

A cosmetic product shows brightening/whitening effect after 4 weeks under normal conditions of use, in adult females with facial hyperpigmentation

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INTRODUCTION & OBJECTIVES

Photoaging leading hyperpigmentary disorders and uneven skin tone is a major cosmetic concern as even-toned skin is universally associated with healthy skin. Current treatments for pigmentary disorders include drugs such as hydroquinone or topical steroids which often produce undesired side effects and are not suitable for all skin types. For that reason, skin care specialists are looking for long-term cosmetic products to address such concerns. We conducted a study to assess the tolerability and whitening effectiveness of a cosmetic product containing ingredients with skin whitening activity like Niacinamide, Hydroxyphenoxy Propionic Acid and 4-n-Butylresorcinol.

MATERIALS & METHODS

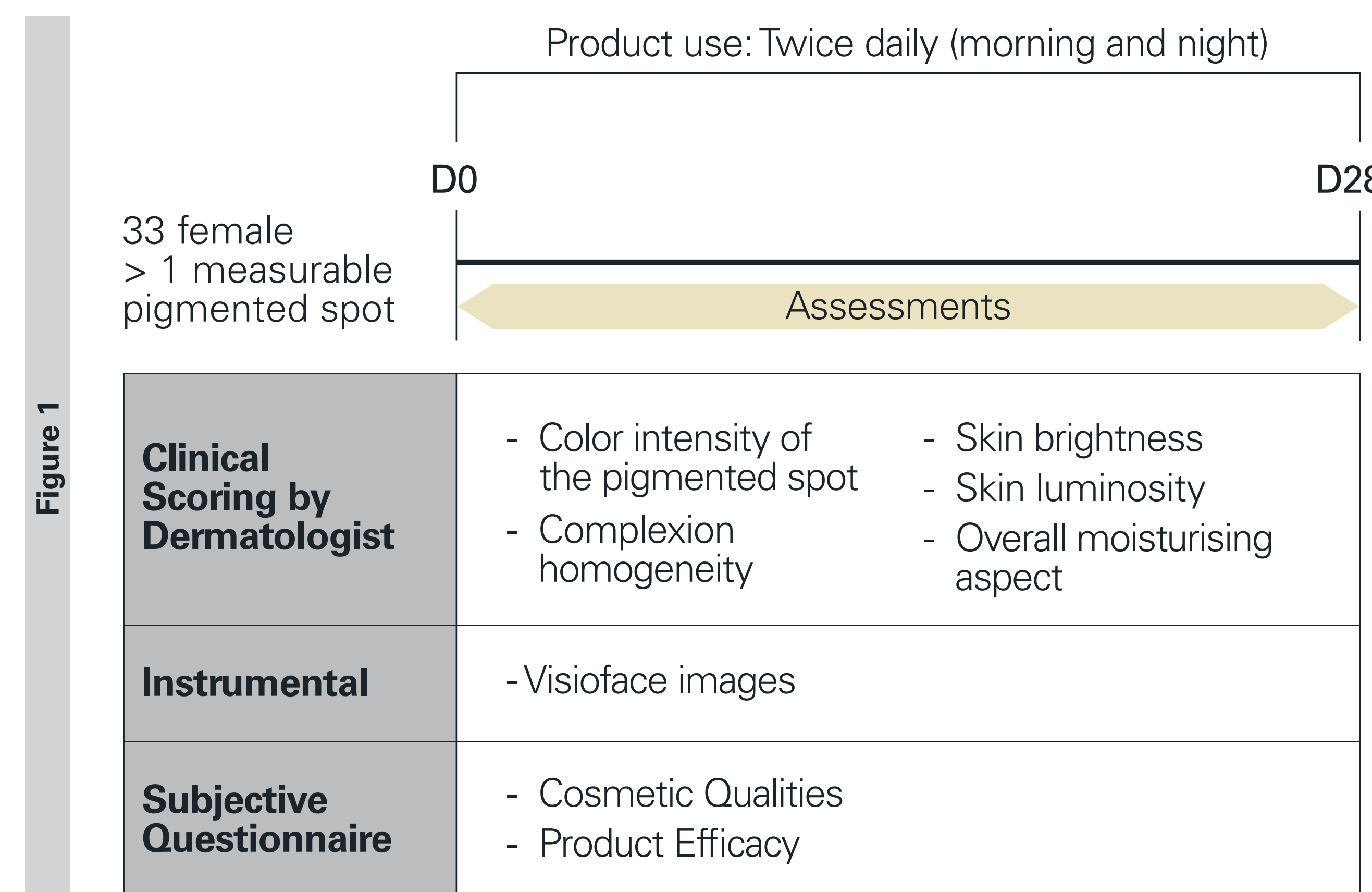


Figure 1. Study design

Statistical analysis was performed by Repeated Measurement ANOVA and results were considered significant at $p < 0.05$.

RESULTS

After 4 weeks of use the product reduced significantly the appearance of spots and improve the skin homogeneity analyzed by Visioface (Figure 2 and Table 1).

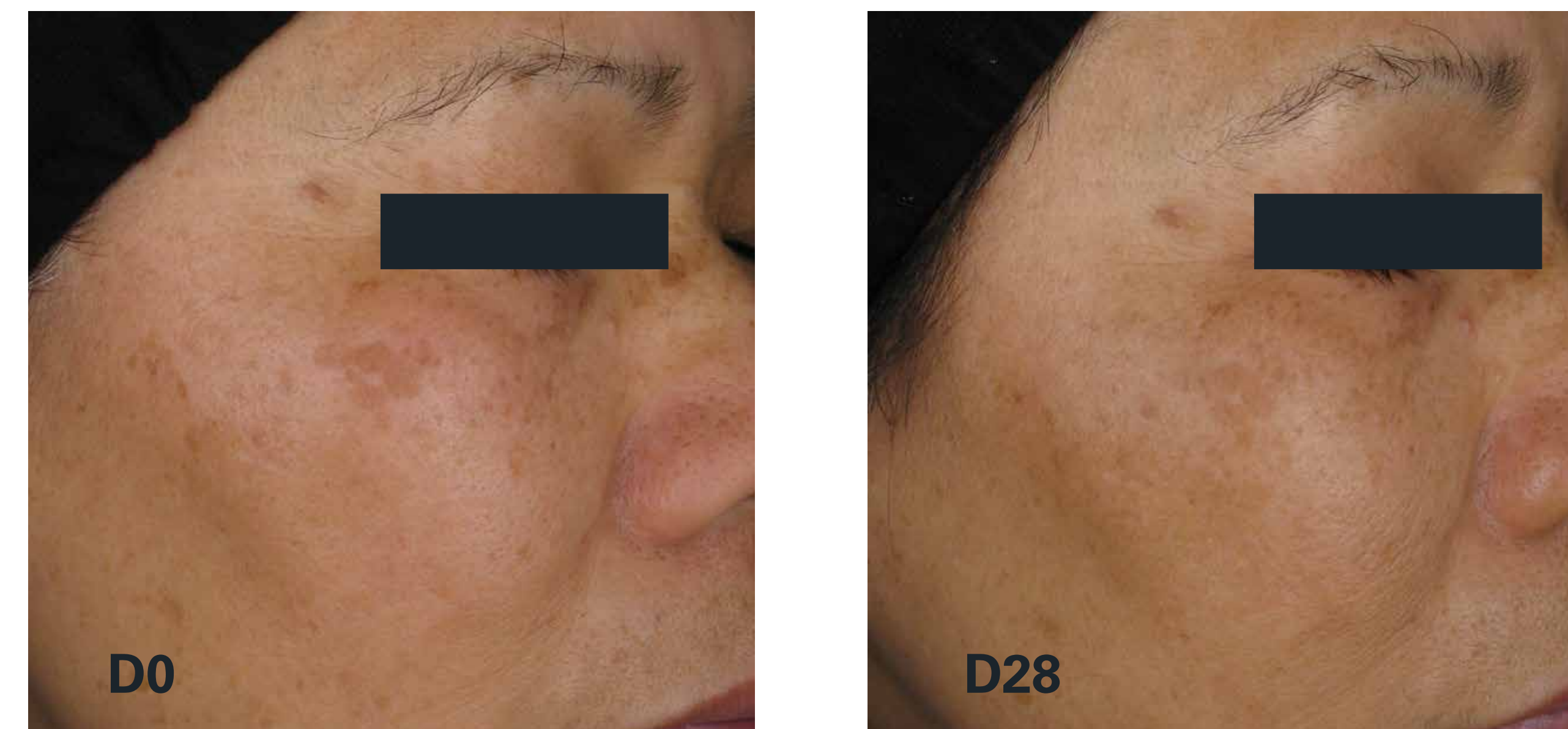


Figure 2: Visioface images

| | %Variation | p-value |
|------------------|------------|----------|
| Spots | -10% | < 0.001 |
| Skin homogeneity | +10% | < 0.0001 |

Table 1. Visioface analysis

Moreover, several clinical evaluations show statistical improvement (Table 2).

| | %Variation | p-value |
|--|------------|----------|
| Colour intensity of the pigmented spot | -10% | 0.0039 |
| Complexion homogeneity | +17% | 0.0001 |
| Skin brightness | +12% | 0.0002 |
| Skin luminosity | +15% | < 0.0001 |
| Overall appearance of moisturized skin | +34% | < 0.0001 |

Table 2. Clinical evaluation

Participants reported high level of satisfaction with the results after 4 weeks of use (Figure 3).

VISIBLE RESULTS - WHITENING EFFECT
IN ONLY 4 WEEKS

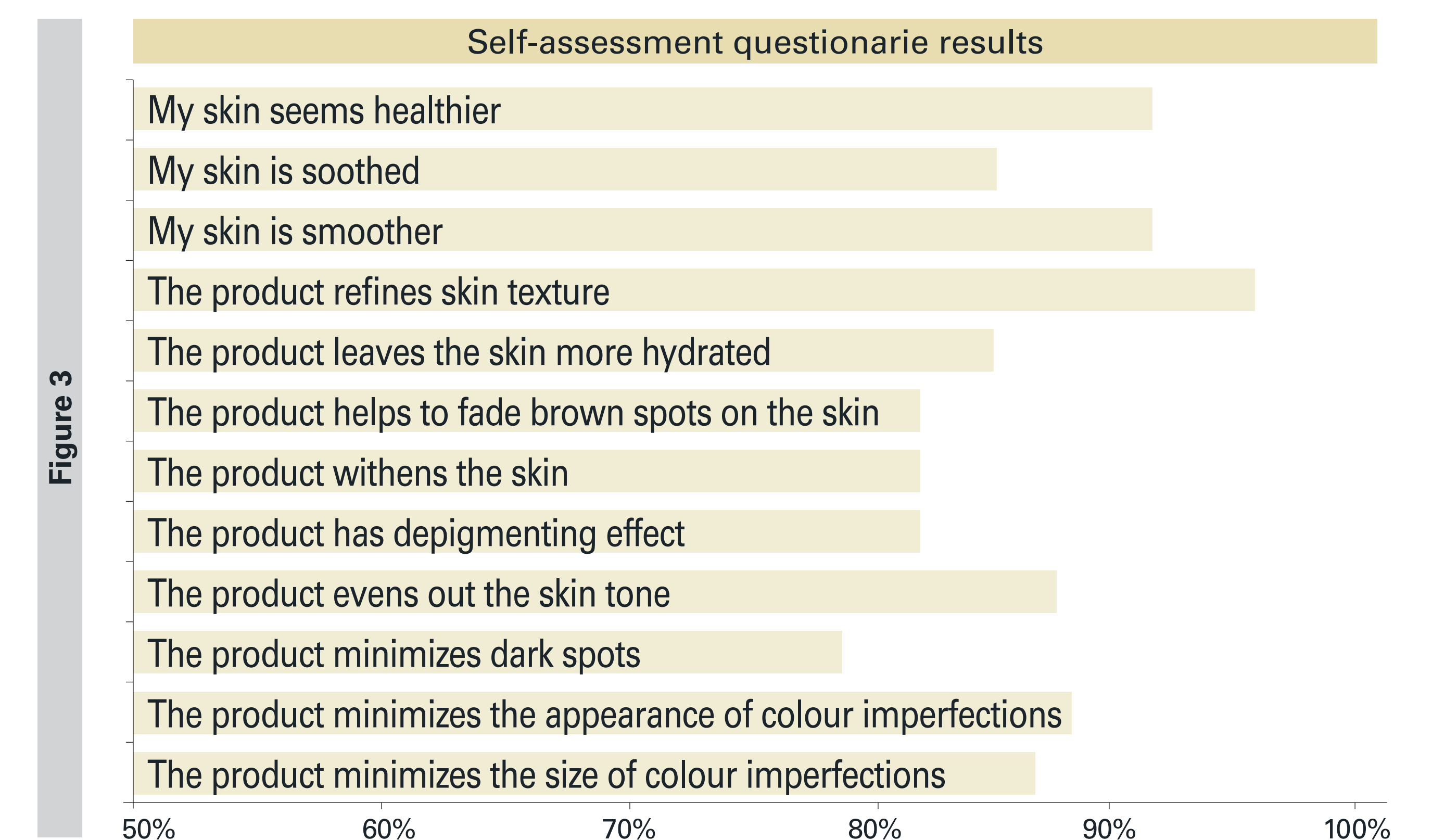


Figure 3: Results of the subjective questionnaire done by the volunteers after 28 days of use.

Cutaneous acceptability of the investigational product was considered as good.

CONCLUSIONS

Significant improvement of skin complexion and reduction of the skin hyperpigmentation linked to photoaging suggests that the cosmetic product containing ingredients like Niacinamide, Hydroxyphenoxy Propionic Acid and 4-n-Butylresorcinol, could be considered effective after 4 weeks of treatment. The tolerance of the product was good.

References

- Ohad N. Glabrene and Isoliquiritigenin as Tyrosinase Inhibitors from Licorice Roots. J. Agric. Food Chem. 2003, 51, 1201-1207
- Hakozaki T. The effect of niacinamide on reducing cutaneous pigmentation and suppression of melanosome transfer. Br J Dermatol. 2002 Jul;147(1):20-31.