CONTENTS

MINIREVIEW

The Ontogeny, Distribution, and Regulation of Alcohol Dehydrogenase 3: Implications for Pulmonary Physiology. Chad M. Thompson, Babasaheb Sonawane, and Roland C. Graefstrom .......................... 1565

SHORT COMMUNICATIONS

Binding of Lopinavir to Human α1-Acid Glycoprotein and Serum Albumin. Abhishek Gulati, F. Douglass Boudinot, and Phillip M. Gerk ..................... 1572

The Glycogen Synthase Kinase Inhibitor 3-(2,4-Dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrrole-2,5-dione (SB216763) Is a Partial Agonist of the Aryl Hydrocarbon Receptor. Albert Braeuning and Albrecht Buchmann ........ 1576

Glycerolysis of Acyl Glucuronides as an Artifact of in Vitro Drug Metabolism Incubations. R. Scott Obach .......................... 1581

ARTICLES

Semiphysiologically Based Pharmacokinetic Models for the Inhibition of Midazolam Clearance by Diltiazem and Its Major Metabolite. Xin Zhang, Sara K. Quinney, J. Christopher Gorski, David R. Jones, and Stephen D. Hall .................. 1587


Involvement of Vitamin D Receptor in the Intestinal Induction of Human ABCB1. Shuko Tachibana, Kouichi Yoshinari, Tsubasa Chikada, Takayoshi Toriyabe, Kiyoshi Nagata, and Yasushi Yamazoe .......... 1604

Rifampicin-Activated Human Pregnane X Receptor and CYP3A4 Induction Enhance Acetaminophen-Induced Toxicity. Jie Cheng, Xiaochao Ma, Kristopher W. Krausz, Jeffrey R. Idle, and Frank J. Gonzalez .................................................. 1611

Disposition and Metabolism of a Novel Prostanoid Antiglaucoma Medication, Tafluprost, Following Ocular Administration to Rats. Y. Fukano and K. Kawazu .................................................. 1622

Disposition and Metabolism of Radiolabeled Casopitant in Humans. Mario Pellegratti, Ellenia Bordini, Patrizia Fizzotti, Andy Roberts, and Brendan M. Johnson .................................................. 1635

Identification of Human Metabolites of (−)-N-{2-[(R)-3-(6,7-Dimethoxy-1,2,3,4-tetrahydroisoquinoline-2-carbonyl)piperidino]ethyl}-4-fluorobenzamide (YM758), a Novel If Channel Inhibitor, and Investigation of the Transporter-Mediated Renal and Hepatic Excretion of These Metabolites. Ken-ichi Umehara, Nobuaki Shirai, Takaumi Iwatsubo, Kiyoshi Noguchi, Takashi Usui, and Hidetaka Kaminura .................................................. 1646

Comparison of Different Algorithms for Predicting Clinical Drug-Drug Interactions, Based on the Use of CYP3A4 in Vitro Data: Predictions of Compounds as Precipitants of Interaction. Odette A. Fahmi, Susan Hurst, David Plowchalk, Jack Cook, Feng Guo, Kuresh Youdim, Maurice Dickens, Alex Pipps, Amanda Darekar, Ruth Hyland, and R. Scott Obach .................................................. 1658

Further Assessment of 17α-Ethynyl Estradiol as an Inhibitor of Different Human Cytochrome P450 Forms in Vitro. Shu-Ying Chang, Cliff Chen, Zheng Yang, and A. David Rodrigues .................................................. 1667

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.: $400.00; outside the U.S.: $479. Single copy: $36. GST Tax Number for Canadian subscribers: BN:13489 2330 RT, Indexed or abstracted by Biochemistry & Biophysics Citation Index®, Biological Abstracts, BIOSIS Previews Database, BioSciences Information Services, Current Awareness in Biological Sciences, Current Contents/Life Sciences, EMBASE/Excerpta Medica, Index Medicus, International Pharmaceutical Abstracts, Medical Documentation Service®, Reference Update®, Research Alert®, Science Citation Index®, SciSearch®, and SICO Data Bases Copyright © 2009 by the American Society for Pharmacology and Experimental Therapeutics. All rights reserved. Printed in the U.S.A.
Oseltamivir (Tamiflu) Is a Substrate of Peptide Transporter 1. Takuo Ogihara, Takashi Kano, Tamae Wagatsuna, Sho Wada, Hikaru Yabuuchi, Shigeki Enomoto, Kaori Morimoto, Yoshiyuki Shirasaka, Shoko Kobayashi, and Ikumi Tamai .......................... 1676

CYP2D6-CYP2C9 Protein-Protein Interactions and Isoform-Selective Effects on Substrate Binding and Catalysis. Murali Subramanian, Michael Low, Charles W. Locuson, and Timothy S. Tracy .............. 1682

Identification of New 2-Amino-3-methylimidazo[4,5-f]-quinoline Urinary Metabolites from /H9252-Naphthoflavone-Treated Mice. Vijaya M. Lakshmi, Fong-Fu Hsu, and Terry V. Zenser ............... 1690


The Importance of Heterogeneous Nuclear Ribonucleoprotein K on Cytochrome P450 2D2 Gene Regulation: Its Binding Is Reduced in Dark Agouti Rats. Noriaki Sakai, Kentaro Q. Sakamoto, Shoichi Fujita, and Mayumi Ishizuka ........ 1703

Selective Role of Sulotransferase 2A1 (SULT2A1) in the N-Sulfoconjugation of Quinolone Drugs in Humans. Laddawan Senggunprai, Kouichi Yoshinari, and Yasushi Yamazoe ............ 1711

Vitreal Kinetics of Quinidine in Rabbits in the Presence of Topically Coadministered P-Glycoprotein Substrates/Modulators. Soumyajit Majumdar, Ketan Hippalgaonkar, and Keshav Srinivasan ........ 1718

Characterizing the Effects of Common UDP Glucuronosyltransferase (UGT) 1A6 and UGT1A1 Polymorphisms on cis- and trans-Resveratrol Glucuronidation. Otto Frances Iwuchukwu, Junoke Ajetunmoba, Din Ung, and Swati Nagar .......... 1726


Metabolite Profiling of Hydroxycinnamate Derivatives in Plasma and Urine after the Ingestion of Coffee by Humans: Identification of Biomarkers of Coffee Consumption. Angelique Stalmach, William Mullen, Denis Barron, Kenichi Uchida, Takao Yokota, Christophe Cavin, Heike Stelling, Gary Williamson, and Alan Crozier .... 1749

Quantitative Analysis of UDP-Glucuronosyltransferase (UGT) 1A and UGT2B Expression Levels in Human Livers. Takeshi Izukawa, Miki Nakajima, Ryoichi Fujitara, Hiroyuki Yamanaka, Tatsuki Fukami, Masataka Takamiya, Yasuhiro Aoki, Shin-ichi Ikashiro, Toshiyuki Sakaki, and Tsuyoshi Yoko ........ 1759


Pharmacokinetics of Acetaminophen-Protein Adducts in Adults with Acetaminophen Overdose and Acute Liver Failure. Laura P. James, Lynda Letzger, Pippa M. Simpson, Edmund Capparelli, Dean W. Roberts, Jack A. Hinson, Timothy J. Davern, and William M. Lee ................. 1779


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