

$$16) C_p = \frac{F \cdot Dose \cdot K_a}{V(K_a - K_{el})} \left[\frac{1 - e^{-n \cdot K_{el} \cdot \bar{t}}}{1 - e^{-K_{el} \cdot \bar{t}}} \cdot e^{-K_{el} \cdot t} - \frac{1 - e^{-n \cdot K_a \cdot \bar{t}}}{1 - e^{-K_a \cdot \bar{t}}} \cdot e^{-K_a \cdot t} \right]$$

$$17) C_{pmin} = \frac{F \cdot Dose \cdot K_a}{V(K_a - K_{el})} \left[\frac{1}{1 - e^{-K_{el} \cdot \bar{t}}} - \frac{1}{1 - e^{-K_a \cdot \bar{t}}} \right]$$

$$18) C_{pmin} = A \left[\frac{R}{1 - R} \right]$$

$$30) K_a = \frac{[rP]}{[D] \cdot [nP - rP]}$$

$$19) \frac{C_{pmin}}{C_{p1}} = \frac{1}{1 - R}$$

$$r = \frac{[DP]}{[P]_{total}}$$

$$31) \frac{r}{[D]} = n \cdot K_a - K_a \cdot r$$

$$20) C_{pmin} = \frac{F \cdot Dose}{V} \left[\frac{e^{-K_{el} \cdot \bar{t}}}{1 - e^{-K_{el} \cdot \bar{t}}} \right]$$

$$21) \bar{C}_p = \frac{F \cdot Dose}{V \cdot K_{el} \cdot \bar{t}} \quad 29) \bar{C}_p = \frac{AUC}{\bar{t}}$$

$$22) C_{Lrenal} = K_e \cdot V$$

$$23) C_{Lrenal} = \frac{\text{filtration rate} + \text{secretion rate} - \text{reabsorption rate}}{C_p}$$

$$24) C_{Lrenal} = \frac{\Delta U / \Delta t}{C_{p \text{ midpoint}}}$$

$$25) C_{Lcr} = \frac{[140 - \text{age (yr)}] \cdot \text{body weight (kg)}}{72 \cdot C_{Scr}}$$

$$26) K_{el} = K_{nr} + b \cdot C_{Lcr}$$

$$27) \text{Organ clearance} = \frac{Q(C_a - C_v)}{C_a} = Q \cdot E$$

$$28) C_L = Q \cdot \frac{f_u \cdot C_{Lint}}{(Q + f_u \cdot C_{Lint})}$$