SHORT COMMUNICATIONS

Glucuronidation of the Antiretroviral Drug Efavirenz by UGT2B7 and an in Vitro Investigation of Drug-Drug Interaction with Zidovudine. Anne-Sophie Bélanger, Patrick Caron, Mario Harvey, Peter A. Zimmerman, Rajeev K. Mehlotra, and Chantal Guillemette .......................... 1793

Aromatic Substitution Reaction of 2-Chloropyridines Catalyzed by Microsomal Glutathione S-Transferase 1. Kazuko Inoue, Tomoyuki Ohe, Kenichi Mori, Takeshi Sagara, Yasuyuki Ishii, and Masato Chiba .......................................................... 1797


ARTICLES

Bioactivation of Minocycline to Reactive Intermediates by Myeloperoxidase, Horseradish Peroxidase, and Hepatic Microsomes: Implications for Minocycline-Induced Lupus and Hepatitis. Baskar Mannargudi, David McNally, William Reynolds, and Jack Uetrecht ........................................... 1806

Age- and Sex-Related Expression and Activity of Carboxylesterase 1 and 2 in Mouse and Human Liver. Hao-Jie Zhu, David I. Appel, Yan Jiang, and John S. Markowitz ........................................... 1819


Up-Regulation of UDP-Glucuronosyltransferase (UGT) 1A4 by 17β-Estradiol: A Potential Mechanism of Increased Lamotrigine Elimination in Pregnancy. Huiging Chen, Kyunghee Yang, Suhyoung Choi, James H. Fischer, and Hyunyoung Jeong ........................................... 1841

In Vitro Inhibition of Multiple Cytochrome P450 Isoforms by Xanthone Derivatives from Mangosteen Extract. Robert S. Foti, Josh T. Pearson, Dan A. Rock, Jan L. Wahlstrom, and Larry C. Wienkers ........................................... 1848

Involvement of Human Organic Cation Transporter 1 in the Hepatic Uptake of 1-(2-Methoxyethyl)-2-methyl-4,9-dioxo-3-(pyrazin-2-ylmethyl)-4,9-dihydro-1H-naphtho[2,3-d]imidazolium Bromide (YM155 Monobromide), a Novel, Small Molecule Survivin Suppressor. Megumi Iwai, Tsuyoshi Minematsu, Shinichi Narakawa, Takashi Usui, and Hidetaka Kamimura ........................................... 1856

Modulation of the Partition Coefficient between Octanol and Buffer at pH 7.4 and pK_a to Achieve the Optimum Balance of Blood Clearance and Volume of Distribution for a Series of Tetrahydropryan Histamine Type 3 Receptor Antagonists. Tanya Hay, Rhys Jones, Kevin Beaumont, and Mark Kemp ........................................... 1864

Changes in mRNA Expression Levels of Solute Carrier Transporters in Inflammatory Bowel Disease Patients. Kacper A. Wojtal, Jyrki J. Eloranta, Petr Hraz, Heike Gutmann, Jürgen Drew, Alex Staumann, Christoph Beglinger, Michael Fried, Gerd A. Kullak-Ublick, and Stephan R. Vavricka ........................................... 1871

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Methadone Induces the Expression of Hepatic Drug-Metabolizing Enzymes through the Activation of Pregnane X Receptor and Constitutive Androstan Receptor. Antonia H. Tolson, Haishan Li, Natalie D. Eddington, and Hongbing Wang .......................................................... 1887


Metabolism of Ticlopidine in Rats: Identification of the Main Biliary Metabolite as a Glutathione Conjugate of Ticlopidine S-Oxide. Shinji Shimizu, Ryo Atsumi, Tsunenori Nakazawa, Yuko Fujimaki, Kenichi Sudo, and Osamu Okazaki .................................................. 1904


An in Vitro Evaluation of the Victim and Perpetrator Potential of the Anticancer Agent Laromustine (VNP40101M), Based on Reaction Phenotyping and Inhibition and Induction of Cytochrome P450 Enzymes. Alaa-Eldin F. Nassar, Ivan King, Brandy L. Paris, Lois Haupt, Florence Ndikum-Moffor, Rebecca Campbell, Etsuko Usuki, Jennifer Skibbe, Dan Brobst, Brian W. Ogilvie, and Andrew Parkinson .............................. 1922

Inhibition of Human CYP2B6-Catalyzed Bupropion Hydroxylation by Ginkgo biloba Extract: Effect of Terpene Trilactones and Flavonols. Aik Jiang Lau and Thomas K. H. Chang ........................................... 1931

3-Ketocholanoic Acid Is the Major In Vitro Human Hepatic Microsomal Metabolite of Lithocholic Acid. Anand K. Deo and Stelvio M. Bandiera .................. 1938

Influence of N-Terminal Domain Histidine and Proline Residues on the Substrate Selectivities of Human UDP-Glucuronosyltransferase 1A1, 1A6, 1A9, 2B7, and 2B10. Oranun Kerdpin, Peter I. Mackenzie, Kushhari Bowalgaha, Moshe Finel, and John O. Miners ................................................................. 1948


Thyroid Hormone Is Necessary for Expression of Constitutive Androstane Receptor in Rat Hepatocytes. Hidekazu Ooe, Junko Kon, Hideki Oshima, and Toshihiro Mitaka ................................................................. 1963


Genetic Polymorphisms in the TATA Box and Upstream Phenobarbital-Responsive Enhancer Module of the UGT1A1 Promoter Have Combined Effects on UDP-Glucuronosyltransferase 1A1 Transcription Mediated by Constitutive Androstane Receptor, Pregnane X Receptor, or Glucocorticoid Receptor in Human Liver. Ye Li, David Buckley, Shuang Wang, Curtis D. Klaassen, and Xiao-bo Zhong ................................................................. 1978

About the cover: Zone classification of IDT risk assessment in accordance with daily dose and covalent binding in human hepatocytes. See article by Nakayama et al. on page 1970 of this issue.

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