

PHA 5127
Case study #4

- 1.) Sarah C. is a 55-year-old woman on aminoglycoside therapy. She is 5'6" tall and weighs 60 kg. Her serum creatinine level is 0.75 mg/dl. What is her creatinine clearance? What is the patient's k_e and half-life? Calculate the i.v. bolus dose in order to achieve 1 mg/L 1 hour after administration. The V_d is 0.25 L/kg and assume that $CL = CrCL$.

- 2.) Bob W. is a 48-year-old man on aminoglycoside therapy. He is 5'11" tall and weighs 140 kg. His serum creatinine level is 1.3 mg/dl. What is his creatinine clearance? What is the patient's k_e and half-life?

- 3.) A patient has overdosed on phenobarbital, a weak acid drug. If the drug is not cleared hepatically, what are two ways you could treat the patient?

- 4.) True or false:

Fluid is filtered across the glomerulus through passive diffusion.

An ionized and hydrophilic drug is more likely to cross biological membranes.

Drug below is an acidic drug.

