

ABSTRACT

Disclosed herein are methods for treatment of a skin disorders using pharmaceutical compositions that reduces the expression of and/or inhibit the activity of various genes including chemokine (C-X-C motif) ligands such as CXCL13 and matrix-metalloproteinases such as MMP12 and MMP13. The pharmaceutical compositions effectively act on epidermal differentiation and proliferation as well as on innate and adaptive immune cells in pathogenesis of skin disorders such as acne.

(No figure)