

Electronic Supplementary Information (ESI)

Microneedles-assisted Percutaneous Delivery of Methotrexate-loaded Nanoparticles Enabling Sustained Anti-inflammatory Effects in Psoriasis Therapy

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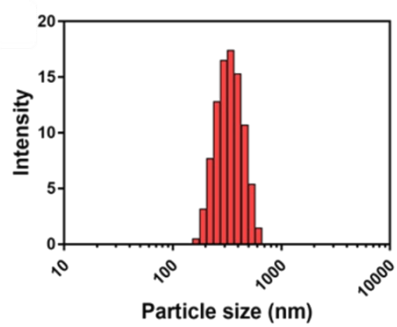


Figure S1. Particle size distribution of MTX@HMSN/CS.

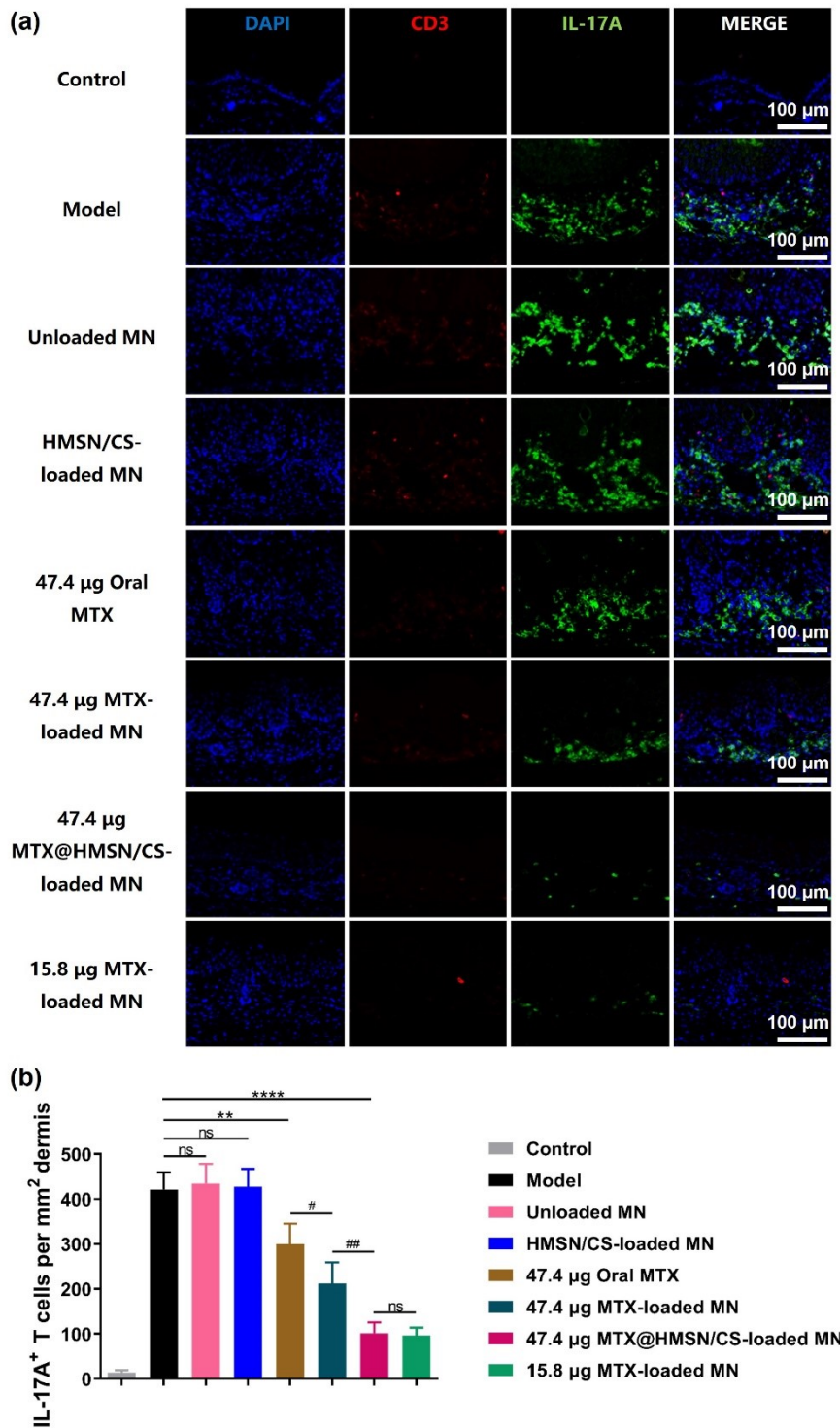


Figure S2. *In vivo* anti-inflammatory effects of MTX@HMSN/CS-loaded MNs. (a) CD3 and IL-17A immunofluorescent staining of mice left ear skin sections on day 10. The scale bars in the last images can be applied to the others in the same line. (b) Quantitative analysis of the counts of IL-17A⁺ T cells in mice left ear skin on day 10. Data are presented as the mean \pm SD (n=5) (ns, $p > 0.05$; **, $p < 0.01$; ****, $p < 0.0001$; #, $p < 0.05$; ##, $p < 0.01$).

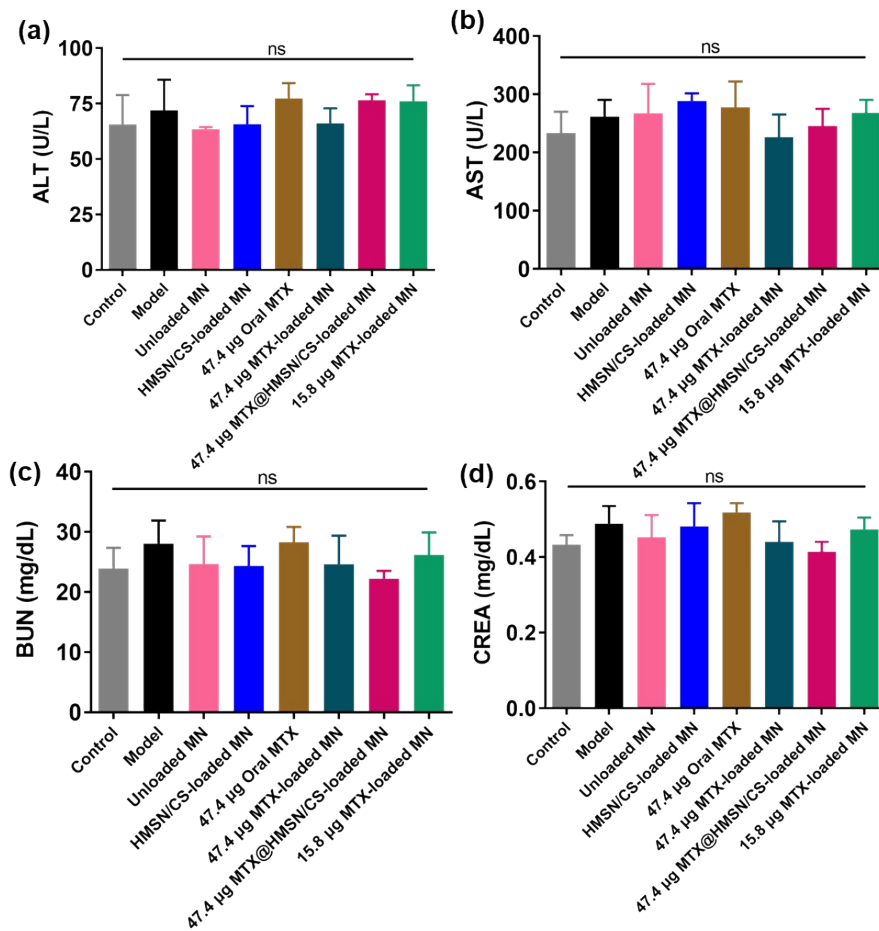


Figure S3. Safety evaluation of MTX@HMSN/CS-loaded MNs. Liver and renal function tests of mice in different groups. Serum levels of (a) ALT, (b) AST, (c) BUN, and (d) CREA. Data are presented as the mean \pm SD (n=5) (ns, $p > 0.05$).