CD44 assists topical anti-psoriatic efficacy of curcumin-loaded hyaluronan-modified ethosomes: a new strategy for clustering drug in inflammatory skin

Yongtai Zhang[1], Qing Xia[1], Yanyan Li[1], Zehui He[1], Zhe Li, Teng Guo, Zhonghua Wu, Nianping Feng *

Department of Pharmaceutical Sciences, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China

* Corresponding author

E-mail addresses: npfeng@hotmail.com; npfeng@shutcm.edu.cn

[1] Authors contributed equally to this work

Supplementary Figure Legends

Fig. S1 FT-IR spectra of hyaluronic acid (HA), dioleoyl phosphoethanolamine (DOPE), and HA- conjugated DOPE (HA-DOPE).

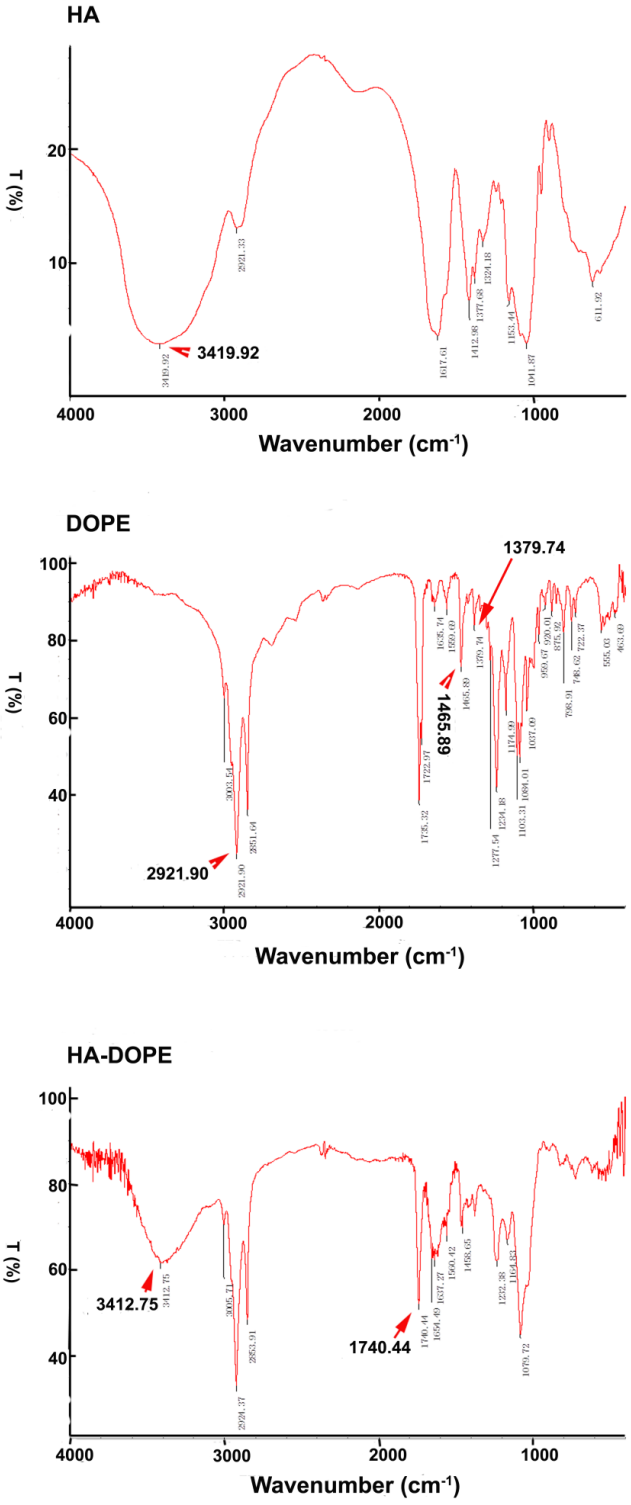

Fig. S2 Increase in mouse ear thickness after treatment with the various formulations (n = 6). Compared with model control, **p < 0.01, ***p < 0.001; HA-ES and ES compared with PGS, $^{\triangle\triangle\triangle}$p < 0.001; HA-ES compared with ES, $^{\emptyset}$p < 0.05. Normal, mice treated without any formulations; Model, treated with IMQ only; HA, hyaluronic acid; HA-ES, curcumin-loaded HA-modified ethosomes; HA-ES-empty, HA-ES without curcumin; ES, curcumin-loaded ethosomes; PGS, curcumin 25% propylene glycol solution; IMQ, imiquimod ointment; CP, clobetasol propionate cream.