

Drug Metabolism and Disposition:

the biological fate of chemicals

December 1995

Vol. 23, No. 12

CONTENTS

ARTICLES

- Reduction and Glucuronidation of Naftazone by Human and Rat Liver Microsomes. REGINE HERBER, BERNARD HERCELIN, JACQUES VAN CANTFORT, JEAN DE GRAEVE, SYLVIE FOURNEL-GIGLEUX, TADAO TAGUCHI, AND JACQUES MAGDALOU 1305
- Metabolism of the Immunosuppressant Tacrolimus in the Small Intestine: Cytochrome P450, Drug Interactions, and Interindividual Variability. ALFONS LAMPEN, UWE CHRISTIANS, F. PETER GUENGERICH, PAUL B. WATKINS, JOSEPH C. KOLARS, AUGUSTINUS BADER, ANN-KATRIN GONSCHIOR, HENNING DRALLE, INGELORE HACKBARTH, AND KARL-F. SEWING 1315
- Microsomal Metabolism of the 5-Lipoxygenase Inhibitors L-746,530 and L-739,010 to Reactive Intermediates that Covalently Bind to Protein: The Role of the 6,8-Dioxabicyclo[3.2.1]octanyl Moiety. N. CHAURET, D. NICOLL-GRIFFITH, R. FRIESEN, C. LI, L. TRIMBLE, D. DUBÉ, R. FORTIN, Y. GIRARD, AND J. YERGEY 1325
- Relative Potency of Mexiletine, Lidocaine, and Tocainide As Inhibitors of Rat Liver CYP1A1 Activity. XIAOXIONG WEI, CHO-MING LOI, ERIC J. JARVI, AND ROBERT E. VESTAL 1335
- Human Cytochromes P4501A1 and P4501A2: R-Warfarin Metabolism As a Probe. ZHIYI ZHANG, MICHAEL J. FASCO, ZEQU HUANG, F. PETER GUENGERICH, AND LAURENCE S. KAMINSKY 1339
- Enzyme- and Sex-Specific Differences in the Intralobular Localizations and Distributions of Aryl Sulfotransferase IV (Tyrosine-Ester Sulfotransferase) and Alcohol (Hydroxysteroid) Sulfotransferase A in Rat Liver. GUANGPING CHEN, JEFFREY BARON, AND MICHAEL W. DUFFEL 1346
- Slow Acetylation in Mice Is Caused by a Labile and Catalytically Impaired Mutant *N*-Acetyltransferase (NAT2 9). JESUS H. DE LEON, KAREN J. MARTELL, KOSTAS P. VATSIS, AND WENDELL W. WEBER 1354
- Synthesis, Pharmacokinetics, and Biodistribution of ⁶⁷Ga Deferoxamineacetyl-cysteinylbiotin. MAZZAZ HASHMI AND SCOTT F. ROSEBROUGH 1362
- Pharmacokinetics of Sodium Mercaptoundecahydrododecaborate after Intravenous Injection in Rats. SAMIR C. MEHTA, F. DOUGLAS BOUDINOT, AND D. ROBERT LU 1368
- Transport and Metabolism of Delta Sleep-Inducing Peptide in Cultured Human Intestinal Epithelial Cell Monolayers. PATRICK F. AUGUSTIJS AND RONALD T. BORCHARDT 1372
- Enhanced Rates of Cytochrome P450 Metabolic-Intermediate Complex Formation from Nonmacrolide Amines in Rifampicin-Treated Rabbit Liver Microsomes. MICHAEL R. FRANKLIN 1379
- The Pharmacokinetics of Valproic Acid in Pregnant Sheep after Maternal and Fetal Intravenous Bolus Administration. JOHN D. GORDON, K. WAYNE RIGGS, DAN W. RURAK, EDDIE KWAN, CAROLINE HALL, AND FRANK S. ABBOTT 1383
- Oxidation of Aldehydes Catalyzed by Pig Liver Flavin-Containing Monooxygenase. GUANG-PING CHEN, L. L. POULSEN, AND D. M. ZIEGLER 1390
- Pharmacokinetics of *O*⁶-Benzylguanine in Rats and Its Metabolism by Rat Liver Microsomes. SANDIP K. ROY, ELORA GUPTA, AND M. EILEEN DOLAN .. 1394

Continued on next page

DRUG METABOLISM AND DISPOSITION (DMD/ISSN 0090-9556) is an official publication of The American Society for Pharmacology and Experimental Therapeutics and is published monthly beginning in January 1995 by Williams & Wilkins, 351 West Camden Street, Baltimore, MD 21201-2436. Second class postage paid at Baltimore, MD and at additional mailing offices. POSTMASTER: send address changes to DRUG METABOLISM AND DISPOSITION, 351 West Camden Street, Baltimore, MD 21201-2436. **Subscription Rates:** U.S.: *Personal* \$90.00; *Institutional* \$150.00; *Single copy* \$24.00. **Outside the U.S., except Japan:** *Personal* \$115.00; *Institutional* \$175.00; *Single copy* \$28.00. Foreign prices exclude Japan. See **Information for Subscribers for detailed instructions.** The GST Tax Number for Canadian subscribers is 123394371. Country of origin USA. PRICES ARE SUBJECT TO CHANGE. Indexed by *Index Medicus*, *Current Contents (Life Sciences)*, *Excerpta Medica*, *Reference Update/Research Information Systems*, and *BioSciences Information Service*. Copyright © 1995 by the American Society for Pharmacology and Experimental Therapeutics.

Contents (cont'd.)

Immunoglobulin G, $F(ab')_2$, and Fab Fragment Uptake Kinetics in Isolated Perfused Rat Liver and Rat Hepatic Cells. M. BAZIN-REDUREAU, P. GRES, P. CHAPELLE, M. MARTINET, AND J. M. SCHERRMANN 1400

Effect of Cimetidine on Hepatic Cytochrome P450: Evidence for Formation of a Metabolite-Intermediate Complex. MARC LEVINE AND GAIL D. BELLWARD 1407

Metabolism of Bromodichloroacetate in B6C3F1 Mice. GUIHONG XU, DOUGLAS K. STEVENS, AND RICHARD J. BULL 1412

Biotransformation of Amitriptyline by *Cunninghamella elegans*. DONGLU ZHANG, FREDERICK E. EVANS, JAMES P. FREEMAN, BENJAMIN DUHART, JR., AND CARL E. CERNIGLIA. 1417

Stereoselective Metabolism of Enflurane by Human Liver Cytochrome P450 2E1. KYLE J. GARTON, PETER YUEN, JERROLD MEINWALD, KENNETH E. THUMMEL, AND EVAN D. KHARASCH 1426

SHORT COMMUNICATIONS

Selectivity of Flavin-Containing Monooxygenase 5 for the (*S*)-Sulfoxidation of Short-Chain Aryl Sulfides. M. B. FISHER, M. P. LAWTON, E. ATTA-ASAFO-ADJEI, R. M. PHILPOT, AND A. E. RETTIE 1431

Benzoyloxyresorufin As a Specific Substrate for the Major Phenobarbital-Inducible Dog Liver Cytochrome P450 (P4502B11). PAUL A. KLEKOTKA AND JAMES R. HALPERT 1434

Author Index 1436

Subject Index 1440