



**Figure S3: Visual predictive check (VPC) of the pharmacokinetic behavior using the posterior distributions of the positive control run based on the presented Bayesian population PBPK approach.** The maximum posterior estimates of the population parameters have been used to estimate the posterior population distributions. The VPCs were performed as described in the text. In each VPC, the 5 % and 95 % percentiles (black dotted lines) and the median (black line) of the experimental data (red dots) are compared against the 95 % confidence intervals of the 5 % and 95 % percentile of the simulation (light blue area) and the median (blue area).