

A NOVEL ECOBIOLOGICAL DERMO-COSMETIC PRODUCT IN WOUND HEALING AND SCAR MANAGEMENT

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INTRODUCTION & OBJECTIVE

Scar management is a crucial dermatological issue in the context of a significant increase of aesthetic procedures in the last decade. Applying an adapted cream after dermatological interventions accelerates healing, avoids post-inflammatory pigmentation and improves its quality. In addition, it reduces pain, burning and pruritus. The aim of the study was to evaluate the safety and efficacy of a new soothing and repairing dermo-cosmetic product formulated in accordance with the ecobiological approach. Ecobiology considers the skin as a living ecosystem interfacing with its environment and preserving its natural biology to act lastingly.

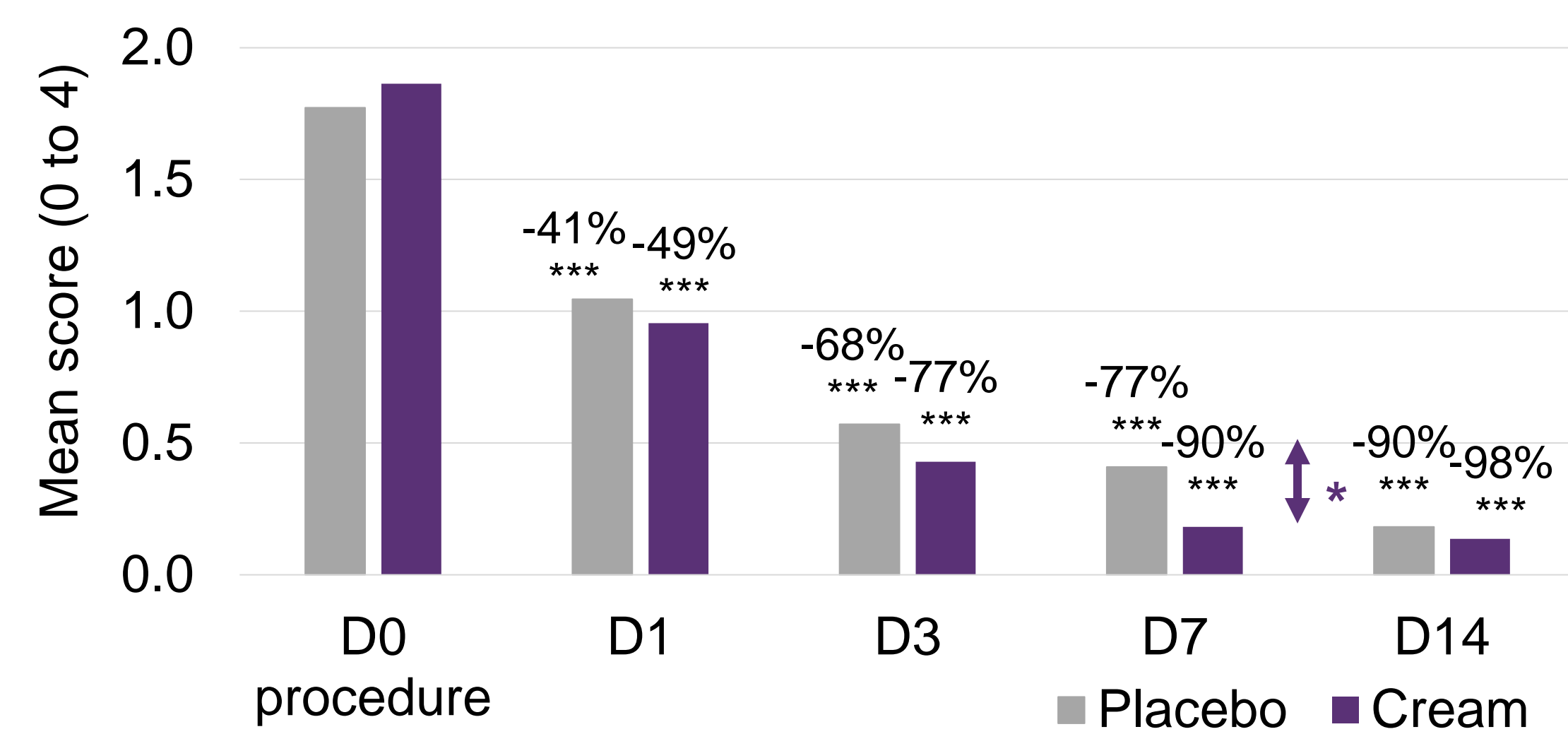
MATERIALS & METHODS

Two clinical studies (1 randomized split face and 1 opened study in real life) were performed with the cream application twice daily for 14 days. In the first study, 22 subjects (mean age 36) underwent a 70% glycolic acid peeling procedure vs placebo in one of the half-face. The global wound score (0 to 12) was constituted of 3 sub scores: intensity of inflammation (redness and oedema, 0 to 4), the scar appearance (post-inflammatory pigmentation, sequellar telangiectasis, crusts, residual redness and desquamation, 0 to 4) and the presence of functional signs (pruritus and pain, 0 to 4) evaluated by the dermatologist. Instrumental assessments (pH, illustrative photos) were also performed. The second study, a non-comparative true-life study on 35 subjects (mean age 32), was based on the massage of post-surgical scars with the cream and evaluated by global assessments (5-point scale, Vancouver Scar Scale [VSS]), skin colorimetry (chromameter) and scar thickness (ultrasound system).

RESULTS

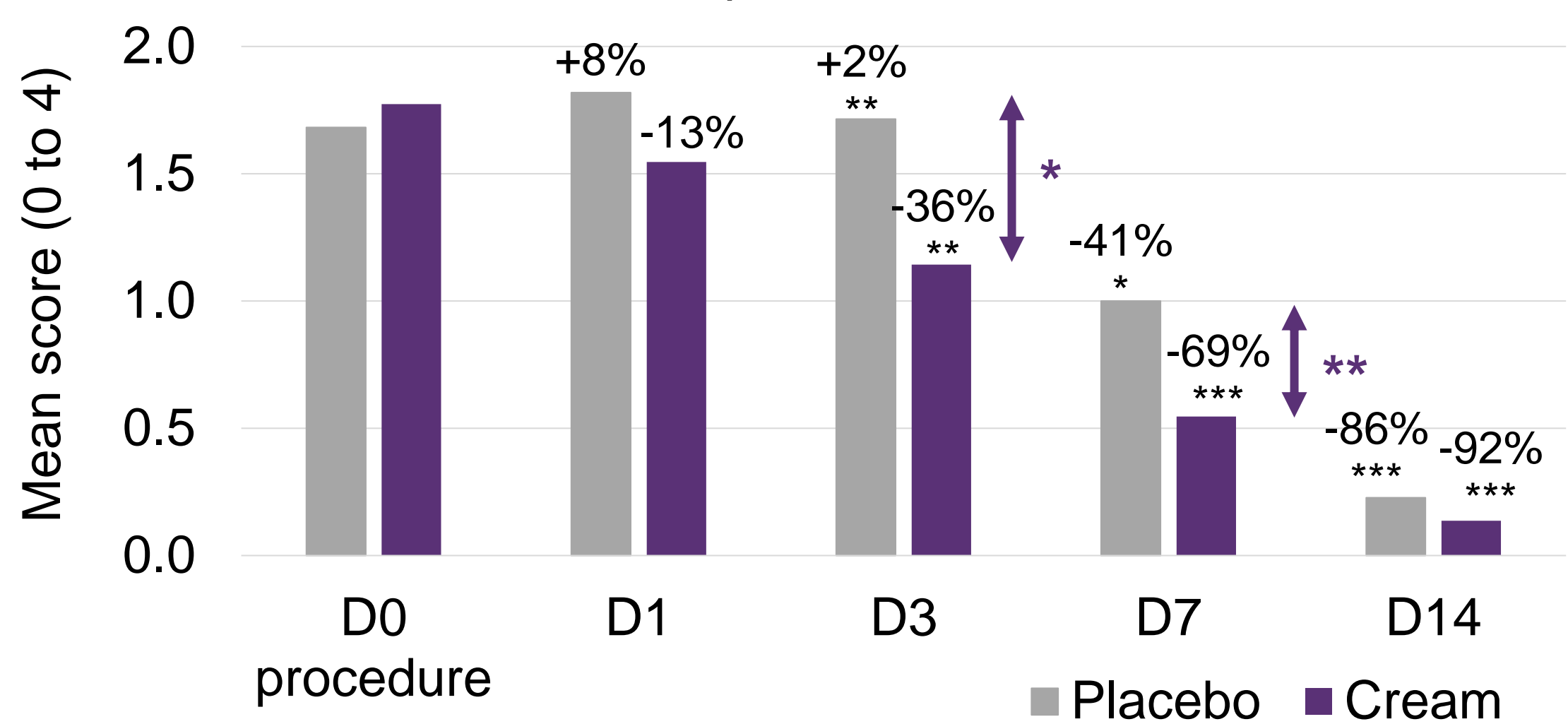
Split face clinical study in post-peeling

Figure 1: Inflammation sub score reduction with the cream vs placebo



*p<0.05, ***p<0.01; **p<0.001; Wilcoxon test

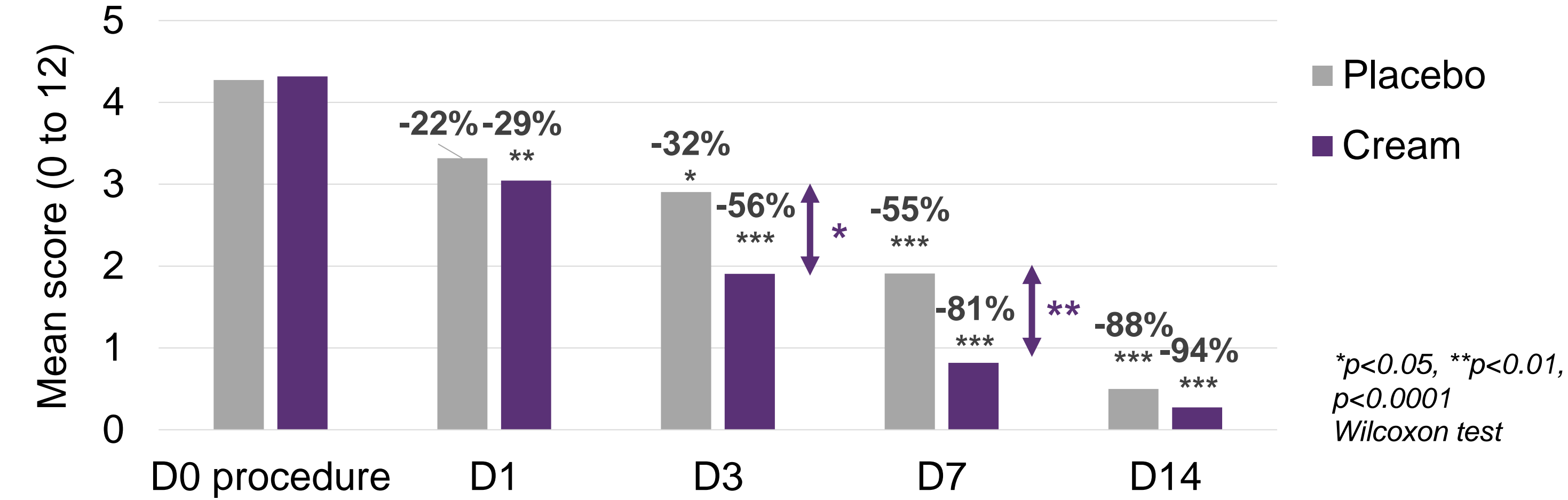
Figure 2: Scar appearance sub score improvement with the cream vs placebo



Both functional signs (pruritus and pain) evaluated had not significantly evolved during the study.

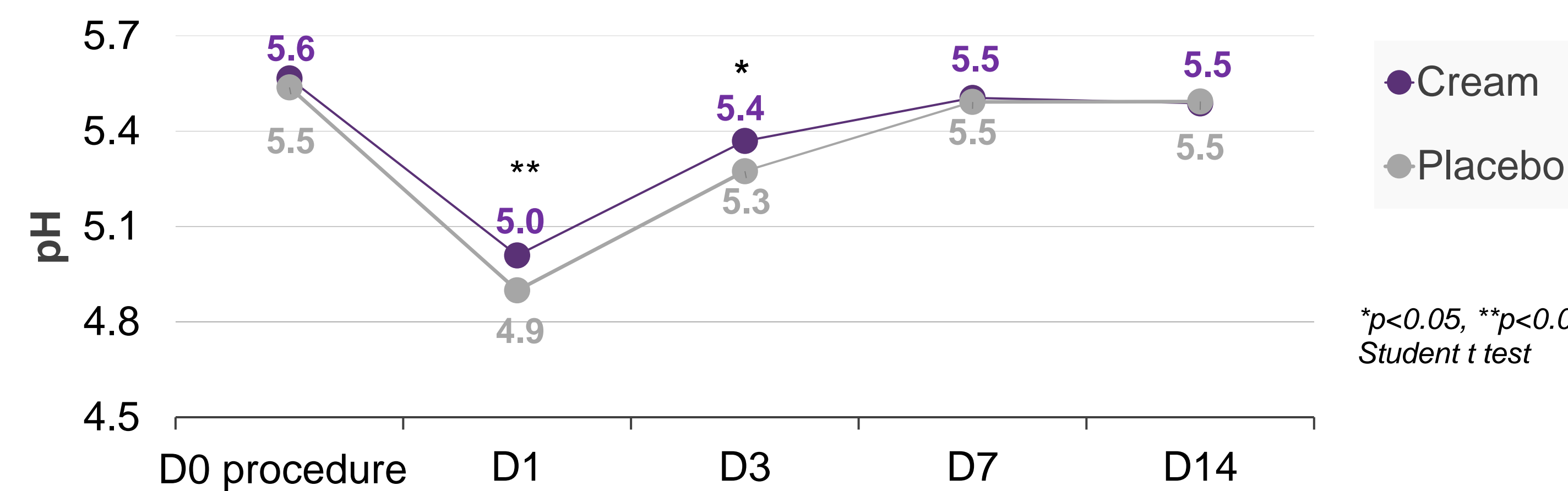
In the 2 clinical studies, the cream was very well tolerated.

Figure 3: Global wound score reduction with the cream vs placebo



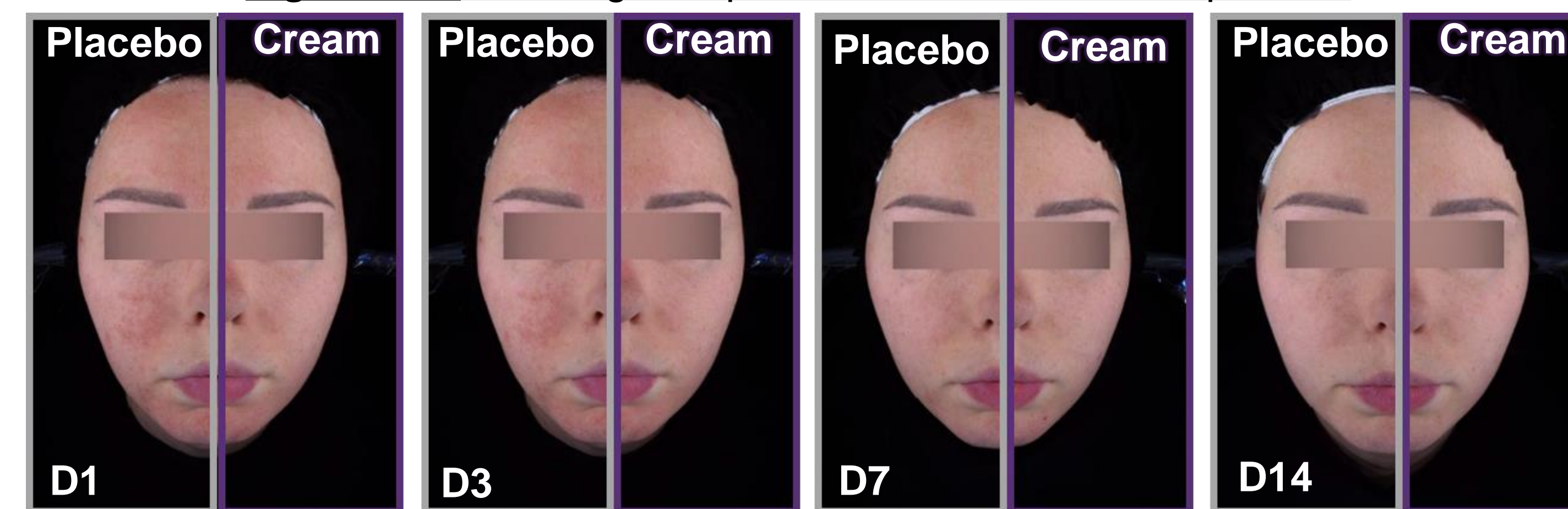
*p<0.05, **p<0.01, p<0.0001 Wilcoxon test

Figure 4: A more physiological pH value with the cream vs placebo



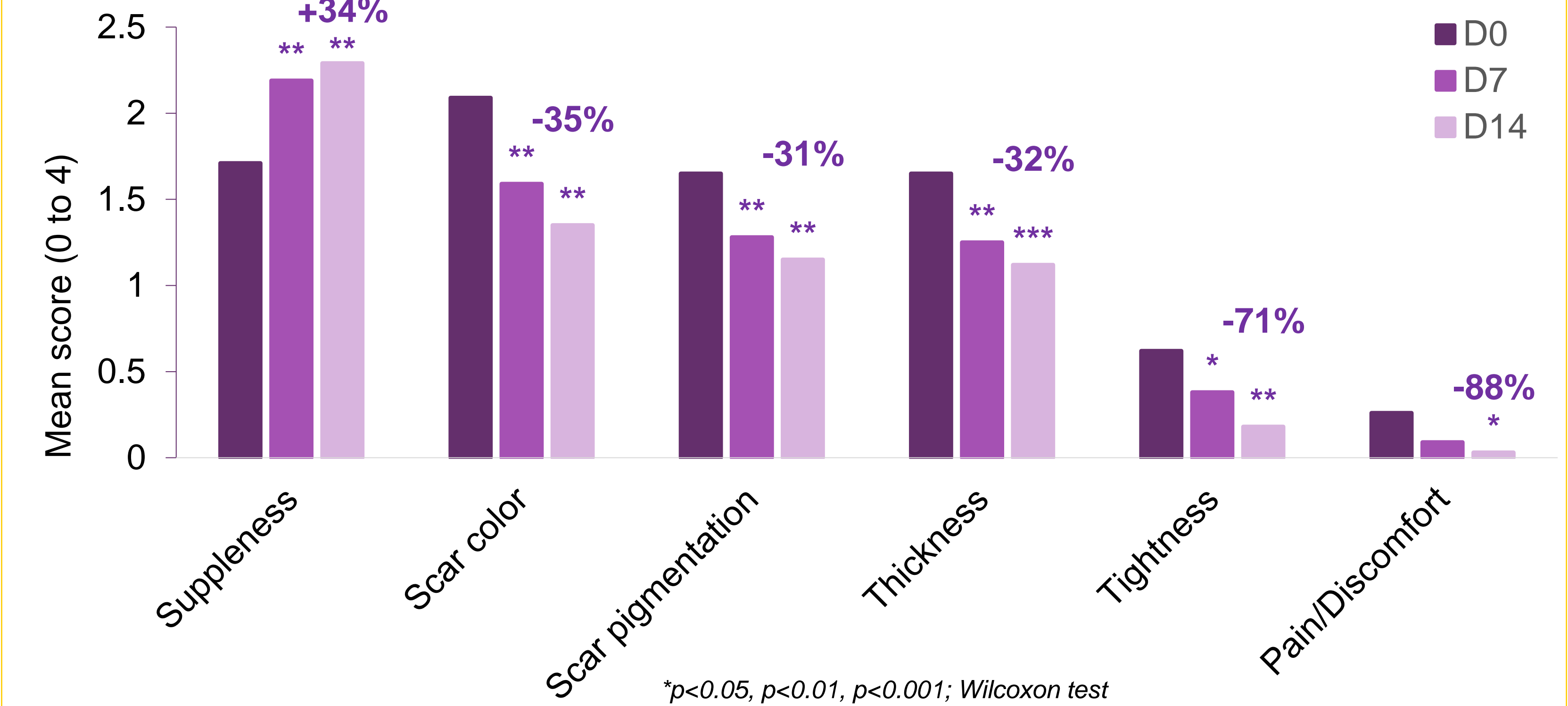
*p<0.05, **p<0.01; Student t test

Figure 5: Clinical signs improvement with cream vs. placebo



Opened clinical study in post-surgery scars in remodeling phase

Figure 6: Clinical scores improvement with the cream



*p<0.05, p<0.01, p<0.001; Wilcoxon test

Figure 7: Vancouver Scar Scale total score improvement with the cream

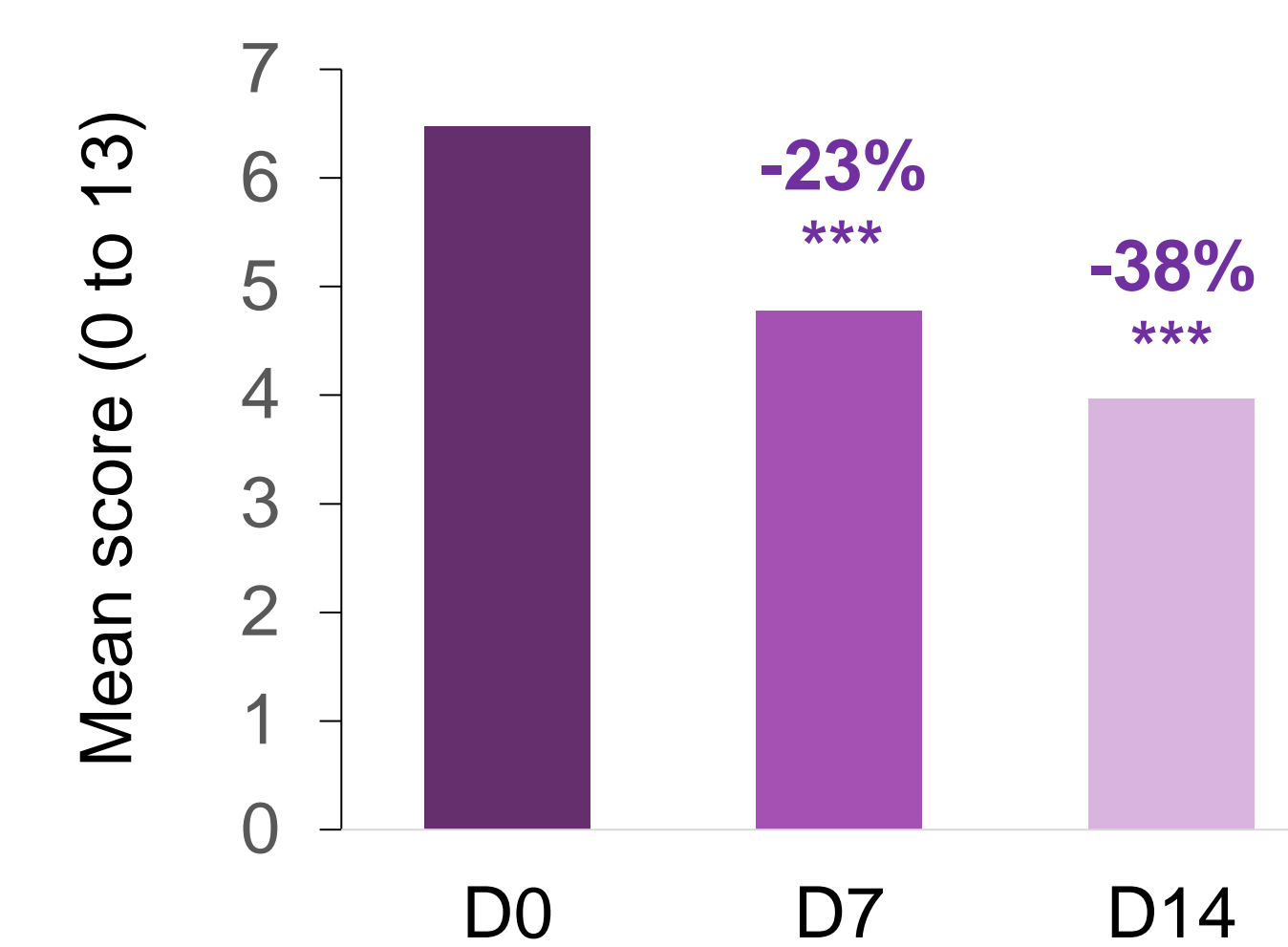
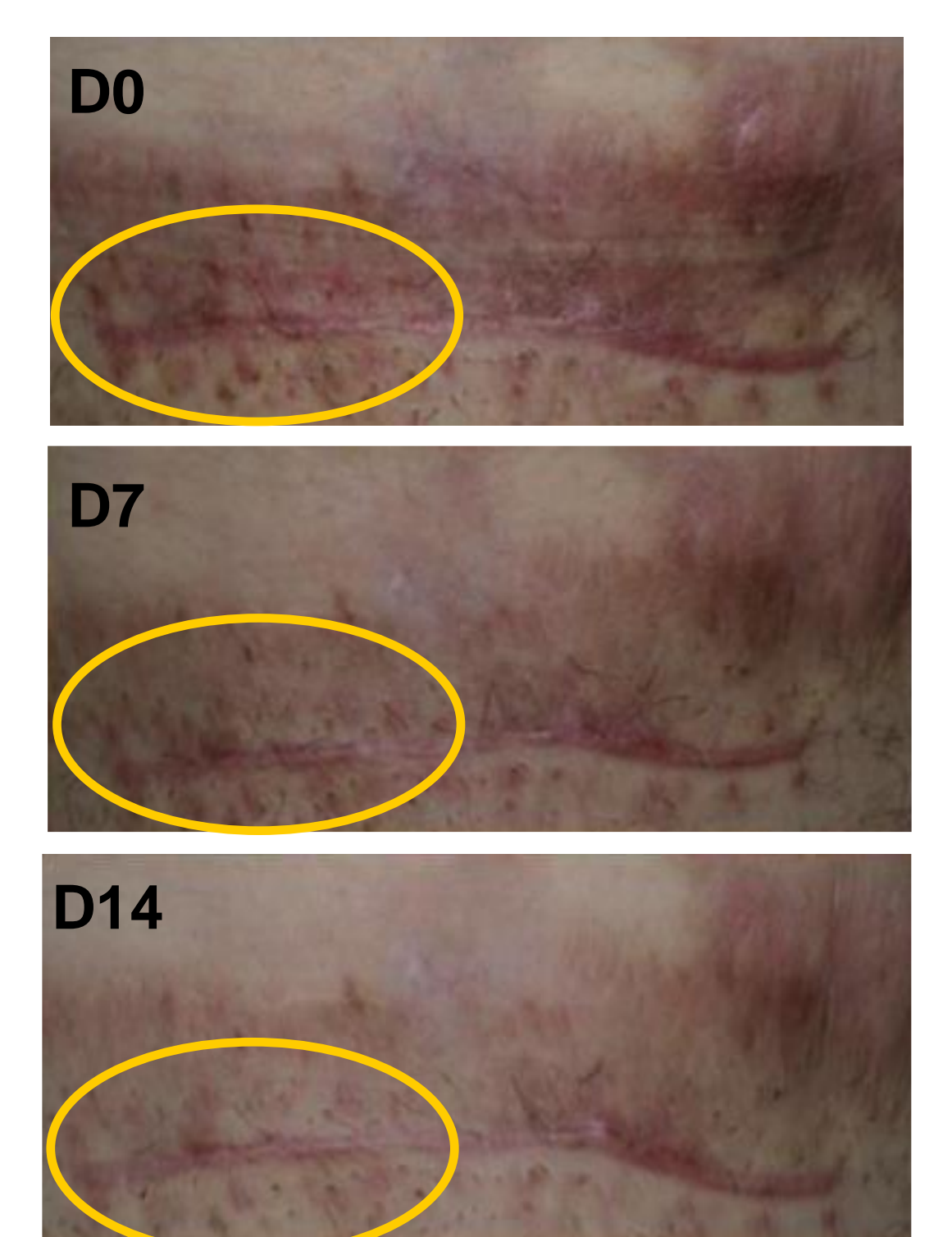


Figure 8: Scar appearance improvement



In addition, at D14 a significant decrease of the skin heterogeneity (-21%), redness (-18%), and post-inflammatory hyperpigmentation (-28%), as well as the scar thickness and depth (-19%) was noticed vs D0.

CONCLUSION

These two clinical studies demonstrate the efficacy of this repair dermo-cosmetic product for rapid, high-quality healing of the skin barrier. It creates ecobiological conditions by favoring the natural process of wound healing in respect of skin ecosystem for a rapid wound healing with no pigmentation nor scar.