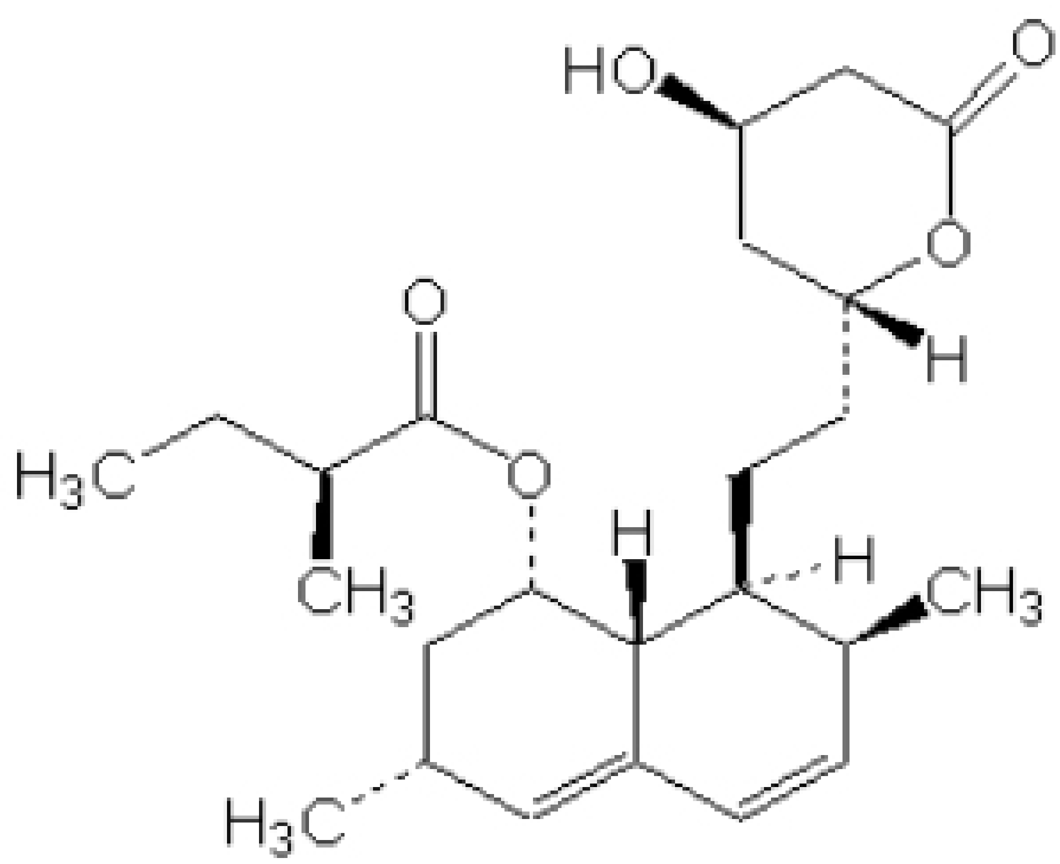
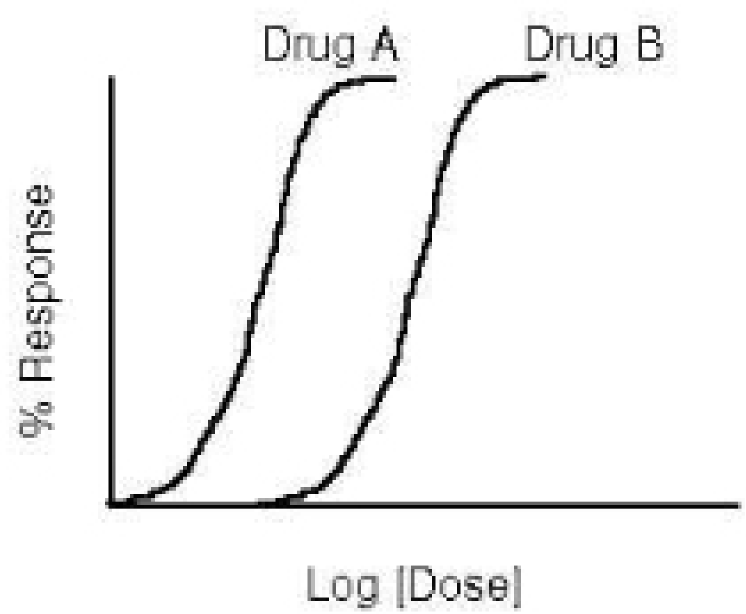
1) Estimate the behavior of this drug in the body during:

a) Oral absorption
b) Liver passage (potential phase I + II reactions)



2) Which drug has the higher efficacy?



A 35 kg child in an ER on an i.v. infusion requires immediate treatment with the antiarrhythmic drug procainamide.

The textbook lists the following pharmakokinetic values for procainamide in a 70 kg adult:

Vd = 130 L

Clearance = 36 L / hr

Oral availability = 83%

Therapeutic concentration = 5 mg/L

1. What iv loading dose should be administered?
2. What constant infusion rate is required to maintain the therapeutic concentration?
3. What is the predicted half-life of the drug in the child?