

DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

December 2012

Vol. 40, No. 12

CONTENTS

ARTICLES

S Cytochrome P450 3A5 Plays a Prominent Role in the Oxidative Metabolism of the Anti-Human Immunodeficiency Virus Drug Maraviroc. *Yanhui Lu, Craig W. Hendrix, and Namandjé N. Bumpus* . . . **2221**

Assessment of Intestinal Availability of Various Drugs in the Oral Absorption Process Using Portal Vein-Cannulated Rats. *Yoshiaki Matsuda, Yoshihiro Konno, Masahiro Satsukawa, Taro Kobayashi, Yu Takimoto, Kunihiko Morisaki, and Shinji Yamashita* **2231**

Predicting the Drug Interaction Potential of AMG 853, a Dual Antagonist of the D-Prostanoid and Chemoattractant Receptor-Homologous Molecule Expressed on T Helper 2 Cells Receptors. *Robert S. Foti, Josh T. Pearson, Simon L. Wong, Julie A. Zalikowski, Michael D. Boudreaux, Samantha P. Prokop, John A. Davis, Christopher Banfield, Maurice G. Emery, Dan A. Rock, Jan L. Wahlstrom, Larry C. Wienkers, and Benny M. Amore* **2239**

Pharmacokinetics, Biotransformation, and Mass Balance of Edoxaban, a Selective, Direct Factor Xa Inhibitor, in Humans. *Mohinder S. Bathala, Hiroshi Masumoto, Toshihiro Oguma, Ling He, Chris Lowrie, and Jeanne Mendell* **2250**

Inhibition of Bupropion Metabolism by Selegiline: Mechanism-Based Inactivation of Human CYP2B6 and Characterization of Glutathione and Peptide Adducts. *Chitra Sridar, Cesar Kanaan, and Paul F. Hollenberg* **2256**

Predictability of Metabolism of Ibuprofen and Naproxen Using Chimeric Mice with Human Hepatocytes. *Seigo Sanoh, Aya Horiguchi, Kazumi Sugihara, Yaichiro Kotake, Yoshitaka Tayama, Naoto Uramaru, Hiroki Ohshita, Chise Tateno, Toru Horie, Shigeyuki Kitamura, and Shigeru Ohta* **2267**

Optimized Experimental Design for the Estimation of Enzyme Kinetic Parameters: An Experimental Evaluation. *Erik Sjögren, Petter Svanberg, and Kajsa P. Kanebratt* **2273**

Bioactivation of the Cancer Chemopreventive Agent Tamoxifen to Quinone Methides by Cytochrome P4502B6 and Identification of the Modified Residue on the Apoprotein. *Chitra Sridar, Jaime D'Agostino, and Paul F. Hollenberg* **2280**

Statistical Methods for Analysis of Time-Dependent Inhibition of Cytochrome P450 Enzymes. *Phillip Yates, Heather Eng, Li Di, and R. Scott Obach* . . . **2289**

S Metabolism and Pharmacokinetics of JM6 in Mice: JM6 Is Not a Prodrug for Ro-61-8048. *Maria G. Beconi, Dawn Yates, Kathryn Lyons, Kim Matthews, Steve Clifton, Tania Mead, Michael Prime, Dirk Winkler, Catherine O'Connell, Daryl Walter, Leticia Toledo-Sherman, Ignacio Munoz-Sanjuan, and Celia Dominguez* **2297**

S Identification of Metabolites of Ganoderic Acid D by Ultra-Performance Liquid Chromatography/Quadrupole Time-of-Flight Mass Spectrometry. *Chunru Cheng, Min Yang, Kate Yu, Shuhong Guan, Sijia Tao, Alan Millar, Xiaoyan Pang, and Dean Guo* **2307**

Reversible Disulfide Formation of the Glutamate Carboxypeptidase II Inhibitor E2072 Results in Prolonged Systemic Exposures In Vivo. *Rana Rais, Randall Hoover, Krystyna Wozniak, Michelle A. Rudek, Takashi Tsukamoto, Jesse Alt, Camilo Rojas, and Barbara S. Slusher* **2315**

Preferred Binding Orientations of Phenacetin in CYP1A1 and CYP1A2 Are Associated with Isoform-Selective Metabolism. *Qingbiao Huang, Rahul S. Deshmukh, Spencer S. Ericksen, Youbin Tu, and Grazyna D. Szklarz* . . . **2324**

S Mitigating the Inhibition of Human Bile Salt Export Pump by Drugs: Opportunities Provided by Physicochemical Property Modulation, In Silico Modeling, and Structural Modification. *Daniel J. Warner, Hongming Chen, Louis-David Cantin, J. Gerry Kenna, Simone Stahl, Clare L. Walker, and Tobias Noeske* **2332**

Continued on next page

Pharmacokinetics, Bioavailability, Tissue Distribution, Excretion, and Metabolite Identification of Methoxyflavones in <i>Kaempferia parviflora</i> Extract in Rats. <i>Catheleeya Mekjaruskul, Michael Jay, and Bungorn Sripanidkulchai</i>	2342
Disposition and Metabolism of LY2452473, a Selective Androgen Receptor Modulator, in Humans. <i>Ping Yi, Jessica Fayer Rehmel, Kenneth Cassidy, Chad Hadden, Kristina Campanale, Nita Patel, and Jason Johnson</i>	2354
Pharmacokinetics of Pegylated Liposomal Doxorubicin Administered by Intraoperative Hyperthermic Intraperitoneal Chemotherapy to Patients with Advanced Ovarian Cancer and Peritoneal Carcinomatosis. <i>Emanuela Salvatorelli, Michele De Tursi, Pierantonio Menna, Consiglia Carella, Renato Massari, Antonella Colasante, Stefano Iacobelli, and Giorgio Minotti</i>	2365
[S] Metabolic Chiral Inversion of Brivanib and Its Relevance to Safety and Pharmacology. <i>Jiachang Gong, Jinping Gan, Eric Masson, Shariq Syed, Yuan-Qing Xia, Daphne Williams, Janice Pursley, Mohammed Jemal, W. Griff Humphreys, and Ramaswamy A. Iyer</i>	2374
ERRATA	
Correction to “Stereochemical Aspects of Itraconazole Metabolism In Vitro and In Vivo”	2381
Correction to “In Vivo-Formed versus Preformed Metabolite Kinetics of <i>trans</i> -Resveratrol-3-sulfate and <i>trans</i> -Resveratrol-3-glucuronide”	2382

[S] Supplemental material is available online at <http://dmd.aspetjournals.org>.

About the cover: Models of Phenacetin (yellow) and acetaminophen (green) bound in CYP1A1 (A) and CYP1A2 (B) were constructed on the basis of NMR-derived distance restraints. See article by Huang et al. on page 2324 of this issue.