



Supplementary Materials: Evaluation of the Effect of CYP2D6 Genotypes on Tramadol and O-Desmethyltramadol Pharmacokinetic Profiles in a Korean Population Using Physiologically-Based Pharmacokinetic Modeling

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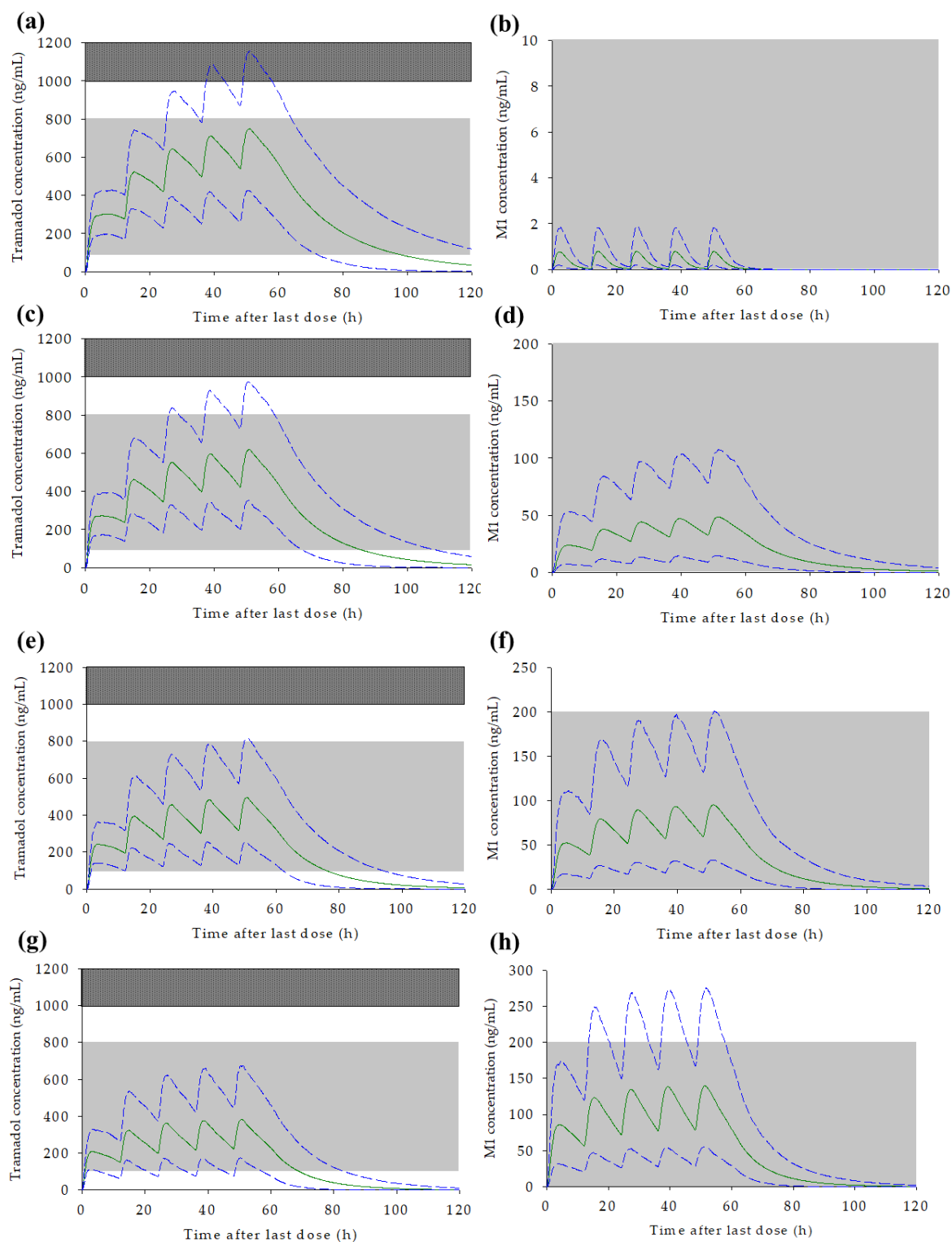


Figure S1. The predicted mean tramadol and *O*-desmethyltramadol concentration-time profiles after administration of 100 mg tramadol ER tablet twice daily (five times in total) for CYP2D6 poor metabolizer (a and b), intermediate metabolizer (c and d), extensive metabolizer (e and f) and ultra-rapid metabolizer (g and h), respectively. Blue dashed lines represent 95th and 5th percentile ranges, and dark green solid line represents predicted mean concentration. Gray areas and checked gray areas in (a), (c), (e), and (g) represent the therapeutic concentration range (100–800 ng/mL) and the toxic range (above 1000 ng/mL) for tramadol, respectively; and the gray area in (b), (d), (f), and (h) represents the maximum therapeutic range for M1 (up to 200 ng/mL).

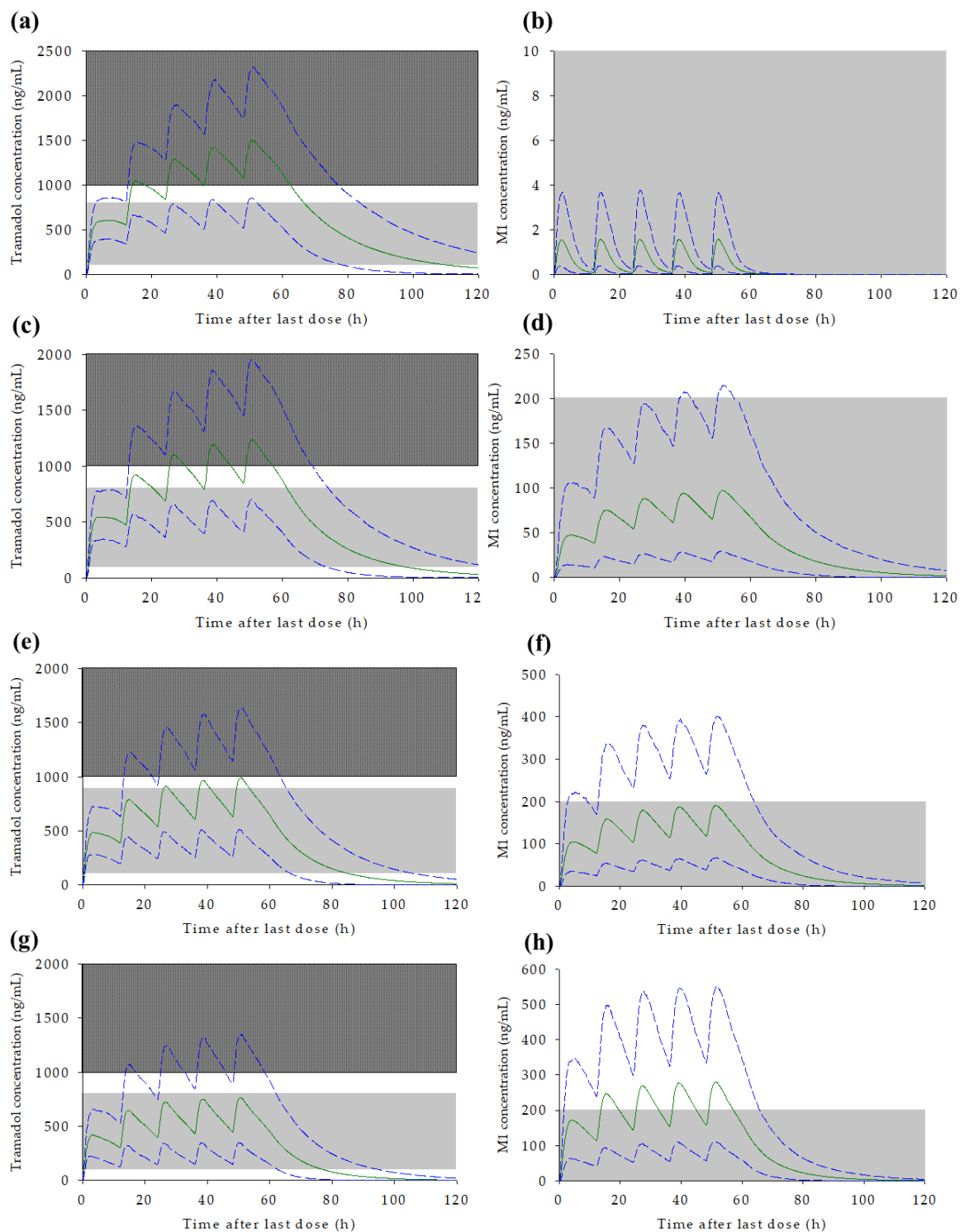


Figure S2. The predicted mean tramadol and *O*-desmethyltramadol concentration-time profiles after administration of 200 mg tramadol ER tablet twice daily (five times in total) for CYP2D6 poor metabolizer (a and b), intermediate metabolizer (c and d), extensive metabolizer (e and f) and ultra-rapid metabolizer (g and h), respectively. Blue dashed lines represent 95th and 5th percentile ranges, and dark green solid line represents predicted mean concentration. Gray areas and checked gray areas in (a), (c), (e), and (g) represent the therapeutic concentration range (100–800 ng/mL) and the toxic range (above 1000 ng/mL) for tramadol, respectively; and the gray area in (b), (d), (f), and (h) represents the maximum therapeutic range for M1 (up to 200 ng/mL).