Article 5

IN VITRO BIOPHARMACEUTICAL AND PHYSICOCHEMICAL EVALUATION OF DIFFERENT BRANDS OF CIPROFLOXACIN MARKETED IN ADEN-YEMEN

ABSTRACT

The current study conducted to evaluate the biopharmaceutical and physicochemical equivalence of the three available pharmaceutical dosage forms of ciprofloxacin (CIP) in the local markets (tablets, infusion and eye drops). Three brands for each dosage form were selected and coded as Tablets I, II, III; CIP infusion (Infusion I, II, III) and CIP eye drops (Eye drops I, II, III). Different in vitro quality control tests, physiochemical and determination of active ingredients contents were performed. All brands of tablets have a satisfactory result that complies with the pharmacopeia specification except the hardness of the tablets was more than the recommended value, and the salinity of Infusion II and III was lower than 0.9, the viscosity of the eye drops was lower than the specified value. Post-marketing surveillance is an essential issue to distinguish poor-quality medicines and must be routinely performed to weed out substandard and counterfeit medicine.

***Keywords*:** Ciprofloxacin, Biopharmaceutical, Quality control tests, Physicochemical, Pharmacopeia