CONTENTS

SHORT COMMUNICATIONS

Correction for Nonspecific Binding to Various Components of Ultrafiltration Apparatus and Impact on Estimating In Vivo Rat Clearance for a Congeneric Series of 5-Ethyl, 5-n-Alkyl Barbituric Acids. Peter Ballard and Malcolm Rowland ................................. 2165


ARTICLES

Production of Ibuprofen Acyl Glucosides by Human UGT2B7. Daniela Buchheit, Călin-Aurel Drăgan, Ellen I. Schmitt, and Matthias Bureik ......................... 2174


Excretion, Metabolism, and Pharmacokinetics of CP-945,598, a Selective Cannabinoid Receptor Antagonist, in Rats, Mice, and Dogs. Zhuang Miao, Dennis O. Scott, David A. Griffith, Robert Day, and Chandra Prakash ........................................... 2191

Cardiac Arrest and Therapeutic Hypothermia Decrease Isoform-Specific Cytochrome P450 Drug Metabolism. Jiangquan Zhou, Philip E. Empey, Robert R. Bies, Patrick M. Kochanek, and Samuel M. Poloyac ................................. 2209


Independent and Combined Effects of Ethanol Self-Administration and Nicotine Treatment on Hepatic CYP2E1 in African Green Monkeys. C. S. Ferguson, S. Miksys, R. Palmour, and R. F. Tyndale ................................................................. 2233

Complex N-Acetylation of Triethylenetetramine. Marc Cerrada-Gimenez, Janne Weisell, Mervi T. Hyvönen, Myung Hee Park, Leena Alhonen, Jouko Vepsäläinen, and Tuomo A. Keinänen ........................................... 2242

Effect of Dose Escalation on the In Vivo Oral Absorption and Disposition of Glycylsarcosine in Wild-Type and Pept1 Knockout Mice. Dilara Jappar, Yongjun Hu, and David E. Smith ........................................... 2250

A Novel Method for the Immunoquantification of UDP-Glucuronosyltransferases in Human Tissue. Alison M. Milne, Brian Burchell, and Michael W. H. Coughtrie ................................................................. 2258

Biosynthesis and Identification of an N-Oxide/N-Glucuronide Metabolite and First Synthesis of an N-O-Glucuronide Metabolite of Lu AA21004. Henriette Kold Uldam, Martin Juul, Henrik Pedersen, and Lars Dalgaard ........................................... 2264

Continued on next page
Systemic and Direct Nose-to-Brain Transport Pharmacokinetic Model for Remoxipride after Intravenous and Intranasal Administration. Jasper Stevens, Bart A. Ploeger, Piet H. van der Graaf, Meindert Danhof, and Elizabeth C. M. de Lange ........................................ 2275

CYP2C19 Progress Curve Analysis and Mechanism-Based Inactivation by Three Methylene-dioxynphenyl Compounds. Kaisa A. Salminen, Achim Meyer, Peter Imming, and Hannu Raunio ......................................................... 2283

Involvement of Different Human Glutathione Transfere Isoforms in the Glutathione Conjugation of Reactive Metabolites of Troglitazone. Ran Okada, Kazuya Maeda, Takahito Nishiyama, Shinsuke Aoyama, Zenzaburo Tozuka, Akira Hiratsuka, Toshihiko Ikeda, Hiroyuki Kusuhara, and Yuichi Sugiyama ......................................................... 2290

Monomethylarsenic Diglutathione Transport by the Human Multidrug Resistance Protein 1 (MRP1/ABCC1). Michael W. Carew, Hua Nanmandura, Caley B. Shukalek, X. Chris Le, and Elaine M. Leslie ......................................................... 2298

Characterization of the Expression and Activity of Carboxylesterases 1 and 2 from the Beagle Dog, Cynomolgous Monkey, and Human. Eric T. Williams, James A. Bacon, David M. Bender, Jennifer J. Lowinger, Wen-Kai Guo, Mariam E. Ehsani, Xiliang Wang, He Wang, Yue-Wei Qian, Kenneth J. Ruterbories, Steven A. Wrighton, and Everett J. Perkins ......................................................... 2305


Complex Drug Interactions of HIV Protease Inhibitors 2: In Vivo Induction and In Vitro to In Vivo Correlation of Induction of Cytochrome P450 1A2, 2B6, and 2C9 by Ritonavir or Nelfinavir. Brian J. Kirby, Ann C. Collier, Evan D. Kharasch, Vaishali Dixit, Pankaj Desai, Dale Whittington, Kenneth E. Thummel, and Jashvant D. Unadkat ......................................................... 2329

Absorption and Metabolism of Chlorogenic Acids in Cultured Gastric Epithelial Monolayers. Tracy L. Farrell, Tristan P. Dew, Laure Poguet, Peter Hanson, and Gary Williamson ......................................................... 2338

Raloxifene Glucuronidation in Human Intestine, Kidney, and Liver Microsomes and in Human Liver Microsomes Genotyped for the UGT1A1*28 Polymorphism. Tina Trdan Lušin, Jurij Trontelj, and Aleš Mrhar ......................................................... 2347

Small Molecule Quantification by Liquid Chromatography-Mass Spectrometry for Metabolites of Drugs and Drug Candidates. Upendra P. Dahal, Jeffrey P. Jones, John A. Davis, and Dan A. Rock ......................................................... 2355


Analysis and Prediction of Drug Transfer into Human Milk Taking into Consideration Secretion and Reuptake Clearances across the Mammary Epithelia. Hiroki Koshimichi, Kousei Ito, Akihiro Hisaka, Masashi Homma, and Hiroshi Suzuki ......................................................... 2370

Inhibition of Human Liver Aldehyde Oxidase: Implications for Potential Drug-Drug Interactions. John T. Barr and Jeffrey P. Jones ......................................................... 2381

Effect of Culture Time on the Basal Expression Levels of Drug Transporters in Sandwich-Cultured Primary Rat Hepatocytes. Eskouhie H. Tchaparian, Jessica S. Houghton, Craig Uyeda, Mark P. Grillo, and Lixia Jin ......................................................... 2387

Variations in ATP-Binding Cassette Transporter Regulation during the Progression of Human Nonalcoholic Fatty Liver Disease. Rhiannon N. Hardwick, Craig D. Fisher, Mark J. Canet, George L. Scheffer, and Nathan J. Cherrington ......................................................... 2395

Prolucrelferin Acetals as Bioluminogenic Substrates for Cytochrome P450 Activity and Probes for CYP3A Inhibition. Poncho L. Meisenheimer, H. Tetsuo Uyeda, Dongping Ma, Mary Sobol, Mark G. McDougall, Cesar Corona, Dan Simpson, Dieter H. Klaubert, and James J. Cali ......................................................... 2403


Studies to Further Investigate the Inhibition of Human Liver Microsomal CYP2C8 by the Acyl-β-Glucuronide of Gemfibrozil. S. M. Jenkins, T. Zvyaga, S. R. Johnson, J. Hurley, A. Wag-
Thr302 Is the Site for the Covalent Modification of Human Cytochrome P450 2B6 Leading to Mechanism-Based Inactivation by tert-Butylphenylacetylene. Hsia-lien Lin, Haoming Zhang, Matthew J. Pratt-Hyatt, and Paul F. Hollenberg . 2431

Development of a Highly Sensitive Method Using Liquid Chromatography-Multiple Reaction Monitoring to Quantify Membrane P-Glycoprotein in Biological Matrices and Relationship to Transport Function. Tasso Miliotis, Liaqat Ali, Johan E. Palm, Anders J. Lundqvist, Martin Ahnoff, Tommy B. Andersson, and Constanze Hilgendorf . 2440

About the cover: Comparison of gemfibrozil acyl-β-glucuronide (with the orientation of m-He toward heme) with gemfibrozil (slate blue carbons) in the active site of the CYP2C8 enzyme. See the article by Jenkins et al. on page 2421 of this issue.

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