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. Ruíz, 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 Induction and Inhibition Characteristics of Carnosic Acid, a Dietary Supplement with Antioxidant Properties. Leslie J. Dickmann, Brooke M. VandenBrink, and Yvonne S. Lin . . 1263

ARTICLES

A Comprehensive Assessment of Repaglinide Metabolic 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


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

Neonatal Development of Hepatic UGT1A9: Implications of Pediatric Pharmacokinetics. Shogo J. Miyagi, Alison M. Milne, Michael W. H. Coughtrie, and Abby C. Collier ............ 1321

Species-Dependent Uptake of Glucylsarcosine 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


Characterization of the In Vitro and In Vivo Metabolism and Disposition and Cytochrome P450 Inhibition/Induction Profile of Saxagliptin in Human. Hong Su, David W. Bouton, Anthony Barros Jr., Lifei Wang, Kai Cao, Samuel J. Bonacorsì Jr., Ramaswamy A. Iyer, W. Griffith Humphreys, and Lisa J. Christopher ............ 1345

Identification of the Cytochrome P450 and Other Enzymes Involved in the In Vitro Oxidative Metabolism of a Novel Antidepressant, Lu AA21004. Mette G. Hvenegaard, Benny Bang-Andersen, Henrik Pedersen, Morten Jørgensen, Ask Püschl, and Lars Dalgaard ............ 1357

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


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


Interaction between Two Sulfate-Conjugated Uremic Toxins, p-Cresyl Sulfate and Indoxyl Sulfate, during Binding with Human Serum Albumin. Hiroshi Watanabe, Tsuyoshi Noguchi, Yohei Miyamoto, Daisuke Kadowaki, Shinsuke Kotani, Makoto Nakajima, Shigeyuki Miyamura, Yu Ishima, Masaki Otagiri, and Toru Maruyama .......... 1423

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, Xiaosi Chen, George R. Tonn, and Bradley K. Wong ........ 1429


ERRATA

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.