

# Evaluation of Effects of Simultaneous Consumption of Alcohol on the Release Profile of Antihypertensive Drug

Gite samadhan Ramdas, Jaybhay Prasad Santosh, Chavan Aashirwad Ramesh  
Kambale Prajkta Balasaheb, Mrs. Mane  
Aditya Pharmacy College, Beed

**Abstract:** *This project evaluates the effects of simultaneous alcohol consumption on the in vitro release profile of Losartan Potassium, a commonly prescribed anti-hypertensive medication. Alcohol consumption is a common lifestyle factor that may interact with the pharmacokinetics of drugs. Understanding these interactions is crucial for the optimization of dosage forms, enhancement of therapeutic efficacy, and minimization of adverse effects. We conducted dissolution testing of Losartan tablets in the presence of simulated gastric and intestinal fluids with varying concentrations of ethanol (5%, 10%, 20%). The results indicated that alcohol significantly alters the dissolution behavior of the drug. These findings have clinical implications in terms of patient counseling and drug safety measures.*

*The dissolution rate of Losartan was assessed using standard in vitro methods, simulating gastric and intestinal fluids containing ethanol. This study provides preliminary data that may inform clinical practice and future pharmacokinetic investigations. Key findings reveal a correlation between ethanol concentration and reduced drug release, underlining the importance of lifestyle considerations in hypertensive therapy.*

**Keywords:** *alcohol consumption*

