FIGURE LEGENDS

Figure 1: Goodness of fit plots for azithromycin plasma concentrations fitted to a three-compartment model with first order absorption and a lag time. (A) Observed versus model predicted azithromycin plasma concentrations. (B) Individual weighted residuals versus time following initial dose. (C) Observed versus individual predicted azithromycin plasma concentrations. (D) Conditional weighted residuals versus time following initial dose. The solid line in (A) and (C) represents the line of identity and the dotted line is the linear regression line. The solid line in (B) and (D) represents the zero-intercept line.

Figure 2: Visual predictive check plots showing the 10^{th} (dashed line), 50^{th} (solid line) and 90^{th} (dashed line) percentile azithromycin plasma concentrations (log scale) versus time simulated from the final covariate model for (A) pregnant African American women and non-pregnant women not receiving oral contraceptives and (B) pregnant women of other ethnicities (Asian, Caucasian, Hispanic, Pacific Islander) ancestry and non-pregnant women receiving oral contraceptives. The close circles represent observed concentrations.

Figure 3: Azithromycin area under the plasma concentration-time curve derived from the empirical Bayesian estimates of azithromycin pharmacokinetic parameters for each individual in the population database and grouped by pregnancy status, ethnicity and co-administration of oral contraceptives. The limits of the box represent the 25th to 75th percentile of the distribution, the solid line in the box is the median value, dashed line is the average and the whiskers represent the 10th and 90th percentiles of the distribution. Solid circles outside the whiskers are outliers.

† : indicates a difference of $p<0.05$ compared to the non-pregnant women who were not receiving oral contraceptives.