Development of Cosmetics from a Viewpoint of Transepidermal Therapeutic System

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Abstract

Transepidermal therapeutic system is a drug that is designed to be delivered to target parts of body through skin. To develop the system, it is important to investigate the delivery mechanism of drug into its target. In cosmetic field, to enhance the effectiveness of active ingredients, it is also necessary to learn the findings that are obtained from the research on transepidermal therapeutic systems. However, there are different features between the transepidermal therapeutic system in medical use and in cosmetic use: 1) a target tissue locates in skin, 2) a formulation consists of many kind of ingredients with complex structure, and 3) application on skin without enclosed system. In this paper, the studies, which is related to the skin transfer mechanism and the formulation technology of moisturizer, antiseptic, fragrance and surface-active agent which are fundamental ingredients of cosmetics, are discussed and we will describe some problems that may rise upon its use in cosmetic field and perspective view of the next generation cosmetic transepidermal therapeutic system.

Key words: transepidermal therapeutic system, stratum corneum, cosmetics, moisturizer, surfactant.