## Step 1: Find Best model

*Best* model is defined as the model with the smallest AIC or RSS<sub>shared</sub> among fitted models, where appropriate.

## **Step 2:** Identify *possibly convex* models

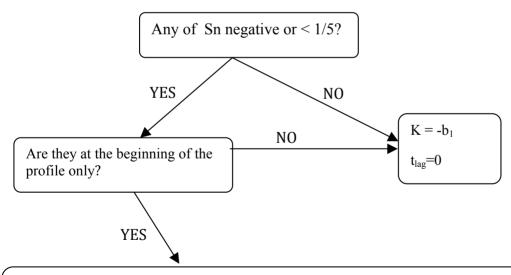
*Possibly convex* models are quadratic or cubic models with negative concavity somewhere over the time domain.

## Step 3: If model is NOT possibly convex:

 $K = -b_1$ ;  $t_{lag} = 0$ ; GO TO **Step 5** 

## Step 4: If model is possibly convex

- 4.1 For each log-parasitaemia predicted by the *Best* model  $y_i$  (but excluding any measured zero parasitaemias), calculate slope  $S_i$  between this point and the preceding predicted value
- 4.2 Find the most negative slope, Smax
- 4.3 Calculate normalised slopes Sn = S / Smax
- 4.4 Find clearance rate constant using the chart below



- 1. Fit linear regression to *Best* model predicted log-parasitaemias with Sn>1/5
- 2. Clearance rate = slope of the linear fit
- 3.  $t_{lag}$  = time of the last measurements with Sn negative or <1/5