



Influence of Polymeric System and Loading Dose on Drug Release from Alfuzosin Hydrochloride Transdermal Films

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SUMMARY. In the present study, the influence of polymeric concentration, its blend and drug loading dose on the in vitro drug release pattern of alfuzosin hydrochloride from its transdermal patches has been investigated. Ratio of EC and PVP and drug loading dose were selected as independent variables and their influence on the percentage drug released at 24 h (Q_{24}), drug release rate (KH) and time taken for 50% drug release ($t_{50\%}$) were studied using statistical experimental designing. Ratio of EC and PVP was found to be the main influential factor for all the dependent variables studied. Drug loading dose was also found to influence the dependent variables but to a lesser extent. Physicochemical parameters of the prepared patches were also evaluated. This study could be used as a screening method for further development of transdermal delivery of alfuzosin hydrochloride and skin permeation studies.

KEY WORDS: Alfuzosin hydrochloride, Drug release, FT IR, Polymeric system, SEM, Transdermal delivery.

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