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A Review on Formulation and Evaluation of Luliconazole Emulgel

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Abstract: The present study was undertaken with an intention to develop a stable and effective topical formulation containing luliconazole. Luliconazole belongs to a class of drugs called Antifungals. Luliconazole exhibits highest antifungal activity against Trichophyton spp. Candida albicans, Malassezia spp., and Aspergillus fumigatu, which are major causative agents of dermatophytosis. However, luliconazole suffers from drawbacks such as lesser skin retention, low aqueous solubility and poor skin penetration because it comes under BCS Class

Materials and methods: Luliconazole emulgel was prepared by hot melt emulsification technique. The formulation of emulgel includes three steps; first step is to prepare O/W emulsions in which the API is included, and then in second step the preparation of the gel base using carbopol 934 and eventually in the third step emulsion is added to the gel by constant stirring to produce an emulgel. The presence of a gelatinizing agent in the water phase converts a classical emulsion into an emulgel. This strategy is suitable to enhance the permeability of luliconazole and deliver to the target site in a controlled release system. The luliconazole emulgel was evaluated for the physical appearance, pH, spreadability, viscosity, extrudability and drug content. Result and discussions: the drug content was found to be maximum in formulation F3 with 72.21%.

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Keywords: Luliconazole, antifungal, emulgel, BCS class II, controlled release system

