



ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

EFFICACY OF AEROGEL BASED FORMULA FOR ACNE AND OILY SKIN

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Introduction: Acne vulgaris is a multifaceted skin disorder. Non-pharmacological therapies can be viable alternatives for patients who suffer from mild-to-moderate acne. Aerogel (INCI name Silica Silylate) is an innovative ingredient with light scattering properties and in vivo mattifying efficacy with much higher amplitude than known ingredients (Talc and Perlite).

Objective: To investigate if Aerogel used daily for sebum control at skin surface could lead to an anti-acne efficacy.

Materials and Methods: In a randomized, placebo controlled, double blind clinical study, the efficacy of topical Aerogel 2% was evaluated on the skin of 120 Indian volunteers. At the inclusion, the volunteers should have more than 8 non-inflammatory lesions and more than 5 inflammatory lesions on each hemi face. The efficacy on the reduction of skin oiliness and acne was evaluated after 1, 2 and 3 months of treatment using clinical grading and instrumental techniques.

Results: Interestingly, a statistically significant decrease of 5 non-inflammatory acne lesions / hemi face was found in favor of Aerogel 2% as compared to Placebo ($p < 0.001$) after 2 and 3 months of applications. A statistically significant effect on the reduction of clinical grading's of oily touch and sebum casual level measurements was also observed for Aerogel 2% when compared to Placebo ($p < 0.001$).

The results of the sebum analysis showed that both Aerogel 2% and Placebo decreased the squalene and squalene peroxide, which could explain the reduction of inflammatory acne lesions observed for both formulae versus initial time. No difference between treatments was observed for bacterial and Malassezia load and diversity indicating no anti-microbial properties.

Conclusion: This study shows that the long-term efficacy of Aerogel 2% in the reduction of skin oiliness and non-inflammatory acne lesions is likely due to its daily sebum control. These findings open a new technical pathway for an adjuvant treatment of acne prone skin.

