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"FORMULATION AND EVALUATION OF TRANSDERMAL PATCHES"

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ABSTRACT

The main objective of the present study was to formulate and evaluate matrix type Pioglitazone transdermal patches and to determine the drug release. Firstly, characterisation of the drug was done by performing FTIR compatibility studies and found that there was no interaction between the drug and polymers under study. Formulations (F1 to F6) were prepared using different ratios of HPMC E15 and Eudragit L 100 and penetration enhancer DMSO was incorporated to the above formulations (F7 to F12). These formulations were evaluated for weight variation, thickness variation, folding endurance, %moisture content, %moisture absorption studies, drug content, mechanical properties and exvivo permeation studies. In formulations F1 to F12, the drug permeation was maximum for F4 and F10 (ratio 10:2 HPMC E15: Eudragit L100). Among these, F10exhibited the required flux.

KEYWORDS: *Pioglitazone, Transdermal Patches, In-Vitro Release, In Vitro Permeation Study*

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