Supporting Information

Intradermal administration of green synthesized nanosilvers (NSs) through film-coated PEGDA microneedles for potential antibacterial applications

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Fig. S1 Long-term stability of green synthesized NSs under physiological conditions, evaluated by monitoring the hydrodynamic size in PBS, FBS (10%) and DMEM (with 10% FBS) for seven days.



Fig. S2 UV-vis-NIR absorption spectrum of SF dispersion.



Fig. S3 Stereoscopic microscopy of (a-b) PEGDA microneedles and (c-d) PEGDA@film-NSs microneedles (scale bar: 500 μm).



Fig. S4 Mouse skin after being applied with PEGDA@film-RhB microneedles. (a) Photograph of Kumming (KM) mouse with back hair shaved (red rectangular enclosed area representing the microneedle administration site); (b) layer-by-layer scanning and reconstructed 3D images of an excised mouse skin after applying PEGDA@film-RhB microneedles for 2 min (scale bar: 200 μ m); (c) skin recovery over time upon the removal of microneedle patch (scale bar: 2 mm).