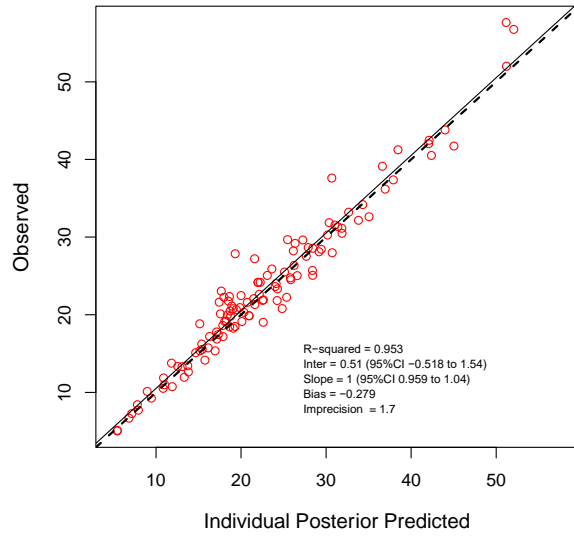
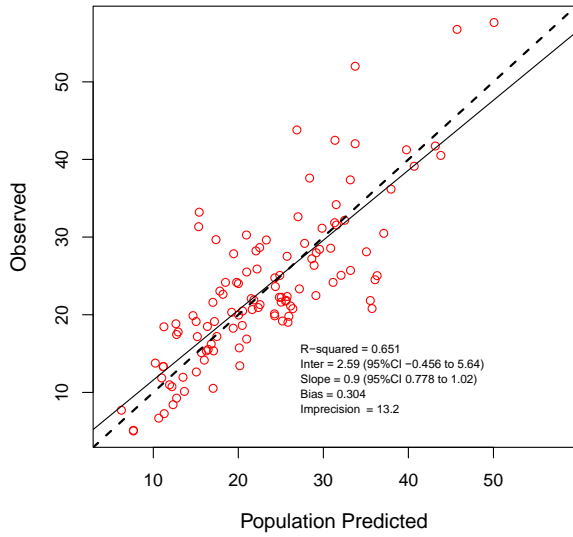


Appendix 1: Diagnostic plots for the final vancomycin model. Observed vs. population (left) and individual (right) predicted plots.



Appendix 2: Relative model log-likelihood, Akaike Information Criterion and Bayesian Information Criterion values

Model Description	-2*LL	AIC	BIC
1-compartment	1270.1	1276.2	1285.9
2-compartment	1195.9	1206	1222.2
2-compartment with CrCL	1163.8	1176	1195.4
2-compartment with CrCL and Weight	1159.9	1172	1191.4
2-compartment with CrCL, RRT and BMI	1130.7	1143	1162.2
2-compartment with CrCL, RRT, Weight and ECMO mode	742.1	757	775.9
2-compartment with CrCL, RRT and Weight	507.4	522.5	540.6

Appendix 3: Model file

#Pri

Cl,0.1, 10.2

Clrrt,0,1

V, 0.5, 80

IC2, 0.1,9300

Kcp,0,8.2

Kpc,0,14

#COV

IC

WT

RRT1

CrCl

#INI

$X(1) = IC * V_w$

$X(2) = IC2$

#Sec

$C_{ln} = Cl * (CrCl / 77)$

&IF (RRT1.eq.1) THEN $C_{ln} = Clrrt$

$V_w = V * (WT / 80) ** 0.75$

$Ke = C_{ln} / V_w$

#Out

$Y(1) = X(1) / V_w$

#Err

G=3

1.5,0.2,0,0

Appendix 4: Spaghetti plot of observed concentration data with posteriors versus time on a semi-log scale stratified by RRT status.

