

Electronic Supplementary Information

A mechanically tough and ultra-swellable microneedle for acute gouty arthritis

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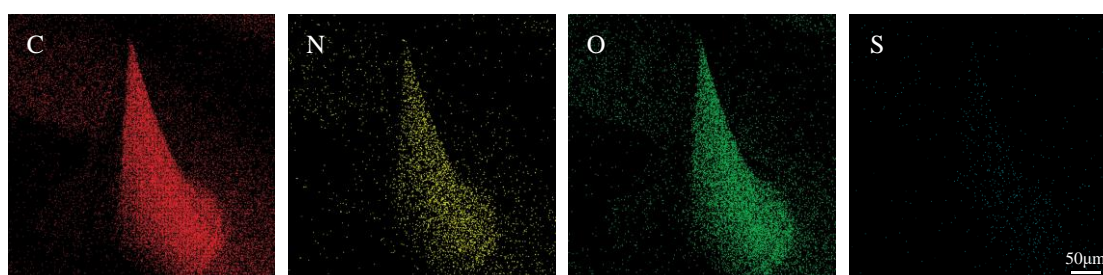


Fig. S1 The element mappings of the HMNs.

Table S1 HMNs samples of different contents.

Sample	AM (wt%)	BACA (wt‰)	Irgacure 2959 (wt‰)
H1	8.33	1.67	1.67
H2	16.67	1.67	1.67
H3	33.33	1.67	1.67
H4	16.67	1.67	8.33
H5	16.67	3.33	8.33
H6	16.67	6.67	8.33
H7	16.67	3.33	1.67
H8	16.67	3.33	8.33
H9	16.67	3.33	16.67

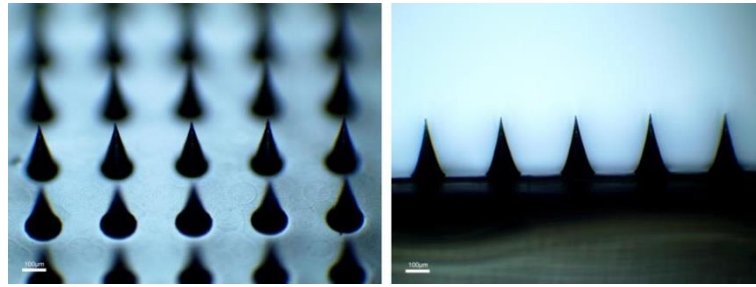


Fig. S5 Microscopic images of Col-HMNs. scale bar: 100 μm .

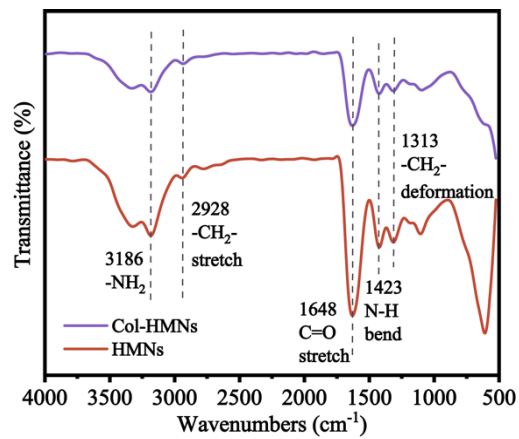


Fig. S6 FTIR spectra of HMN and Col-HMNs.

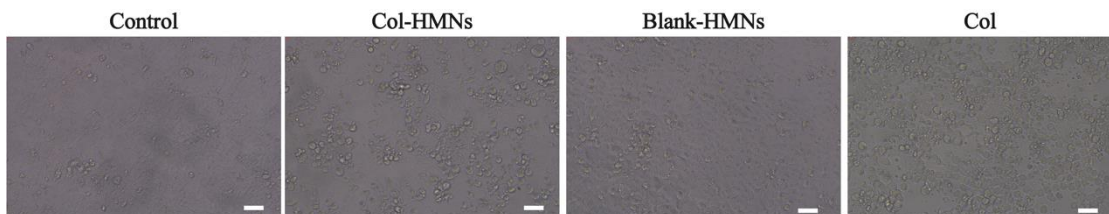


Fig. S7 Microscopic images of different groups of cells in cytotoxicity experiments; scale bar: 200 μm .



Fig. S8 Feet images of rats treated with Col-HMNs and i.g. Col.