

HOW TO GET RID OF DARK SPOTS FAST?

Efficacy and tolerability of a simple skin care regimen combining a serum with Isobutylamid-Thiazolyl-Resorcinol, a potent tyrosinase inhibitor, and a cleanser with Alpha Hydroxy Acids to reduce facial hyperpigmentation

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INTRODUCTION & OBJECTIVES

Facial hyperpigmentation is a major cosmetic concern for those who are affected. While hydroquinone is considered the gold standard treatment, it bears a considerable risk for side effects. Isobutylamido-Thiazolyl-Resorcinol (ITR) is a potent cosmetic tyrosinase inhibitor, reducing melanin production at its source, and has shown promising results in terms of hyperpigmentation reduction without the known side effects of hydroquinone. The aim of this study was to assess if the efficacy of a serum with ITR can be increased when used in combination with a cleanser containing exfoliating Alpha Hydroxy Acids (AHAs) while maintaining excellent tolerability.

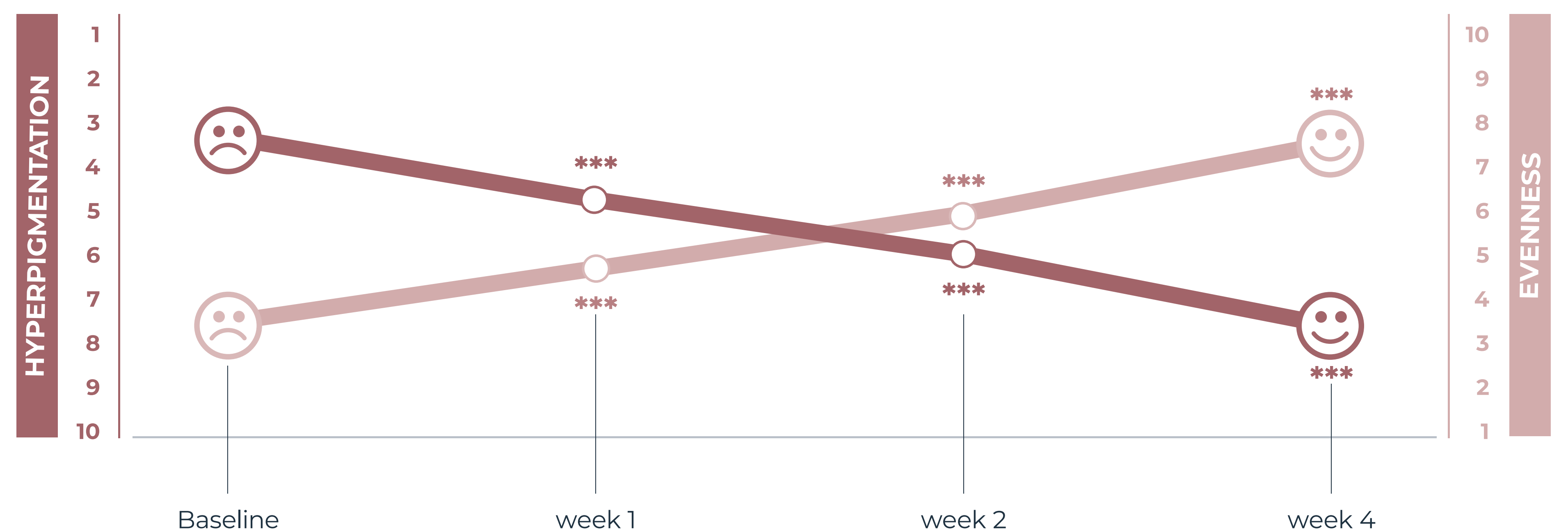
MATERIALS AND METHODS

A monocentric, double blinded, split face, controlled randomized clinical trial was conducted to evaluate the efficacy and tolerability of two simple skin care regimens for the reduction of facial hyperpigmentation. For 4 weeks, participants used a cleansing gel containing 2% AHA (lactic acid & glycolic acid) twice daily on one side of the face. On the other side participants used a standard cleanser with active ingredients only in the evening to remove make-up or sunscreen. Participants furthermore used a serum containing the tyrosinase inhibitor ITR on both sides of the face, followed by a sunscreen with SPF 50+.

Modified Melasma Area and Severity Index (mMASI) and tolerability were assessed by a dermatologists at baseline and after 4 weeks of treatment. Self-grading of hyperpigmentation intensity and skin evenness were conducted by the participants on 10-point scales from 1 (= very strong hyperpigmentation / very uneven skin tone) to 10 (= no hyperpigmentation/very even skin tone) at baseline and after 1, 2 and 4 weeks of treatment.

Hyperpigmentation and evenness of skin tone

Self-grading (mean score)



*** significant improvement compared to baseline; p<0.001

Figure 2: self-grading of hyperpigmentation and evenness of skin tone using AHA-cleanser & and ITR-serum

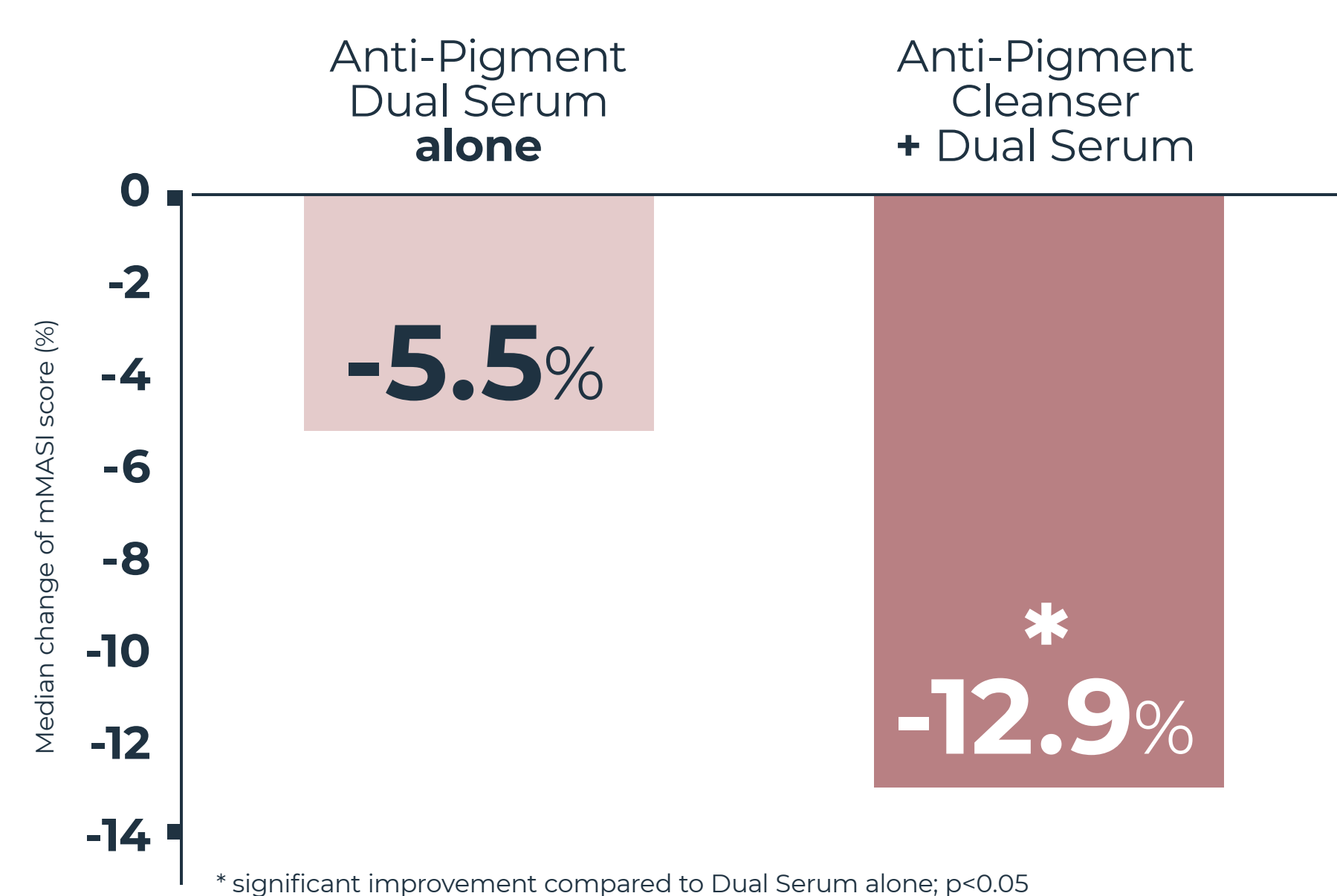


Figure 1: Reduction of mMASI score after 4 weeks of treatment

Changes across time were assessed on both sides using Wilcoxon Signed Rank Test. For mMASI, treatment results on both sides of the face were compared using Wilcoxon Signed Rank Test. The level of significance was set to alpha=0.5 for all analyses.

RESULTS

In total, 64 participants completed the study (97% women, 3% men; mean age: 52 years; Phototypes III-V). No significant differences between the two treatment areas were observed at baseline in any of the examined parameter.

After 4 weeks of treatment, a significant decrease of mMASI score was observed on both treatment areas (p<.001), with the area treated with the AHA + ITR cleanser showing superior improvement (-12.9% reduction of mMASI score) as compared

to the control side (-5.5% reduction of mMASI score, p=.022; Fig. 1).

The self-grading of both hyperpigmentation and skin evenness showed significant improvements over the course of the study on both treatment areas, with first significant results after one week (p<.001; Fig. 2).

The skin care regimen was very well tolerated after 4 weeks of product use.

CONCLUSION

The results of this study show that a skin care regimen consisting of a cleansing gel with exfoliating AHA and a serum with the potent tyrosinase inhibitor ITR is safe and effective for the reduction of facial hyperpigmentation, with first results observed by the patients after only one week. Furthermore, combining the ITR-containing with an AHA cleanser led to superior reduction of facial hyperpigmentation measured with mMASI as compared to using the serum alone. Consequently, combining ITR-containing skin care products with an AHA containing cleanser can increase the efficacy of the ITR-products alone, making it a good option especially for patients who want to see fast results.