
Cytochrome P450 2S1 is Reduced by NADPH-Cytochrome P450 Reductase. Yi Xiao, Raku Shinkyo, and F. Peter Guengerich .................. 944

The Tissue-Specific Toxicity of Methimazole in the Mouse Olfactory Mucosa Is Partly Mediated through Target-Tissue Metabolic Activation by CYP2A5. Fang Xie, Xin Zhou, Mary Beth Genter, Melissa Behr, Jun Gu, and Xinxin Ding ............... 947

Absorption, Distribution, Metabolism, and Excretion of $[14C]$GDC-0449 (Vismodegib), an Orally Active Hedgehog Pathway Inhibitor, in Rats and Dogs: A Unique Metabolic Pathway via Pyridine Ring Opening. Qin Yue, Yong-Hsiang Chen, Teresa Mulder, Alan Deese, Ryan Takahashi, Patrick J. Rudewicz, Mark Reynolds, Eric Solon, Cornelis E. A. Hop, Harvey Wong, and S. Cyrus Khojasteh ......................... 952


Quantitative Time-Lapse Imaging-Based Analysis of Drug-Drug Interaction Mediated by Hepatobiliary Transporter, Multidrug Resistance-Associated Protein 2, in Sandwich-Cultured Rat Hepatocytes. Takeo Nakanishi, Yuta Shibue, Yoko Fukuyama, Kenji Yoshida, Hajime Fukuda, Yo- shiuki Shirasaka, and Ikumi Tamai ............... 984

Alteration of Hepatic but Not Renal Transporter Expression in Diet-Induced Obese Mice. Vijay R. More and Angela L. Slitt ............... 992

ATP-Binding Cassette Transporter Expression in Human Placenta as a Function of Pregnancy Condition. Cifford W. Mason, Irina A. Buhimschi, Catalin S. Buhimschi, Yafeng Dong, Carl P. Weiner, and Peter W. Swaan ............... 1000

Prediction of Human Renal Clearance from Preclinical Species for a Diverse Set of Drugs That Exhibit Both Active Secretion and Net Reabsorption. Stuart W. Payne, Karelle Ménochet, Rebecca Denton, Derron F. McGinnity, and Robert J. Riley ............... 1008

Studies on the Metabolism and Biological Activity of the Epimers of Sulindac. David Brunell, Daphna Sagher, Shailaja Kesara, Nathan Brot, and Herbert Weissbach ............... 1014


Drug Metabolism and Disposition (ISSN 0090-9556) is published monthly (one volume per year) by the American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD 20814-3995; e-mail: subscriptions@aspet.org; Web site: aspet.org. Periodicals postage paid at Bethesda, MD, and at additional mailing offices. POSTMASTER: Send address changes to Drug Metabolism and Disposition, 9650 Rockville Pike, Bethesda, MD 20814-3995. Subscription rates: U.S.: $453; outside the U.S.: $552. Single copy: $40. GST Tax Number for Canadian subscribers: BN:13489 2330 RT. Indexed or abstracted by Biochemistry & Biophysics Citation Index®, Biological Abstracts, BIOSIS Previews Database, BioScience Information Services, Current Awareness in Biological Sciences, Current Contents®/Life Sciences, EMBASE/Excerpta Medica, Index Medicus, International Pharmacoeconomic Abstracts, Medical Documentation Service®, Reference Update®, Research Alert®, Science Citation Index®, SciSearch®, and SII/C Data Bases Copyright © 2011 by the American Society for Pharmacology and Experimental Therapeutics. All rights reserved. Printed in the U.S.A.

Continued on next page
Prediction of the Overall Renal Tubular Secretion and Hepatic Clearance of Anionic Drugs and a Renal Drug-Drug Interaction Involving Organic Anion Transporter 3 in Humans by In Vitro Uptake Experiments. Takao Watanabe, Hiroyuki Kusuhara, Tomoko Watanabe, Yasuyuki Debori, Kazuya Maeda, Tsunenori Kondo, Hideki Nakayama, Shigeru Horita, Brian W. Ogilvie, Andrew Parkinson, Zhuohan Hu, and Yuichi Sugiyama

CYP3A Time-Dependent Inhibition Risk Assessment Validated with 400 Reference Drugs. Alfred Zimmerlin, Markus Trunzer, and Bernard Faller

Influence of Non-Steroidal Anti-Inflammatory Drugs on Organic Anion Transporting Polypeptide (OATP) 1B1- and OATP1B3-Mediated Drug Transport. Juergen Kindla, Fabian Muller, Maren Mieth, Martin F. Fromm, and Jörg König

A Refined Cytochrome P450 IC50 Shift Assay for Reliably Identifying CYP3A Time-Dependent Inhibitors. Ping Li, Chuang Lu, Suresh K. Balani, and Liang-Shang Gan


Complex Drug Interactions of HIV Protease Inhibitors 1: Inactivation, Induction, and Inhibition of Cytochrome P450 3A by Ritonavir or Nelfinavir. Brian J. Kirby, Ann C. Collier, Evan D. Kharasch, Dale Whittington, Kenneth E. Thummel, and Jashvant D. Unadkat

Pharmacokinetics and Metabolism in Rats, Dogs, and Monkeys of the Cathepsin K Inhibitor Odanacatib: Demethylation of a Methylsulfonyl Moiety as a Major Metabolic Pathway. Kelem Kassahun, W. Cameron Black, Deborah Nicoll-Griffith, Ian McIntosh, Nathalie Chauret, Stephen Day, Elizabeth Rosenberg, and Kenneth Koepflinger

Pharmacokinetics and Hepatic Uptake of Eltrombopag, a Novel Platelet-Increasing Agent. Kazuya Takeuchi, Tomoko Sugiuira, Saki Umeda, Kazuki Matsubara, Masato Horikawa, Noritaka Nakamichi, David L. Silver, Norihisa Ishiwata, and Yukio Kato


Pharmacokinetics of the Monohydroxy Derivative of Oxcarbazepine and Its Enantiomers after a Single Intravenous Dose Given as Racemate Compared with a Single Oral Dose of Oxcarbazepine. G. Flesch, C. Czendlik, D. Renard, and P. Lloyd

ERRATUM

Correction to “Disposition and Metabolism of $^{14}$C]SB-649868, an Orexin 1 and 2 Receptor Antagonist, in Humans”

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

About the cover: A whole-body autoradiogram of the radioactivity distribution in female Long-Evans rats. See the article by Yue et al. on page 952 of this issue.