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Innovative active biovector of vitamins using Poly-lysins dendrimer (DGL-DERMABEL) to enhance the skin bioavailability of vitamins A and C

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Vitamin A and C are routinely used in topical formulations, due to biological effects related to their anti-aging, antioxidant and anti-inflammatory properties. However, several of these formulations seem to be not enough effective in the skin application due to a very low concentration of these vitamins because their low bioavailability by almost non-penetration and low stability by exposure to air and light. Fortunately, nowadays many cosmetic innovations come about through scientific investigations. In this context, we have recently focused our interest on conception of innovative active biovector of vitamins using Polylysins dendrimer (DGL) to enhance the skin bioavailability of Vitamins A and C. In this abstract, we report the pharmacological and clinical results of new formulation DERMABEL with combination of Vitamins and DGL.

Methods: 16 formulations were studied and compared containing different combinations of vitamin A and C and DGL concentrations. The acute cutaneous tolerance was evaluated by patch-test 15 minutes of "DERMABEL" in 12 healthy volunteers from 18 years old accordance with the strict ethical requirements. Macroscopic skin examinations were performed immediately, 30 minutes and 24 hours after removal of the product.

Conclusion: All the formulations are stable in presence of air and light exposure. DERMABEL product, applied on the skin of 12 adult volunteers, was found to be non-irritant and well tolerated after single or iterative applications. DERMABEL using the innovative active biovector of vitamins as Poly-lysins dendrimer (DGL) is a promising cosmetic since it enhance the skin bioavailability of Vitamins A and C.

Biography

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