January 2008

CONTENTS

CENTENNIAL PERSPECTIVE

The Development of Drug Metabolism Research as Expressed in the Publications of ASPET: Part 1, 1909–1958. Patrick J. Murphy ............. 1

SHORT COMMUNICATIONS

Oseltamivir (Tamiflu) Efflux Transport at the Blood-Brain Barrier via P-Glycoprotein. Kaori Morimoto, Masanori Nakakariya, Yoshiyuki Shirasaka, Chihaya Kakinuma, Takuya Fujita, Ikumi Tamai, and Takuo Oghara ........... 6

The Effects of ABCB1 3′-Untranslated Region Variants on mRNA Stability. Jason M. Gow, Leslie W. Chinn, and Deanna L. Kroetz ............ 10

ARTICLES

Gender Differences in mRNA Expression of ATP-Binding Cassette Efflux and Bile Acid Transporters in Kidney, Liver, and Intestine of 5/6 Nephrectomized Rats. Hong Lu and Curtis Klaassen .... ..... 16

Disposition and Metabolism of [14C]Brasofensine in Rats, Monkeys, and Humans. Mingshe Zhu, Daisy B. Whigan, Shu Y. Chang, and Randy C. Dockens .................. 24

Pharmacokinetics and Metabolism of 14C-C-Brivaracetam, a Novel SV2A Ligand, in Healthy Subjects. Maria Laura Sargentini-Maier, Pascal Espié, Alain Coquette, and Armeil Stockis .......... 36

Glucuronidation of Mycophenolic Acid by Wistar and Mrp2-Deficient TR\(^{-}\) Rat Liver Microsomes. Ian S. Westley, Raymond G. Morris, Allan M. Evans, and Benedetta C. Sallustio .......... 46

Hepatic UDP-Glucuronosyltransferases Responsible for Glucuronidation of Thyroxine in Humans. Yoshihisa Kato, Shin-ichi Ikushiro, Yoshikazu Eno, Sekihiro Tamaki, Hiroshi Suzuki, Toshiyuki Sakaki, Shizuo Yamada, and Masakuni Degawa ........... 51

Regulation of CYP2A6 Protein Expression by Skatole, Indole, and Testicular Steroids in Primary Cultured Pig Hepatocytes. Gang Chen, Rebecca-Ayme Cue, Kerstin Lundstrom, Jeffrey D. Wood, and Olena Doran .................. 56


Pharmacokinetics and Metabolic Profile of Free, Conjugated, and Total Silymarin Flavonolignans in Human Plasma after Oral Administration of Milk Thistle Extract. Zhiming Wen, Todd E. Dumas, Sarah J. Schrieber, Roy L. Hawke, Michael W. Fried, and Philip C. Smith ............. 65

Trimethoprim and the CYP2C8*3 Allele Have Opposite Effects on the Pharmacokinetics of Pioglitazone. Aleksa Tornio, Mikko Niemi, Pertti J. Neuvonen, and Janne T. Backman .......... 73


Investigation of Regional Mechanisms Responsible for Poor Oral Absorption in Humans of a Modified Release Preparation of the \(\alpha\)-Adrenoceptor

Continued on next page

Regulation of Hepatic Drug-Metabolizing Enzyme Genes by Toll-Like Receptor 4 Signaling Is Independent of Toll-Interleukin 1 Receptor Domain-Containing Adaptor Protein. Romi Ghose, Damara White, Tao Guo, Jesus Vallejo, and Saul J. Karpen .


Mechanism-Based Inactivation of Lung-Selective Cytochrome P450 2F2 Enzymes. Jaya S. Kartha and Garold S. Yost .


Transport and Metabolism of Ferulic Acid through the Colonic Epithelium. Laure Poquet, Michael N. Clifford, and Gary Williamson .

Localization of P-gp (Abcb1) and Mrp2 (Abcc2) in Freshly Isolated Rat Hepatocytes. Daniel A. J. Bow, Jennifer L. Perry, David S. Miller, John B. Pritchard, and Kim L. R. Brouwer .

ERRATUM
Correction to “Use of Isolated Hepatocyte Preparations for Cytochrome P450 Inhibition Studies: Comparison with Microsomes for Ki Determination”.

About the cover: Cister analysis of PXR (Fig. 1D). Regions with clusters of binding sites for liver-enriched transcription factors and hormone receptors are indicated. See article by Lamba et al. on page 169 of this issue.