EVALUATION OF THE EFFICACY AND TOLERANCE OF A LIGHT-WEIGHT FACIAL FORMULATION CONTAINING CALENDULA PETALS AND CALENDULA EXTRACT USING A NOVEL CLINICAL INDEX

B Lee(1) - A Du(2) - V Robert(2) - M Yatskayer(1)

L’oreal Research And Innovation, Clinical Evaluation, Clark, United States (1) - L’oreal Research And Innovation, Skincare Lab, Clark, United States (2)

Introduction: Facial skin discomfort, red/blotchy and dull appearance could derive from various factors including environmental stressors. The present studies were performed to evaluate the efficacy and tolerance of an inverse emulsion containing micronized calendula petals and calendula extract. In addition, a novel index was developed by taking composite scores of clinical and bioinstrumental measurements to evaluate the effectiveness of the facial formula.

Methods: A 4-week, single center, clinical study was conducted on females ages 20-55, with mild to moderate fine, dry lines, skin texture roughness, dullness, and lack of suppleness. Efficacy evaluations were conducted at baseline, immediately after first product use, and after 1 day, 1, 2 and 4 weeks of twice daily product use. Efficacy evaluations comprised of blinded expert grading of skin attributes and hydration measurements. Tolerability assessments included subjective and objective tolerance evaluations. A novel radiance index was calculated for all time points; this calculation accounted for improvement in radiance, skin texture smoothness, skin texture softness, and hydration scores. Further, TEWL measurements were performed to evaluate the effectiveness of the formula in the improvement of skin barrier function after 1 application. Finally, in-use consumer test panels were conducted to evaluate the tolerance and consumer perception of the formula on subjects who self-identified to have discomforted facial skin.

Results: From the immediate time point to week 4, there were statistically significant improvements in fine, dry lines, skin texture, radiance, suppleness, and overall skin healthy look/condition. Additionally, there was statistically significant improvement in hydration and skin barrier function when compared to pre-treatment. The radiance index showed improvement at all intervals. Statistical significant decrease was observed for dryness and tightness at all intervals when compared to baseline. The formula was well tolerated and well perceived by the subjects.