ABSTRACT

Aim of the present investigation was to improve the low oral bioavailability and short half life of losartan due to its first pass hepatic metabolism in liver for the treatment of hypertension by formulation and evaluation of matrix-type of transdermal film containing Eudragit RS 100, HPMC K4 and HPMC K15M as polymers at different proportions. Propylene glycol is used as plasticizer and DMSO as permeation enhancer. The physicochemical compatibility of drug and polymers was studied by FTIR spectroscopy. The results suggested no physicochemical incompatibility between the drug and polymers. Transdermal film containing model drug losartan was formulated by solvent casting method. Stability studies of two most satisfactory formulations (F7 and F8) were carried out as per ICH Q1C guidelines. The stability studies showed that there was no significant change in physicochemical properties, *in vitro* release and *in vitro* diffusion studies.

KEYWORDS:

Losartan, Transdermal film.