

M89PF MITIGATES TOPICAL RETINOID SKIN IRRITATION AND IS AN ADJUNCT IN ANTI AGING TREATMENT

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INTRODUCTION

Tretinoin is a topical gold standard for skin aging, particularly photoaging. However, as for any topical retinoid, patient satisfaction and adherence can be impaired by local tolerability issues in the first 1-2 weeks.^{1,2}

The M89PF containing volcanic mineralizing water, probiotic fractions, hyaluronic acid, niacinamide and tocopherol has been developed to reinforce the skin barrier and enhance skin defenses against exposome stressors, such as application of topical retinoids.³

OBJECTIVES

The aim of this study was to evaluate the benefits of M89PF in managing topical retinoids induced irritation in adult women by self- assessment of skin tightness, dryness, burning, itching and stinging sensation. Improvement of erythema, fine lines, skin tone, radiance and pores appearance, by dermatological evaluation, were also assessed.

MATERIALS & METHODS

The study included 43 adult women, aged 30 - 60 years, phototype I to VI (Fitzpatrick), including 100% with sensitive skin, and receiving their first anti-aging topical retinoid prescription (tretinoin).

38 subjects ended the study without major deviations and were included in final analysis. The duration of the study was 84 days.

Subjects applied M89PF on full face twice a day in association with SPF50+ sunscreen on full face once daily. The Tretinoin use was kept in every evening on full face.

Evaluations were performed at days 0, 7, 28 and D84. Erythema, fine lines, skin tone, radiance and pore appearance were assessed by a dermatologist.

Subjects were asked to answer a self assessment questionnaire about skin tightness, dryness, burning, itching and stinging sensations.

Any possible local intolerance and adverse events were investigated by the dermatologist.

Instrumental evaluations were performed to investigate skin hydration through Corneometer®.

The statistical methodology considered the % changes at each timepoint and comparisons between timepoints were performed to estimate the results.

RESULTS

Figure 1: Dermatological clinical evaluation, Error bars: 95% CI, *** p-value≤0.001

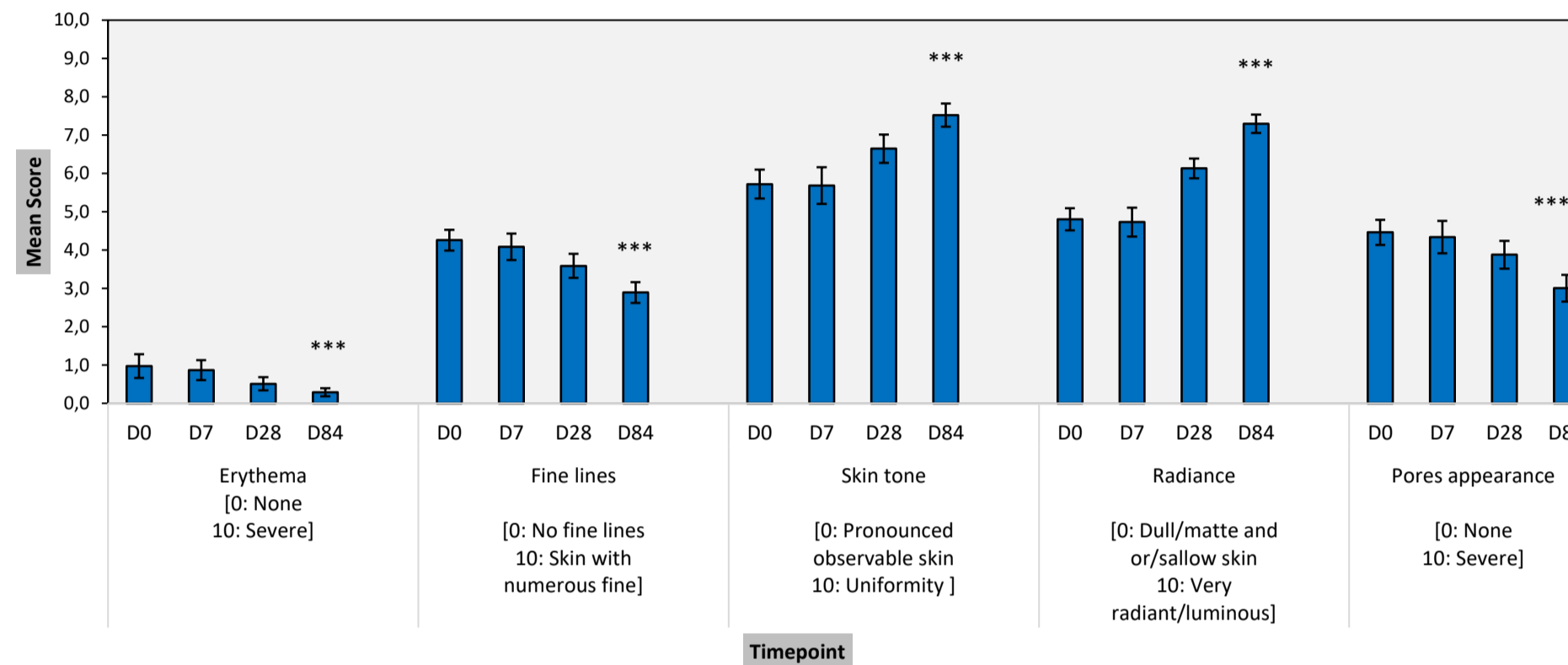


Figure 2: Responses from self-assessment questionnaire, Error bars: 95% CI, *** p-value≤0.001

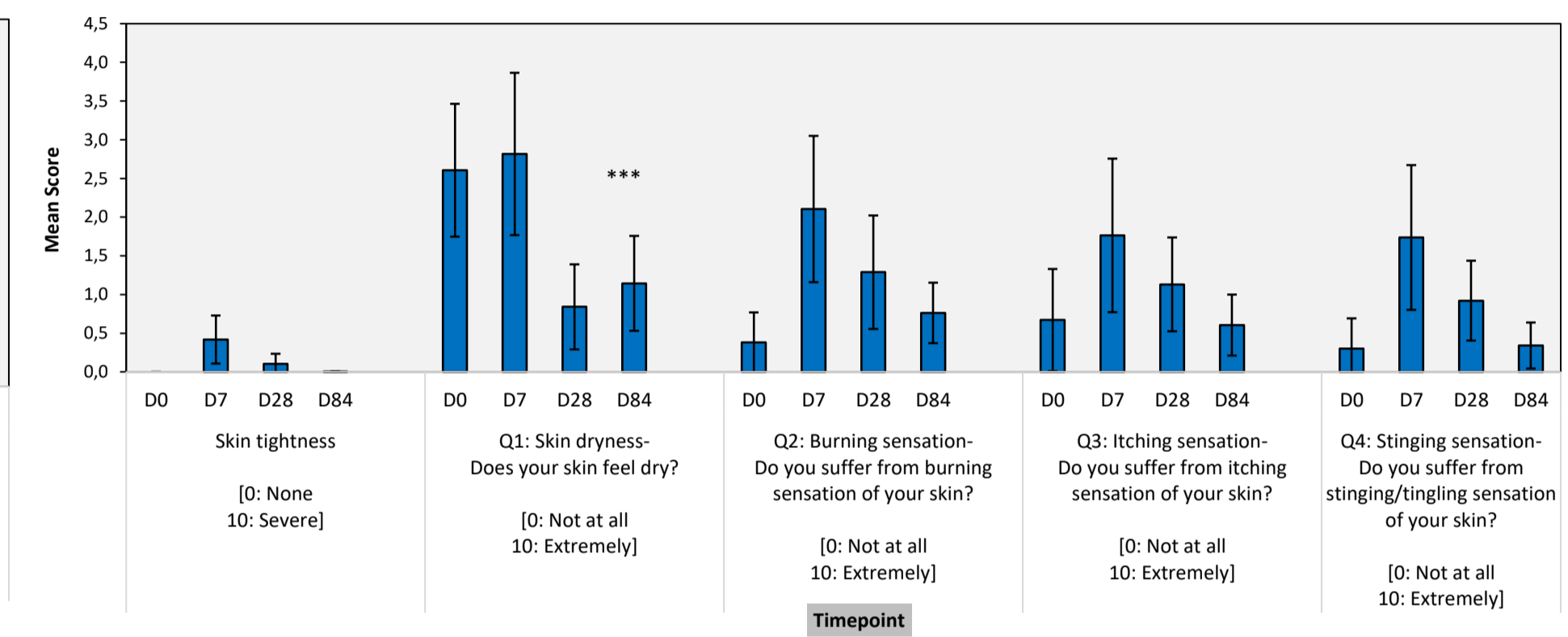
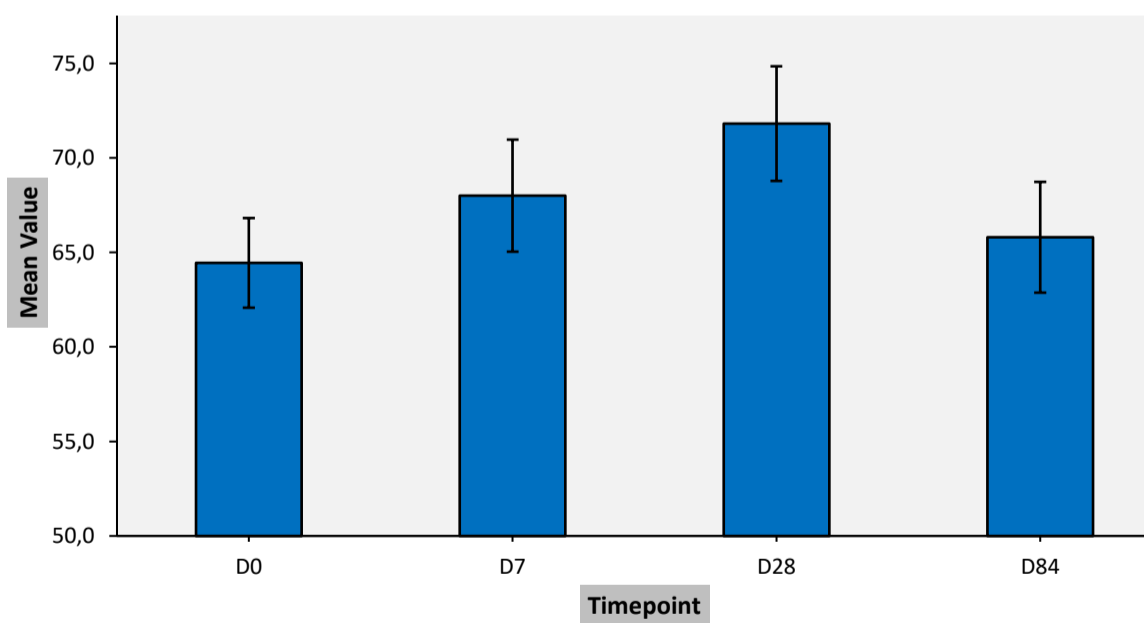


Figure 3: Corneometer® readings, Error bars: 95% CI



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Conflict of interest

Priscila Correia, Delphine Kerob, Stéphanie Leclerc-Mercier and José Junior are employees of L'Oréal Group

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RESULTS

- Through cutaneous assessment of full face, M89PF in combination with topical retinoid (Tretinoin) and sunscreen SPF50+ showed a significant ($p < 0.001$) improvement in erythema (70%), fine lines (32%), skin tone (42%), radiance (47%) and pores appearance (32%) after 84 days of study when compared to Baseline (D0)
- Subjects reported a significant improvement of skin tightness (99%), dryness feeling (59%), burning sensation (63%), itching sensation (65%) and stinging sensation (80%) on global face after 84 days of study when compared to first 7 days of Tretinoin use.
- Corneometer® results showed a maintenance in skin hydration during 84 days of M89PF and sunscreen SPF50+.
- No local side effect related to the investigational product was reported.

CONCLUSION

- M89PF in association with sunscreen SPF50+ improved retinoid induced irritation as demonstrated by improvement in erythema, skin tightness, skin dryness, burning, itching and stinging sensations during 84 days with a good tolerability profile.
- M89PF in association with sunscreen maintained skin hydration during 84 days of Tretinoin use as demonstrated by Corneometer® measurements.
- M89PF in association with sunscreen SPF50+ and Tretinoin use improved fine lines, skin tone, radiance and pores appearance after 84 days.

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