CONTENTS

SHORT COMMUNICATIONS

Essential Role of the Cytochrome P450 Enzyme CYP2A5 in Olfactory Mucosal Toxicity of Naphthalene. Jinping Hu, Li Sheng, Lei Li, Xin Zhou, Fang Xie, Jaime D’Agostino, Yan Li, and Xinxin Ding ........................................... 23

Candidate Gene Polymorphisms in Patients with Acetaminophen-Induced Acute Liver Failure. Michael H. Court, Inga Peter,? Suwagmani Hazarika,? Magdalini Vasiadi, David J. Greenblatt, William M. Lee, and The Acute Liver Failure Study Group .......... 28

Selective Inhibition of Cytochrome P450 2D6 by Sarpogrelate and Its Active Metabolite, M-1, in Human Liver Microsomes. Doo-Yeoun Cho, Soo Hyeon Bae, Joeng Kee Lee, Yang Weon Kim, Bom-Taeck Kim, and Soo Kyung Bae .......... 33


SYMPOSIUM REPORT


ARTICLES

Evaluation and Mechanistic Analysis of the Cytotoxicity of the Acyl Glucuronide of Nonsteroidal Anti-Inflammatory Drugs. Taishi Miyashita, Kento Kimura, Tatsuki Fukami, Miki Nakajima, and Tsuyoshi Yokoi ..................... 1

MicroRNA-561 Promotes Acetaminophen-Induced Hepatotoxicity in HepG2 Cells and Primary Human Hepatocytes through Downregulation of the Nuclear Receptor Corepressor Dosage-Sensitive Sex-Reversal Adrenal Hypoplasia Congenital Critical Region on the X Chromosome, Gene 1 (DAX-1). Minghua Li, Yinxue Yang, Zhi-Xu He, Zhi-Wei Zhou, Tianxin Yang, Peixuan Guo, Xueji Zhang, and Shu-Feng Zhou ....... 44

Oatp1a1 Requires PDZK1 to Traffic to the Plasma Membrane by Selective Recruitment of Microtubule-Based Motor Proteins. Wen-Jun Wang, John W. Murray, and Allan W. Wolkoff .......... 62

A Role for Cytochrome b5 in the In Vivo Disposition of Anticancer and Cytochrome P450 Probe Drugs in Mice. Colin J. Henderson, Lesley A. McLaughlin, Robert D. Finn, Sebastien Ronseaux, Yury Kapelyukh, and Roland Wolf .......... 70


Localization of Multidrug Resistance-Associated Proteins along the Blood-Testis Barrier in Rat, Macaque, and Human Testis. David M. Klein, Stephen H. Wright, and Nathan J. Cherrington .................. 89

Deoxyschizandrin, a Naturally Occurring Lignan, Is a Specific Probe Substrate of Human Cytochrome P450 3A. Jingjing Wu, Yunfeng Cao, Yanyan Zhang, Yong Liu, James Y. Hong, Liangliang Zhu, Guangbo Ge, and Ling Yang .......... 94

Continued on next page

Tissue-Specific Metabolism of Benzo[a]pyrene in Rainbow Trout (Oncorhynchus mykiss): A Comparison between the Liver and Immune Organs. Anja-Maria Möller, Corinna Hermsen, Tilman Floehr, Marja H. Lamoree, and Helmut Segner. 111

Nonlinear Pharmacokinetics of (±)-3,4-Methylenedioxymethamphetamine (MDMA) and Its Pharmacodynamic Consequences in the Rat. Marta Concheiro, Michael H. Baumann, Karl B. Scheidweiler, Richard B. Rothman, Gina F. Marrone, and Marilyn A. Huestis. 119

In Vitro Drug Metabolism by Human Carboxylesterase 1: Focus on Angiotensin-Converting Enzyme Inhibitors. Ragnar Thomsen, Henrik B. Rasmussen, Kristian Linnet, and The INDICES Consortium. 126

Hepatic Cytochrome P450s, Phase II Enzymes and Nuclear Receptors Are Downregulated in a Th2 Environment during Schistosoma mansoni Infection. Sylvie M. Mimche, Beatrice A. Nyagode, Matthew D. Merrell, Choon-Myung Lee, Nina S. Prasanphanich, Richard D. Cummings, and Edward T. Morgan. 134

Multiple Cytochrome P450 Isoforms Are Involved in the Generation of a Pharmacologically Active Thiol Metabolite, whereas Paraoxonase 1 and Carboxylesterase 1 Catalyze the Formation of a Thiol Metabolite Isomer from Ticlopidine. Min-Jung Kim, Eun Sook Jeong, Jung-Soon Park, Su-Jun Lee, Jong Lyul Ghim, Chang-Soo Choi, Jae-Gook Shin, and Dong-Hyun Kim. 141

In Vitro Hydrolysis and Transesterification of CDP323, an αβ1/αβ7 Integrin Antagonist Ester Prodrug. Hugues Chanteux, Maria Rosa, Claude Delatour, Chandra Prakash, Steven Smith, and Jean-Marie Nicolas. 153


In Vivo to In Vitro Effects of Six Bioactive Lignans of Wuzhi Tablet (Schisandra Sphenanthera Extract) on the CYP3A/P-glycoprotein–Mediated Absorption and Metabolism of Tacrolimus. Xiao Ling Qin, Xiao Chen, Ying Wang, Xin Ping Xue, Ying Wang, Jia Li Li, Xue Ding Wang, Guo Ping Zhong, Chang Xi Wang, Hui Yang, Min Huang, and Hui Chang Bi. 193

ERRATUM

Correction to “Meeting the Challenge of Predicting Hepatic Clearance of Compounds Slowly Metabolized by Cytochrome P450 Using a Novel Hepatocyte Model, HepatoPac”. 200

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

About the cover: Histopathological analysis of nasal mucosal injury caused by NA treatment in WT and Cyp2a5-null mice. See article by Hu et al. (dx.doi.org/10.1124/dmd.113.054429)