

EFFICACY OF A TOPICAL SERUM CONTAINING PHYTO BOTANICAL BLEND AND HYALURONIC ACID IN THE ACNEIFORM ERUPTION PREVENTION AND SKIN BARRIER RECOVERY AFTER CO2 FRACTIONAL LASER IN THE PHOTODAMAGED FACIAL IN LATIN SKIN

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INTRODUCTION

The acneiform eruption can occur in up to 80% of patients after the ablative procedures with more frequency in subjects with a previous acne history. The use of occlusive moisturizing and/or corticosteroid potency also seems to be implicated in the increase of acneiform eruption. Therefore, this study aims to evaluate the effect of a topical serum containing 4.5% phyto botanical blend (extracts of cucumber, thyme, olive, mulberry and eucalyptus leaves), 0.2% of hyaluronic acid and 9.5% of glycerin after ablative fractional carbon dioxide (AFCO2).

MATERIAL & METHODS

Design: monocentric, open-label, intra-individual study

Volunteers: 30 adults (92% female and 8% male) with 41 YO, phototype II (38%) and III (62%), combination to oily skin and any facial skin condition to receive an AFCO2 were enrolled.

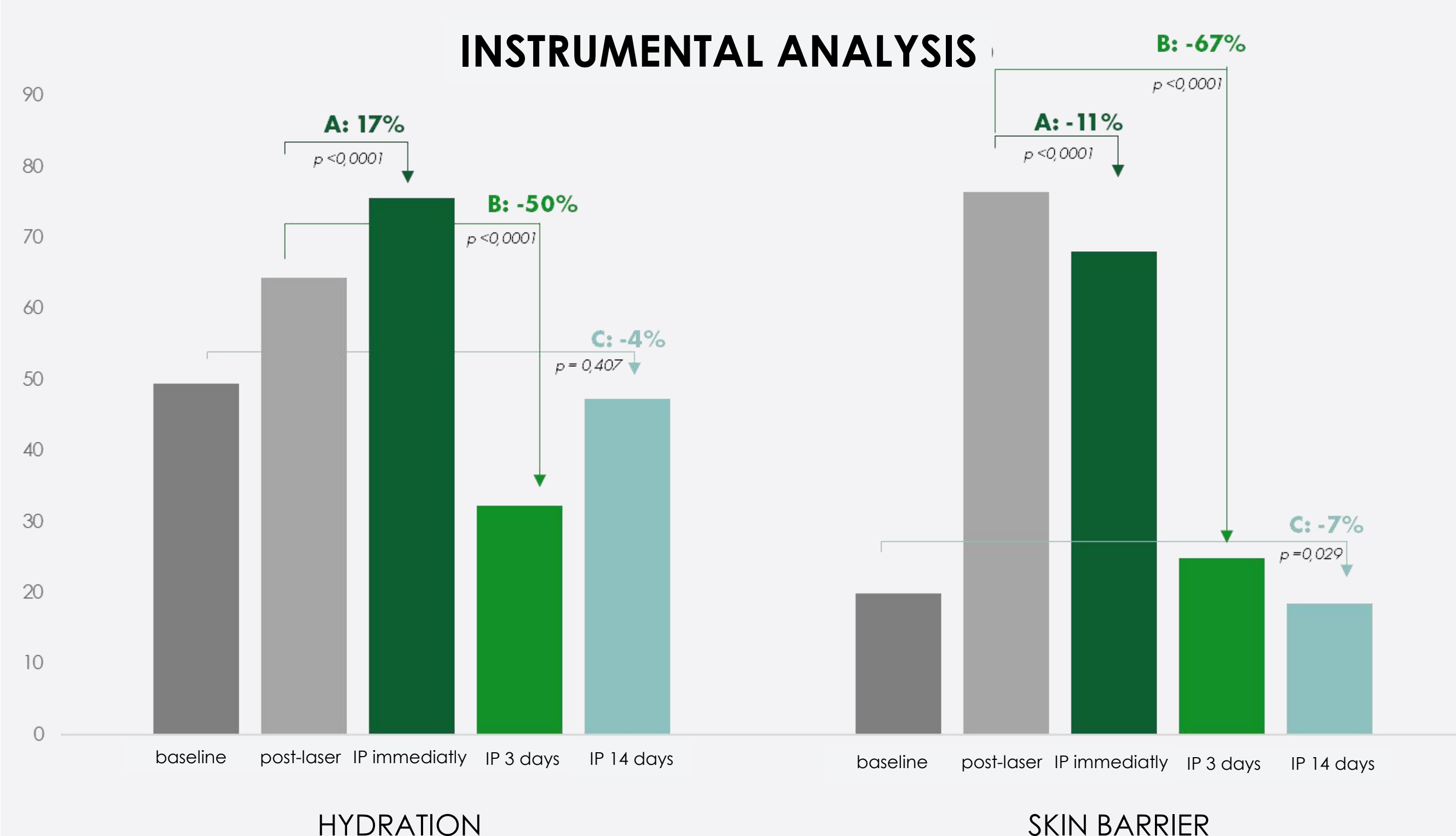
Kinetic: Baseline, after AFCO2, after immediately, 3 and 14 days of the IP use

Procedure:

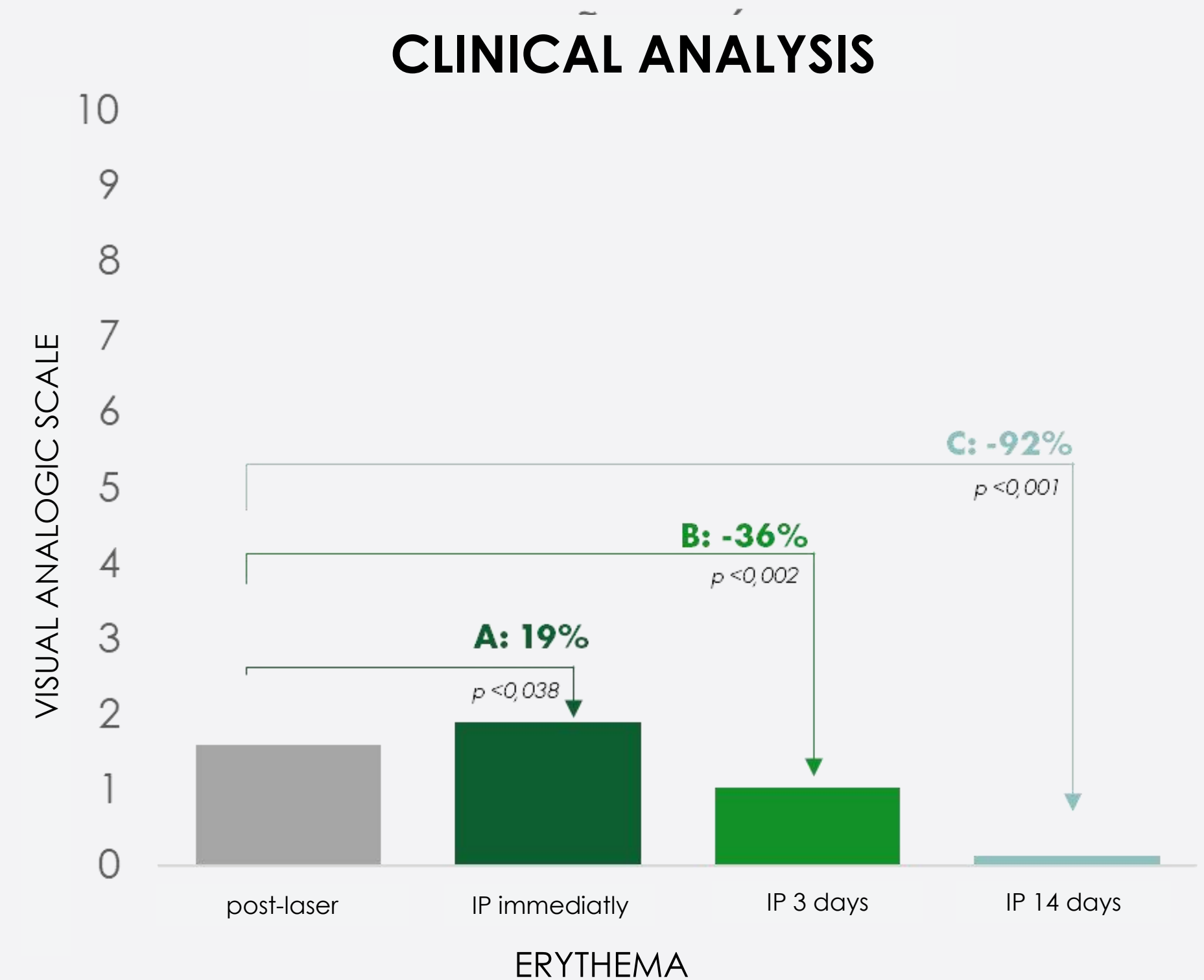
- AFCO2: All subjects received 1 section using the power 20w, spacing 800µm, stack 1 and dwell time 500µs.
- Investigational Product (IP): All subjects were instructed to apply the serum immediately and twice a day for 14 days at home.
- The hydration and skin barrier were evaluated instrumentally, while the degree irritation, acneiform eruption and overall skin improvement were evaluated visually by dermatologists.

RESULTS

The serum immediately improved hydration (17%) and barrier skin recovery (11%), but with an increasing of erythema, maybe due to the water in the IP composition. The subjects reported an improvement of soothing, recovery, hydration and tightness perception. Also, there was a slight increase of burning, heating and pain sensation. During resurfacing skin (D3), the erythema improved (44%), but the hydration and skin barrier worst, probably, due to the scaling and scab which is common during this phase. The subjects reported an improvement of the irritation perceptions.



Graphic 1: Evolution across time for instrumental evaluation (Corneometer and Tewameter)



Graphic 2: Evolution across time for erythema evaluated by dermatologist

Figure 1: Average case of skin improvement.



Besides that, after 14 days the overall aspect of the skin improvement at 45% according to the dermatological evaluation and no acneiform eruption was observed.

DISCUSSION

The serum significantly improved hydration, barrier recovery, erythema, and irritation degree during the AFCO2 resurfacing. Additionally, no acneiform eruptions associated to AFCO2 were observed which indicates the product can support in the prevention.

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Conflicts of interest:

Beatriz Medeiros is a L'Oreal consultant. All other authors are employees at L'Oreal Group. The other authors have no conflict of interest to be declared.

References:

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