



GLOBAL SKIN HEALTH

CLINICAL OBSERVATION ON EFFICACY OF β 1-3 GLUCAN REPAIR FOR SENSITIVE SKIN

Xiaohong Shu⁽¹⁾ - Xi Wang⁽²⁾ - Li Li⁽²⁾

West China Hospital, Sichuan University, Cosmetics Evaluation Center, Chengdu, China⁽¹⁾
- West China Hospital, Sichuan University, Department Of Dermatology, Chengdu, China⁽²⁾

Background: Sensitive skin is a condition of subjective cutaneous hyperreactivity defined by the occurrence of discomforting state (stinging, redness, dryness, and burning sensation) in response to the external stimulating factors.

Objective: To evaluate the clinical efficacy and safety of β 1-3 glucan in repairing sensitive skins.

Methods: Female subjects aged between 20–50 years with sensitive skin, verified by a positive reaction on the lactic acid stinging test at screening, were included and observed in the study. Subjects applied the β 1-3 glucan to the face twice daily for 4 weeks. Evaluations were performed at baseline, 14 days and 28 days. Efficacy was evaluated using clinical evaluation, subject self-assessment questionnaires, lactic sting test and instrumental test methods. Data were then analyzed statistically.

Results: In total, 31 subjects initiated and completed the study. Results showed that β 1-3 glucan provided a statistically significant improvement in clinical grading scores for dryness, smoothness, tenderness and glossiness at 14 days and 28 days compared to baseline. In addition, after two and four weeks of using test product, the transepithelial water loss (TEWL) were significantly lower than baseline ($p < 0.05$). The stratum corneum hydration of subjects after using for two and four weeks were significantly higher than baseline ($p < 0.05$). The total sensory score of lactic acid test of subjects after using product for four weeks were significantly decreased. ($p < 0.05$). More than 80% of subjects agreed that the test product kept their skin moisturizing, protecting skin, preventing sensitivity, leaving their skin soft, relieving skin, repairing skin damage and no stimulation after 14 days and 28 days using.

Conclusion: This study confirmed the effectiveness and tolerance of the β 1-3 glucan in subjects with sensitive skin.

