CONTENTS

COMMENTARY
Nonspecific Protein Binding versus Membrane Partitioning: It Is Not Just Semantics. Swati Nagar and Ken Korzekwa .................... 1649

SHORT COMMUNICATION
Risk Assessment of Mechanism-Based Inactivation in Drug-Drug Interactions. Yasushi Fujioka, Kent L. Kuoze, and Nina Isoherranen .......... 1653

ARTICLES

A Novel Ring Oxidation of 4- or 5-Substituted 2H-Oxazole to Corresponding 2-Oxazolone Catalyzed by Cytosolic Aldehyde Oxidase. Vinod K. Arora, Thomas Philip, Stella Huang, and Yue-Zhong Shu ....................... 1668


Selective Mechanism-Based Inactivation of CYP3A4 by CYP3cide (PF-04981517) and Its Utility as an In Vitro Tool for Delineating the Relative Roles of CYP3A4 versus CYP3A5 in the Metabolism of Drugs. Robert L. Walsky, R. Scott Obach, Ruth Hyland, Ping Kang, Sue Zhou, Michael West, Kieran F. Geoghegan, Christopher J. Helal, Gregory S. Walker, Theunis C. Goosen, and Michael A. Zientek ...................... 1686


Metabolism and Pharmacokinetics of Indacaterol in Humans. Mark Kagan, Jeremy Dain, Lena Peng, and Christine Reynolds .......... 1712

Excretion and Metabolism of Milnacipran in Humans after Oral Administration of Milnacipran Hydrochloride. Fanying Li, Christina Chin, Julie Wangsa, and John Ho .................. 1723

Role of Human UDP-Glucuronosyltransferases in the Biotransformation of the Triazoloacridinone and Imidazoacridinone Antitumor Agents C-1305 and C-1311: Highly Selective Substrates for UGT1A10. Barbara Fedjeko-Kap, Stacie M. Bratton, Moshe Finel, Anna Radominska-Pandya, and Zofia Mazerska .................. 1736

Use of Mechanistic Modeling to Assess Interindividual Variability and Interspecies Differences in Active Uptake in Human and Rat Hepatocytes. Karelle Meñochet, Kathryn E. Kenworthy, J. Brian Houston, and Aleksandra Galetin ........... 1744

Evaluation of P450 Inhibition and Induction by Artemisinin Antimalarials in Human Liver Microsomes and Primary Human Hepatocytes. Jie Xing, Brian J. Kirby, Dale Whittington, Yakun Wan, and David R. Goodlett ........... 1757

Mechanism-Based Inactivation of Cytochrome P450 2B6 by Methadone through Destruction of Prosthetic Heme. Hemali Amanugama, Haoming Zhang, and Paul F. Hollenberg .................. 1765


Continued on next page
Metabolism of the Active Metabolite of Quetiapine, N-Desalkylquetiapine In Vitro. Gry Vibeke Bakken, Espen Molden, Karoline Knutsen, Niclas Lunder, and Monica Hermann .......... 1778

Preclinical Assessment of the Absorption and Disposition of the Phosphatidylinositol 3-Kinase/Mammalian Target of Rapamycin Inhibitor GDC-0980 and Prediction of Its Pharmacokinetics and Efficacy in Human. Laurent Salpatti, Jodie Pang, Emilie G. Plise, Leslie B. Lee, Alan G. Olivero, Wei Wei Prior, Deepak Sambath, Susan Wong, and Xiaolin Zhang .......... 1785

Evaluation of Inhibition Selectivity for Human Cytochrome P450 2A Enzymes. Eva S. Stephens, Agnes A. Walsh, and Emily E. Scott .......... 1797

Discovery of a Highly Selective CYP3A4 Inhibitor Suitable for Reaction Phenotyping Studies and Differentiation of CYP3A4 and CYP3A5. Xiaohai Li, Xinyi Song, Theodore M. Kamenecka, and Michael D. Cameron .......... 1803

Preclinical Evaluation of the Metabolism and Disposition of RRx-001, a Novel Investigative Anti-cancer Agent. Jan Scicinski, Bryan Oronsky, Michael Taylor, Gang Luo, Timothy Musick, Joseph Marini, Christopher M. Adams, and William L. Fitch .......... 1810


Characterization of SAGE Mdr1a (P-gp), Bcrp, and Mrp2 Knockout Rats Using Loperamide, Paclitaxel, Sulfasalazine, and Carboxydichlorofluorescein Pharmacokinetics. Maciej J. Zamek-Gliszczynski, David W. Bedwell, Jing Q. Bao, and J. William Higgins .......... 1825


Influence of Enterohepatic Recycling on the Time Course of Brain-to-Blood Partitioning of Valproic Acid in Rats. Jeannie M. Padowski and Gary M. Pollack .......... 1846

Glutaredoxin Is Involved in the Formation of the Pharmacologically Active Metabolite of Clopidogrel from Its GSH Conjugate. Katsunobu Hagihara, Miho Kazui, Atsushi Kurihara, Toshikiko Ikeda, and Takashi Izumi .......... 1854

ACCELERATED COMMUNICATION


ERRATA

Correction to “Identification of Novel Metoclopramide Metabolites in Human: In Vitro and In Vivo Studies” .......... 1866

Correction to “Identification and Validation of Novel Human Pregnane X Receptor Activators among Prescribed Drug via Ligand-Based Virtual Screening” .......... 1868

About the cover: Schematic representation of a 40-kDa branched PEGylated Adnectin (P40BEI-tandem). See the article by Wang et al. on page 1677 of this issue.

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