CONTENTS

SHORT COMMUNICATIONS


In Vitro-to-in Vivo Prediction of P-glycoprotein-Based Drug Interactions at the Human and Rodent Blood-Brain Barrier. Peng Hsiao, Tot Bui, Rodney J. Y. Ho, Jashvant D. Unadkat ......


ARTICLES


Characterization and Comparative Studies of Zebrafish and Human Recombinant Dihydrofolate Reductases—Inhibition by Folic Acid and Polyphenols. Tseng-Ting Kao, Kuan-Chieh Wang, Wen-Ni Chang, Chia-Ying Lin, Bing-Hung Chen, Hua-Lin Wu, Guey-Yueh Shi, Jen-Ning Tsai, and Tzu-Fun Fu .

The First Aspartic Acid of the DQxD Motif for Human UDP-Glucuronosyltransferase 1A10 Interacts with UDP-Glucuronic Acid during Catalysis. Yan Xiong, Anne-Sisko Patana, Michael J. Miley, Agnieszka K. Zielinska, Stacie M. Bratton, Grover P. Miller, Adrian Goldman, Moshe Finel, Matt R. Redinbo, and Anna Radomska-Pandya .

CYP2C19 Inhibition: The Impact of Substrate Probe Selection on in Vitro Inhibition Profiles. Robert S. Foti and Jan L. Wahlstrom ....

CYP2D6-Mediated Metabolism of a Novel Acyl Coenzyme A:Cholesterol Acyltransferase Inhibitor, Pactimibe, and Its Unique Plasma Metabolite, R-12552. Masakatsu Kotsuma, Taro Tokui, Tomoko Ishizuka-Ozeki, Tomoyo Honda, Haruo Iwabuchi, Takahiro Murai, Toshihiko Ikeda, and Hideo Saji ....

Drug Lipophilicity and Microsomal Protein Concentration as Determinants in the Prediction of the Fraction Unbound in Microsomal Incubations. Michael Gertz, Peter J. Kilford, J. Brian Houson, and Aleksandra Galetin ....

Regulation of Aryl Hydrocarbon Receptor Expression and Function by Glucocorticoids in Mouse Hepatoma Cells. Kirsten A. Bielefeld, Chunja Lee, and David S. Riddick ....

Modulation of Human Multidrug Resistance Protein (MRP) 1 (ABCC1) and MRP2 (ABCC2) Transport Activities by Endogenous and Exogenous Glutathione-Conjugated Catechol Metabolites.

Continued on next page
Contents (cont’d.)

Andrew J. Slot, Dana D. Wise, Roger G. Deely, Terrence J. Monks, and Susan P. C. Cole ........ 552

Metabolism of the Trisubstituted Purine Cyclin-Dependent Kinase Inhibitor Seliciclib (R-Roscovitine) in Vitro and in Vivo. Steven J. McClue and Iain Stuart .......................................................... 561


Physical Incorporation of NADPH-Cytochrome P450 Reductase and Cytochrome P450 into Phospholipid Vesicles Using Glycocholate and Bio-Beads. James R. Reed, Lauren M. Brignac-Huber, and Wayne L. Backes....................... 582


Down-Regulation of Hepatic Cytochrome P450 Enzymes in Rats with Trinitrobenzene Sulfonic Acid-Induced Colitis. Yasuhiro Masubuchi, Kanako Enoki, and Toshiharu Horie ...................... 597

Induction of Metabolism and Transport in Human Intestine: Validation of Precision-Cut Slices as a Tool to Study Induction of Drug Metabolism in Human Intestine in Vitro. Esther G. van de Kerkhof, Inge A. M. de Graaf, Anna-Lena B. Ungell, and Geny M. M. Groothuis ....................... 604

High-Affinity Binding of [H]Cimetidine to a Heme-Containing Protein in Rat Brain. Rebecca Stadel, Jun Yang, Julia W. Nalwalk, James G. Phillips, and Lindsay B. Hough ..................... 614

ERRATUM
Correction to “The Development of Drug Metabolism Research as Expressed in the Publications of AS-PET: Part 1, 1909–1958” ....................... 622

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

About the cover: Docking of carbamazepine, testosterone, and erythromycin into the active site of CYP3A4. See article by Kang et al. on page 490 of this issue.
Journals Director: Richard Dodenhoff

ISSUE REPLACEMENT POLICY: DOMESTIC SUBSCRIBERS—
Claims for nondelivery of issues must be made within three (3) months of issue mail date. FOREIGN SUBSCRIBERS—Claims for nondelivery of issues must be made within six (6) months of issue mail date. MISSING ISSUES (DOMESTIC AND FOREIGN)—ASPET will not honor refunds or replacement requests made outside of the claim period. Up to two (2) issues will be replaced free of charge per subscription year. Reprints of individual articles are available from the authors and from Infotrieve at www.infotrieve.com; otherwise call 800-422-4633, fax 310-208-5971, or email orders@infotrieve.com. Please send as much citation information as possible such as journal title, volume issue, page number, year, authors, article title, etc.

JOURNAL AND ASPET OFFICE: 9650 Rockville Pike, Bethesda, MD 20814-3995; telephone: 301-634-7060; fax: 301-634-7061; email: info@aspet.org; web site: www.aspet.org

Correspondence regarding editorial matters should be addressed to Dr. Eric F. Johnson, Editor, Drug Metabolism and Disposition, at the above address.

Official version: The online version of Drug Metabolism and Disposition contains all of the information and material contained in the print version plus additional material that may not appear in print such as videos and large data sets. The online version may be more current than the print version. Where noted, the online version has been corrected in departure from the print version. The online version of Drug Metabolism and Disposition officially published by the American Society for Pharmacology and Experimental Therapeutics is the definitive version and, to the extent any differences exist, will prevail over the print version.

Instructions to Authors: See http://dmd.aspetjournals.org for the Instructions to Authors and the ASPET Authorship Responsibility, Financial Disclosure, and Copyright Transfer form.

Correspondence concerning subscriptions: Nonmember individual and institutional subscriptions: ASPET Subscriptions Dept., Rm. L-2310, 9650 Rockville Pike, Bethesda, MD 20814-3998; telephone: 301-634-7029; fax: 301-634-7099; email: staff@dues.faseb.org. ASPET Members: contact the ASPET office. For European site licenses and consortia, contact: David Charles, Institutional Sales & Licensing, 92 avenue du General de Gaulle, 78600 Maisons-Laffitte, France; telephone: +33-1-39–12-29–29; fax: +33–1-39–12-47–45; email: dlcharles@wanadoofr.

Change of address: ASPET must be notified 60 days in advance. Journals undeliverable because of incorrect address will be destroyed. Duplicate copies may be obtained, if available, from ASPET at the single copy price. Send address changes to the ASPET office.

ISSUE REPLACEMENT POLICY: DOMESTIC SUBSCRIBERS—Claims for nondelivery