## **Supplementary Information for**

## **ORIGINAL ARTICLE**

Transdermal delivery of Chinese herbal medicine extracts using dissolvable microneedles for hypertrophic scar treatment

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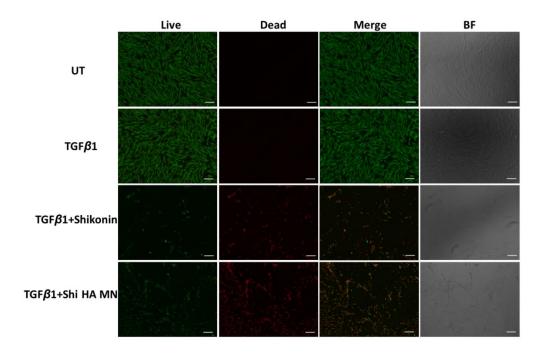
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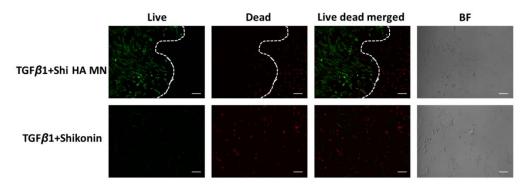
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**Figure S1** Microscopic fluorescence (Live/Dead staining) and BF images of HSF treated by different groups after 48 h of incubation. Scale bar:  $200 \, \mu m$ .



**Figure S2** Live dead staining of HSFs at corner region after 48 h treatment by Shikonin HA MN or Shikonin solution. The image taken for the Shikonin HA MNs group showed a boundary between viable and dead cells (white dashed line), indicating a localizing killing effect of the MNs. Scale bar: 200 μm.

**Table S1** Primers used in RT-qPCR.

Gene	Primer sequences: forward (F) & reverse (R)
TGFβ1	F: 5'-GTACCTGAACCCGTGTTGCT-3'
	R: 5'-GAACCCGTTGATGTCCACTT-3'

FAP-α	F: 5'-CGGCCCAGGCATCCCCATTT-3'
	R: 5'-CACTCTGACTGCAGGGACCACC-3'
COL1A1	F: 5'-GAGGGCCAAGACGAAGACATC-3'
	R: 5'-CAGATCACGTCATCGCACAAC-3'