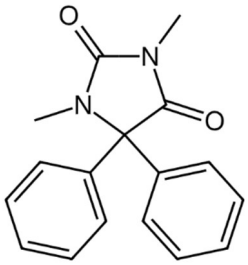
Funytoin

Project description

F unytoin is a novel drug against seizures. It was approved by *SwissMedic* two years ago with *intra venous* (IV) administration route. However, real world data showed bad compliance in patients, potentially due to the IV administration. Thus, the pharma company decided to bring Funytoin as tablet on the market. It is known that the AUC within the first 6 hours after administration is the relevant exposure measure for the effectiveness of Funytoin and that the AUC range of 150 mg IV Funytoin in a patient population of 70 kg is effective. In order to find information about appropriate oral doses, they conducted a clinical study with 64 patients receiving 150 mg Funytoin, half of them receiving the tablet (administration route 1), and the other half the original IV drug (administration route 2). Funytoin concentrations were measured at different time-points within 30 hours.



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Project aim

Develop a PK model and find a dose for the Funytoin tablets that matches the $AUC_{0h\text{-}6h}$ of 150 mg Funytoin IV in patients weighting 70 kg.