Prevention of acne scars: clinical evidence for fixed dose combination adapalene/benzoyl peroxide gel

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Acne scar severity correlates with the acne grade and with delay to effective treatment. Acne scarring is a common concern amongst acne patients. Despite the availability of effective treatments for primary acne lesions, the evidence for efficacy on scar prevention is not well established. Atrophic acne scars are associated with a loss of dermal matrix via degradation of collagen, induced by inflammation that occurs during acne lesion formation. The objective of this study was to evaluate the effect of Adapalene-Benzoyl peroxide fixed-dose combination (Adapalene-BPO) compared to its vehicle on the prevention of secondary acne lesions and/or on the treatment of pre-existing secondary lesions. This was an exploratory, multi-center, randomized, investigator-blinded, vehicle-controlled study using intra-individual comparison (right versus left side of face) for a 6-month treatment period during which Adapalene/BPO gel or vehicle were applied on each half-face, once a day, between 5 to 7 days per week. The majority of randomized patients were male, Caucasian and had a skin phototype of II or III, the mean age was 23.4 years. There was no difference in baseline acne or scar characteristics between each half face. Adapalene/BPO was found to be more effective than vehicle at improving the global acne scar severity and mitigated development of more scars. In conclusion, adapalene/BPO effectively reduces the number of primary lesions, mitigates against development of more atrophic scars and improves global acne scar severity.