## LIST OF ABBREVIATIONS

$(AUC_m/AUC_p)_{last}$ metabolite/parent $AUC_{last}$ ratio

+BG 6',7'-dihydroxybergamottin plus bergamottin

1'-OH MDZ 1'-hydroxymidazolam

1X single strength

2X double strength

AA African American

ACAT advanced compartmental absorption & transit

ADAM advanced dissolution, absorption & metabolism

ADME absorption, distribution, metabolism, excretion

ANOVA analysis of variance

APAP acetaminophen

Aq aqueous

$AUC_{0-\infty}$ area under the curve from zero to infinite time

$AUC_{last}$ area under the curve from zero to the last measured concentration

B/P blood to plasma partition ratio

BCA bicinchoninic acid

BCRP breast cancer resistance protein

BG bergamottin

bid two times daily

BLQ below limit of quantification

BSP bromosulfophthalein

BuOH butanol

C concentration

$CaCl_2$ calcium chloride

CBJ cranberry juice

CI confidence interval

Cl/F apparent oral clearance

$C_{last}$ last measured concentration

$Cl_{int}$, intrinsic clearance

$C_{max}$ maximum concentration

COS-1 CV-1 (simian) origin SV40 virus

CTRC Clinical and Translational Research Center

CV coefficient of variation

CYP cytochrome P450

d day(s)

DDIs drug-drug interactions

DHB 6',7'-dihydroxybergamottin

DMEM Dulbecco's modified Eagle's medium

DMSO dimethyl sulfoxide

E maximum effect

E1S estrone 3-sulfate

EDTA ethylenediaminetetraacetic acid

EGCG epigallocatechin gallate

ELSD evaporative light scattering detector

$E_o$ baseline effect

ER extended release

$f_a$ fraction available to be absorbed from dosage form

FC furanocoumarin

FDA Food and Drug Administration

$f_{u,gut}$ unbound fraction in enterocytes

$f_{u,inc}$, unbound fraction in incubation

$f_{u,plasma}$ unbound fraction in plasma

g gram

GCRC General Clinical Research Center

GFJ grapefruit juice

GI gastrointestinal

h hour

HBSS Hank's balanced salt solution

HEK human embryonic kidney

HeLa cervical cancer cells

HEPES 4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid

HPLC high pressure liquid chromatography

HRMS high resolution mass spectrometry

$IC_{50}$ half maximal inhibitory concentration

$I_{max}$ maximum inhibitory effect

INR International Normalized Ratio

$k_a$ first-order absorption rate constant

$K_{app}$ concentration of mechanism-based inhibitor associated with half maximal inactivation rate ($K_I$)

KCl potassium chloride

kg kilogram

$KH_2PO_4$ monopotassium phosphate

$K_i$ inhibition constant

$k_{inact}$ maximal inactivation rate constant

$K_m$ substrate concentration at which reaction rate is half of $V_{max}$

L liter

l liter

Log*P* logarithm of the octanol-water partition

M men

MDCKII Madin-Darby canine kidney type II

*MDR1* gene encoding for P-glycoprotein

MDZ midazolam

MES 2-(*N*-morpholino)ethanesulfonic acid hydrate

mg milligram

mGFJ modified grapefruit juice

$MgSO_4$ magnesium sulfate

min minute

ml milliliter

mL milliliter

mM millimolar

mol mole

MOM 3-methoxymorphinan

MRP multi-drug resistance-associated protein

*m/z* mass to charge ratio

NaCl sodium chloride

NaOH sodium hydroxide

NC not calculated

ND not detected

NM not measured

nmol/l nanomoles per liter

NMR nuclear magnetic resonance

NR not reported

NS not statistically significant

NSP not specified

OATPs organic anion transporting polypeptides

OJ orange juice

Org organic

OST α/β organic solute transporter alpha/beta

PBPK physiologically-based pharmacokinetic

PBS phosphate-buffered saline

PD pharmacodynamics

PDA photodiode array detector

P-gp P-glycoprotein

PK pharmacokinetics

p$K_a$ acid dissociation constant

*p*-nitrophenylacetate PNPA

POM pomegranate juice

qd daily

rCYP, recombinant CYP

s second

SD standard deviation

SDS sodium dodecyl sulfate

SE standard error

*SLCO* gene encoding for organic anion transporting polypeptides

SS statistically significant

SULTs sulfotransferases

$t_{½}$ terminal half-life

tid three times daily

$t_{max}$ time to reach maximum concentration

UPLC ultrahigh pressure liquid chromatography\

UTI urinary tract infection

UV ultraviolet

VER verapamil

$V_{max}$ maximum rate

$V_{max}$, maximum rate of metabolite formation

$V_{ss}$ volume of distribution at steady state

w week

W women

y year

$\gamma$ Hill coefficient

$\lambda_z$ terminal elimination rate constant

µg microgram

µg/mL micrograms per milliliter

µM micromolar

µmol/l micromoles per liter