CONTENTS

MINIREVIEW
Unusual Glucuronides. Upendra A. Argikar .......... 1239

SHORT COMMUNICATIONS
Effect of Glucagon-Like Peptide 2 on Hepatic, Renal,
and Intestinal Disposition of 1-Chloro-2,4-dinitrobenzene.
Silvina S. M. Villanueva, Virginia G.
Perdomo, María L. Ruiz, Juan P. Rigalli, Agostina Arias, Mary Vore, Viviana A. Catania, and
Aldo D. Mottino ........................................... 1252

Reevaluation of a Quantitative Structure Pharmacokinetic Model for Biliary Excretion in Rats.
Yash A. Gandhi and Marilyn E. Morris ............ 1259

In Vitro Hepatotoxicity and Cytochrome P450 In-
duction and Inhibition Characteristics of Carnosic Acid, a Dietary Supplement with Anti-
adipogenic Properties. Leslie J. Dickmann,
Brooke M. VandenBrink, and Yvonne S. Lin .... 1263

ARTICLES

In Vitro Evaluation of the Interaction Potential of Iro-
sustat with Drug-Metabolizing Enzymes. Verònica
Ventura, Josep Solà, Concepción Peraire, Fran-
çoise Brée, and Rosendo Obach ................. 1268

A Comprehensive Assessment of Repaglinide Meta-
abolic Pathways: Impact of Choice of In Vitro System and Relative Enzyme Contribution to In Vitro Clearance. Carolina Säll, J. Brian Houston,
and Aleksandra Galetin ............................... 1279

A Simple Liquid Chromatography-Tandem Mass
Spectrometry Method to Determine Relative Plasma Exposures of Drug Metabolites across
Species for Metabolite Safety Assessments
(Metabolites in Safety Testing). II. Application
to Unstable Metabolites. Hongying Gao and R.
Scott Obach .............................................. 1290

Metabolite Profiling of Bendamustine in Urine of Can-
cer Patients after Administration of [14C]Benda-
mustine. Anne-Charlotte Dubbelman, Robert S.
Jansen, Hilde Rosing, Mona Durwish, Edward
Hellriegel, Philmore Robertson Jr., Jan H. M.
Schellens, and Jos H. Beijnen ....................... 1297

Assessment of Exposure of Metabolites in Preclinical
Species and Humans at Steady State from the
Single-Dose Radiolabeled Absorption, Distribu-
tion, Metabolism, and Excretion Studies: A Case
Study. Chandra Prakash, Zhaoyang Li, Cesare
Orlandi, and Lewis Kluin ................................ 1308

Neonatal Development of Hepatic UGT1A9: Impli-
cations of Pediatric Pharmacokinetics. Shogo J.
Miyagi, Alison M. Milne, Michael W. H. Cought-
rie, and Abby C. Collier ............................... 1321

Species-Dependent Uptake of Glycylsarcosine but
Not Oseltamivir in Pichia pastoris Expressing the
Rat, Mouse, and Human Intestinal Peptide
Transporter PEPT1. Yongjun Hu, Xiaomei Chen,
and David E. Smith ............................. 1328

Time-Dependent Inhibition and Estimation of
CYP3A Clinical Pharmacokinetic Drug-Drug
Interactions Using Plated Human Cell Systems.
Daniel R. Albaugh, Cody L. Fullenwider, Michael B.
Fisher, and J. Matthew Hutzler ............... 1336

Characterization of the In Vitro and In Vivo Metabol-
olism and Disposition and Cytochrome P450 In-
duction/Induction Profile of Saxagliptin in Hu-
mans. Hong Su, David W. Boulton, Anthony
Barros Jr., Lifei Wang, Kai Cao, Samuel J.
Bonacorsi Jr., Ramaswamy A. Iyer, W. Griffith
Humphreys, and Lisa J. Christopher .......... 1345

Coordinated Regulation of Hepatic Phase I and II Drug-
Metabolizing Genes and Transporters using AhR-
, CAR-, PXR-, PPARα-, and Nrf2-Null Mice.
Lauren M. Aleksunes and Curtis D. Klaassen .... 1366

Continued on next page
Nano-Advantage in Enhanced Drug Delivery with Biodegradable Nanoparticles: Contribution of Reduced Clearance. Rajendra S. Kadam, David W. A. Bourne, and Uday B. Kompella 1380

Simultaneous Absolute Protein Quantification of Carboxylesterases 1 and 2 in Human Liver Tissue Fractions using Liquid Chromatography-Tandem Mass Spectrometry. Yuichiro Sato, Aiji Miyashita, Takafumi Iwatsubo, and Takashi Usui 1389

Probabilistic Orthology Analysis of the ATP-Binding Cassette Transporters: Implications for the Development of Multiple Drug Resistance Phenotype. Ciaran Fisher, Tanya Coleman, and Nick Plant 1397

Effect of Multiple Cysteine Substitutions on the Functionality of Human Multidrug Resistance Protein 1 Expressed in Human Embryonic Kidney 293 Cells: Identification of Residues Essential for Function. Lei Qin, Shui-Pang Tam, and Roger G. Deeley 1403


Hydralazine As a Selective Probe Inactivator of Aldehyde Oxidase in Human Hepatocytes: Estimation of the Contribution of Aldehyde Oxidase to Metabolic Clearance. Timothy J. Strelevitz, Christine C. Orozco, and R. Scott Obach 1441

Sequential Metabolism of AMG 487, a Novel CXCR3 Antagonist, Results in Formation of Quinone Reactive Metabolites That Covalently Modify CYP3A4 Cys239 and Cause Time-Dependent Inhibition of the Enzyme. Kirk R. Henne, Thuy B. Tran, Brooke M. VandenBrink, Dan A. Rock, Divesh K. Aidasani, Raju Subramanian, Andrew K. Mason, David M. Stresser, Yohannes Teferra, Simon G. Wong, Michael G. Johnson, Xiaoqi Chen, George R. Tonn, and Bradley K. Wong 1429

Correction to “A Semiphysiological Population Model for Prediction of the Pharmacokinetics of Drugs under Liver and Renal Disease Conditions” 1449

Correction to “Pharmacokinetic Analysis of Continuous Erythropoietin Receptor Activator Disposition in Adult Sheep Using a Target-Mediated, Physiologic Recirculation Model and a Tracer Interaction Methodology” 1450

Correction to “Glucuronidation of Polychlorinated Biphenyls and UDP-Glucuronic Acid Concentrations in Channel Catfish Liver and Intestine” 1451

Supplemental material is available online at http://dmd.aspetjournals.org.

About the cover: Three views of a model of multidrug-associated protein 1 (MRP1). A and B, two views from the plane of the membrane. C, view from the extracellular face of the membrane. See the article by Qin et al. on page 1403 of this issue.