Steady State Pharmacokinetics

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Time to steady state (SS) is determined by Volume of distribution (V) and Clearance (CI) & steady state concentrations are determined by Clearance (CI). Accumulation is determined by the relationship between dosing interval and half-life. Ciprofloxacin PK (30 mg/kg) in infected rat was modelled and simulated for IV infusions and bolus dosing for different durations. Time to SS, SS concentrations, and accumulation was determined.



Yedle et al. 2023. Neutropenic Rat Thigh Infection Model for Evaluation of the Pharmacokinetics/Pharmacodynamics of Anti-Infectives. Microb. Spect. 11(4)