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Supporting Information For

Non-Invasive Transdermal Delivery of Peptide Inhibitors of IL-23/IL-17 Axis by Novel Ionic Liquids Biomaterials for Psoriasis Treatment

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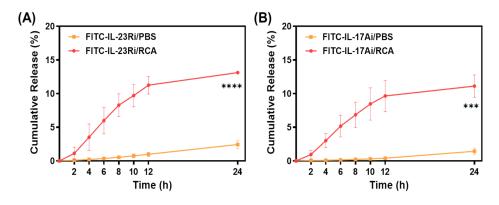


Figure S1. 24-hour cumulative penetration rate of FITC-IL-23Ri (A) and FITC-IL-17Ai (B). (Mean \pm SD \cdot n = 3)

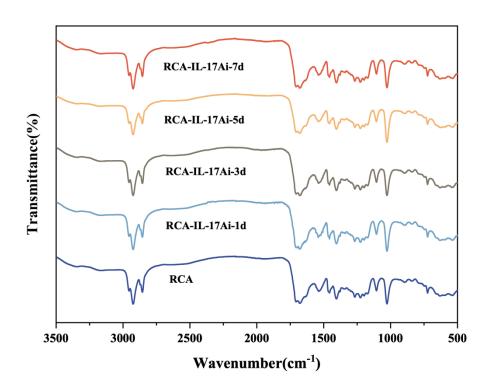


Figure S2. FT-IR spectrum of ionic liquids RCA loaded with IL-17Ai.

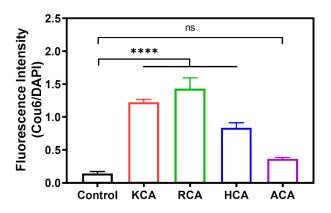


Figure S3. Fluorescence intensity ratio (Green/Blue) of Control, KCA, RCA, HCA, ACA.

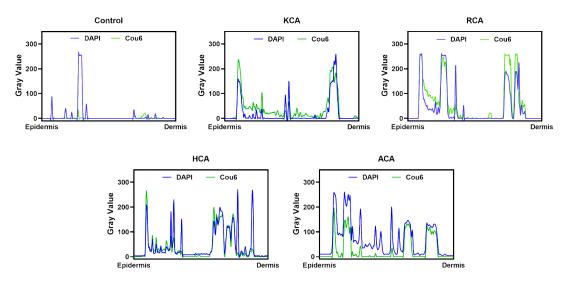


Figure S4. Fluorescence intensity of Cou6 and DAPI between the epidermis and the dermis of the skin treated by Control, KCA, RCA, HCA, ACA.

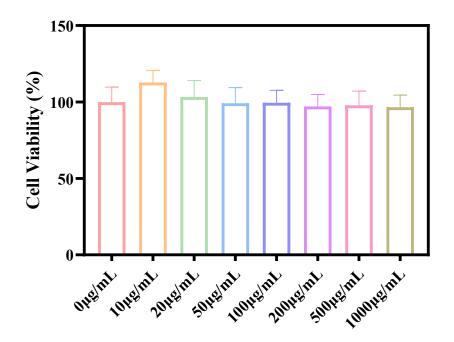


Figure S5. The relative cell viability of the cells after co-incubation with RCA for 24 hours. (Mean \pm SD, n = 6)

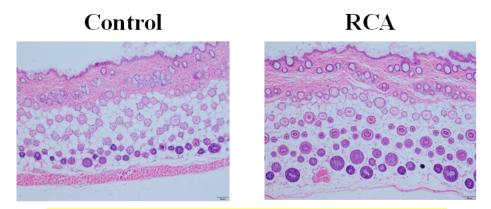


Figure S6. H&E staining of skin from mice of control and RCA group.

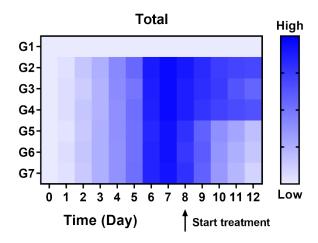


Figure S7. Total PASI scores of psoriatic skin after the treatment.

 $G1:Control\ ;\ G2:IMQ\ Model\ ;\ G3:IL-23Ri\&IL-17Ai/PBS\ ;\ G4:RCA\ ;\ G5:IL-23Ri\&IL-17Ai/RCA$

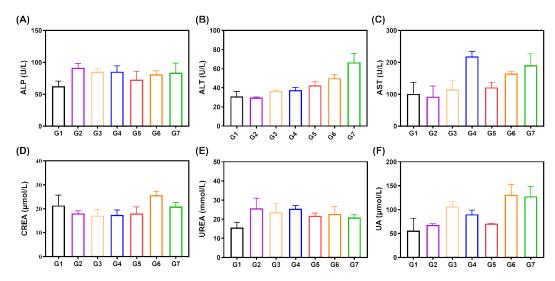


Figure S8. ALP, ALT, AST, CREA, UREA, and UA levels in mouse serum after treatment. G1: Control; G2: IMQ Model; G3: IL-23Ri&IL-17Ai/PBS; G4: RCA; G5: IL-23Ri&IL-17Ai/RCA; G6: IL-17Ai/RCA; G7: IL-23Ri&IL-17Ai/RCA