**Pharmacokinetic Calculations**

**Ideal Body Weight (IBW) Calculation:**

Male: 50 kg + [2.3 kg for each inch over 5 feet]

Female: 45 kg + [2.3 kg for each inch over 5 feet]

**Creatinine Clearance (CrCl) using Cockcroft-Gault Equation:**

Creatinine is expressed in mL/min

\[
CrCl \text{ (mL/min)} = \frac{(140 - \text{age}) \text{ (IBW in kg)}}{72 \ (\text{SCr in mg/dL})} \]

**NOTE:** For Females multiply by 0.85

**CrCl for elderly patients or when no height is available:**

\[
CrCl \text{ (mL/min)} = \frac{(114 - (0.8 \times \text{age})) \text{ (SCr in mg/dL)}}{72} \]

**NOTE:** For females multiply by 0.9

*If patients actual body weight is less than IBW, use actual body weight to calculate CrCl

*If patient is underweight/cachectic, may consider rounding SCr up to 1 mg/dL.\(^1,2\)

Do not round to 1 mg/dL for all patients > 60 years of age.\(^3,5\)

**Adjusted Body Weight (aminoglycoside dosing)**

Use adjusted body weight (AdjBW) when actual body weight (ABW) is ≥ 30% of ideal body weight (IBW)

\[
\text{AdjBW} = 0.4 \times (\text{ABW} - \text{IBW}) + \text{IBW} \]

**References:**


IBW= Ideal Body Weight (in kg); AdjBW= Adjusted Body Weight; ABW= Actual Body Weight; CrCl= Creatinine clearance; SCr= serum creatinine