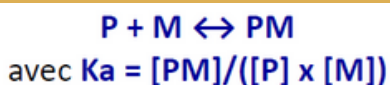


FORMULES

Constante d'affinité



KA

Fraction libre

FU

$$f_u = [M]/([PM] + [M])$$

100% pas de fixation
<10% forte fixation

Loi de Fick

$$V = \frac{dQ}{dt} = D \cdot k \cdot \frac{S}{e} \cdot (C_1 - C_2)$$

FICK

Temps demi-vie

t1/2

$$t_{1/2} = \frac{\ln 2}{k} = \frac{0.693}{k}$$

Cinétique ordre 1 IV

$$\frac{dQ}{dt} = -k Q$$

$$C(t) = C_0 e^{-k t}$$

IV

Volume de distribution

VD

$$V_d = \frac{Q_0}{C_0}$$

Aire sous la courbe

$$AUC = \frac{C_{p0}}{k} = \frac{DOSE}{V_d \cdot k} = \frac{DOSE}{Cl}$$

AUC

Clairance

$$Cl = Cl_r + Cl_{nr}$$

CL

$$Cl = \frac{k \times V_d \times C_p}{C_p} = k \times V_d = \frac{0.693 V_d}{t_{1/2}}$$

Clairance rénale

$$Cl_r = \frac{UV}{C_p}$$

CLR

Biodispo. absolue

BA

$$F = \frac{Dose_{IV}}{Dose_{PO}} \times \frac{AUC_{PO}}{AUC_{IV}}$$

Biodispo. relative

$$F = \frac{Dose_{Ref}}{Dose_{PO}} \times \frac{AUC_{PO}}{AUC_{Ref}}$$

BR

UNITÉS

- $t_{1/2} = h$
- constante d'élimination = h^{-1}
- $V_d = L$ ($Q = mg$ et $C = mg/L$)
- $Cl = mL/h$
- Fick = quantité / temps