8 working solution was measured at 450 nm using a microplate reader (Thermo 3001, USA).

Figure S1. Cell proliferation behavior of L929 cells seeded on the BC and BCC_{60} composites.