

**Supplemental Table 1.** Summary of the stepwise building of the covariates model

<b>Model</b>	<b>OFV</b>	<b>ΔOFV</b>
<b>Step 1</b>		
Base	-3603.720	N/A
BW on ( $V_c$ )	-3604.591	-0.871
BW on ( $V_p$ )	-3605.275	-1.555
BW on ( $CL_{other}/F$ )	-3604.032	-0.312
CYP2A6 on ( $CL_{other}/F$ )	-3611.676	-7.956*
CYP2A6 on ( $CL_{f1}/F$ )	-3597.866	5.854
CYP3A5 on ( $CL_{other}/F$ )	-3603.720	0.000
CYP3A5 on ( $CL_{f2}/F$ )	-3613.979	-10.259*
CYP3A5 on ( $CL_{m2}$ )	-3606.531	-2.811
CYP2B6 on ( $CL_{other}/F$ )	-3607.720	-4.000
CYP2B6 on ( $CL_{f2}/F$ )	-3628.965	-25.245*
CYP2B6 on ( $CL_{m2}$ )	-3608.275	-4.555
CYP2B6 on (INH1)	-3615.040	-11.320*
CYP2B6 on (INH2)	-3607.841	-4.121
<b>Step 2</b>		
Base: CYP2B6 on ( $CL_{f2}/F$ )	-3628.965	N/A
CYP2B6 ( $CL_{f2}/F$ ) + CYP2B6 on (INH1)	-3628.830	0.135
CYP2B6 + CYP3A5 on ( $CL_{f2}/F$ )	-3626.923	2.042
CYP2B6 on ( $CL_{f2}/F$ ) + CYP2A6 on ( $CL_{other}/F$ )	-3628.965	0.000

ΔOFV is the difference in the value of the objective function

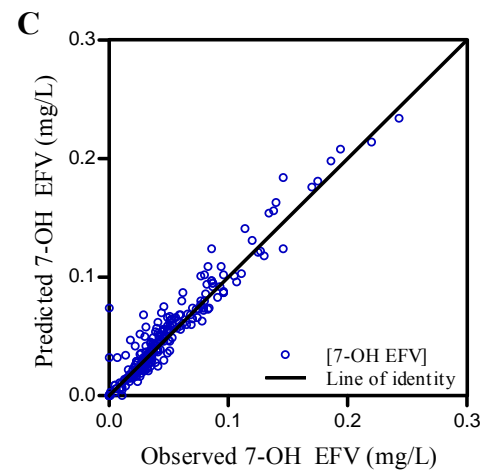
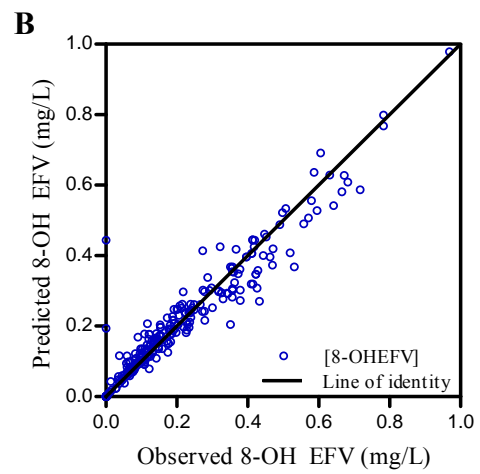
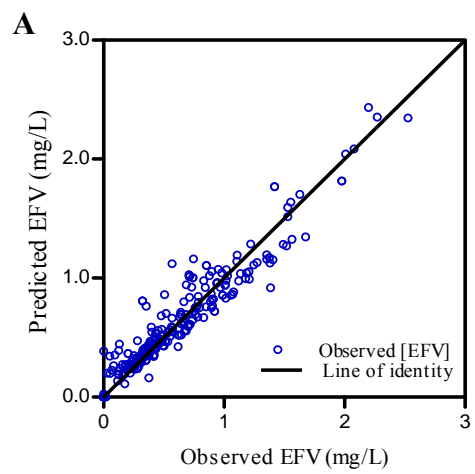
\* indicates statistical significance at  $p = 0.05$

## **Supplemental Figure Legends**

**Supplemental Figure 1** Predicted versus observed plasma concentrations of a) EFV, b) 7-OH EFV, c) 8-OH EFV displaying uniform distribution of observed concentrations around the line of identity.

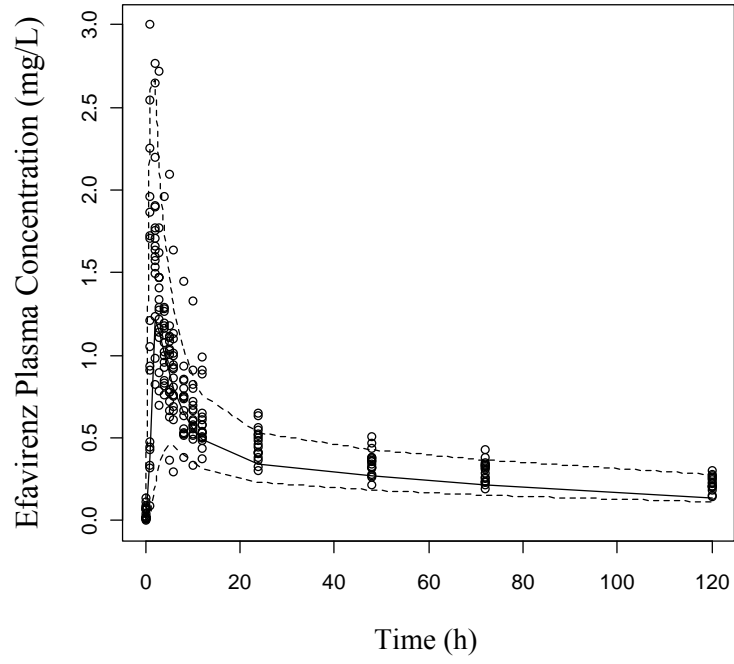
**Supplemental Figure 2** Visual predictive checks in the clopidogrel phase of (a) EFV, (b) 7-OH EFV, and (c) 8-OH EFV based on 1000 simulations per each CYP2B6 genotype group when clopidogrel 75 mg was administered for four days prior to EFV 200 mg. Dashed lines represent the 5<sup>th</sup> and 95<sup>th</sup> percentiles while the solid line is the median of simulated plasma concentrations.

## Supplemental Figure 1



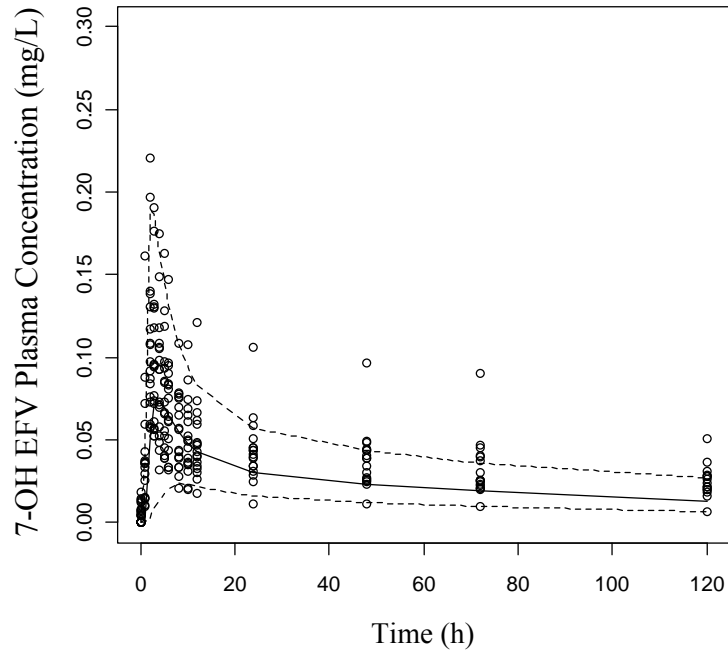
Supplemental Figure 2 (a):

A



Supplemental Figure 2 (b):

**B**



Supplemental Figure 2 (c):

C

