ABSTRACT

Azelnidipine is a cardiac L type of calcium channel blocker and Nebivolol is a cardio selective β-blocker. When administered by orally, undergoes extensive first pass metabolism. When these two drugs are administered via Transdermal rout would reduce deficiencies which associated by oral administration and enhance bioavailability.

In the présent study, Transdermal Patches of Azelnidipine and Nebivolol hydrochorie were developed by différentes ratios of Hydroxypropyl Methylcellulose, (HPMC) Eudragit RL-100, Eudragit RS-100 and Ethylcellulose (EC) by solvent evaporation technique. The effet of Dimethyl Sulfoxide (DMSO) on Transdermal Delivery of Azelnidipine was studied. Ex Vivo drug release was performed on albino rat abdominal skin by use of Franz diffusion cell. The diffused drug was analysed by Uv-Spectrophotomètre. In vivo drug release and importent pharmacokinetics were determined on male albino rats, the released drug in plasma was measured by using HPLC.

The drug- polymer interaction was evaluated by FTIR. All formulations were subjected to physicochemical evaluation tests like drug content, weight variation, thickness, moisture absorption and loss, water vapor transmission rate, percentage of flatness, folding endurance, skin irritation and stability. All these test results were showed satisfactory.