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経皮吸収と角層

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Relationship between Percutaneous Absorption and the Stratum Corneum

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Abstract

In the field of cosmetics, high performance products containing active ingredients such as whitening agents, anti-aging agents, anti-inflammation agents or moisturizers have recently developed. Regarding these products, the absorption of the actives into the skin has become of major issue. In the general application of cosmetics, however, it is not desirable that the active ingredients penetrate all the way through the skin into the systemic circulation like pharmaceuticals.

This paper described the delivery concept for the cosmetic applications “what percutaneous absorption means,” the percutaneous absorption routes, absorption measurement methods. In addition, the chemically modified actives, i.e. prodrugs and the advanced vehicles based on phospholipids were introduced as the optimized systems to deliver and accumulate active ingredients into the skin.

Key words: cosmetics, active ingredients, percutaneous absorption, stratum corneum, prodrug.