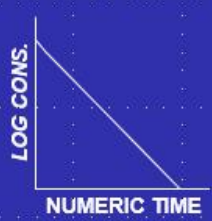
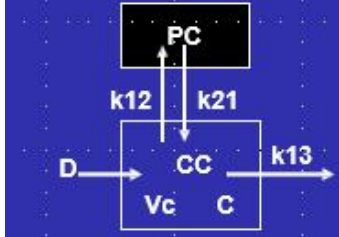
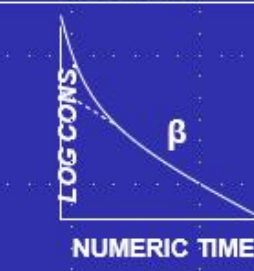


Rumus Model 1 dan 2 kompartemen terbuka - Intravaskular.

| 1 kompartemen                                                                                                                                                                                                           |                                                                                   | 2 kompartemen                                                                       |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Model                                                                                                                                                                                                                   | Blood Level vs. Time Curve                                                        | Model                                                                               | Blood Level vs. Time Curve                                                          |
|  <p>D = Dose administered<br/>Vd = Volume of Distribution<br/>C = drug concentration in plasma<br/>Kel = elimination rate constant</p> |  |  |  |
| $C_{pt} = C_0 \cdot e^{-kel \cdot t}$                                                                                                                                                                                   |                                                                                   | $C_{pt} = A \cdot e^{-\alpha \cdot t} + B \cdot e^{-\beta \cdot t}$                 |                                                                                     |
| $T_{1/2 \text{ eliminasi}} = \frac{0,693}{k_{el}}$                                                                                                                                                                      |                                                                                   | $T_{1/2(\text{eliminasi})} = \frac{0,693}{\beta}$                                   |                                                                                     |
|                                                                                                                                                                                                                         |                                                                                   | $T_{1/2(\text{distribusi})} = \frac{0,693}{\alpha}$                                 |                                                                                     |
| $Cl = \frac{0,693 \cdot Vd}{T_{1/2}}$                                                                                                                                                                                   |                                                                                   | $Cl = \frac{Div}{AUC}$                                                              |                                                                                     |
| $AUC_{0-\infty} = \frac{C_0}{K_{el}}$                                                                                                                                                                                   |                                                                                   | $AUC_{0-\infty} = \frac{A}{\alpha} + \frac{B}{\beta}$                               | $k_{21} = \frac{A \cdot \beta + B \cdot \alpha}{A + B}$                             |
| $Vd = \frac{Dosis}{C_p}$                                                                                                                                                                                                |                                                                                   | $Vd_{ss} = V_s + V_p$                                                               | $k_{12} = \alpha + \beta - k_{21} - k$                                              |
|                                                                                                                                                                                                                         |                                                                                   | $V_p = \frac{V_s \cdot k_{12}}{k_{21}}$                                             | $k = \frac{\alpha \cdot \beta}{k_{21}}$                                             |
|                                                                                                                                                                                                                         |                                                                                   | $V_s = \frac{Div}{k \cdot AUC} = \frac{Div}{A + B}$                                 | $D_p = \frac{k_{12} \cdot Div}{k_{21}} (e^{-\beta \cdot t} - e^{-\alpha \cdot t})$  |