Drug Metabolism and Disposition: 
the biological fate of chemicals

December 1995

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


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 Motif. N. CHAURET, D. NICOLL-GRIMM, R. FRIESEN, L. TRIMBLE, D. DUBE, R. FORTIN, Y. GIRARD, AND J. YERGEY .................................................. 1325

Relative Potency of Mexiletine, Lidocaine, and Toxacinde As Inhibitors of Rat Liver CYP1A1 Activity. XIAOQIANG 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, ZEQI HUANG, F. PETER GUENGERICH, AND LAURENCE S. KAMINSKY .......................... 1339

Enzyme- and Sex-Specific Differences in the Intralobular Localizations and Distributions of Aryl Sulfo transferase IV (Tyrosine-Ester Sulfo transferase) and Alcohol (Hydroxysteroid) Sulfo transferase A in Rat Liver. GUANGPING CHEN, ROBERT J. WEHMEYER, AND MICHAEL W. DUFFEL .......................... 1346


Synthesis, Pharmacokinetics, and Biodistribution of 67Ga Deferoxamineacetethyl-cysteinylbiotin. MAZZAZ HASHMI AND SCOTT F. ROEBROUGH .................. 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. AUGUSTINS AND RONALD T. BORCHARDT ........................................ 1372

Enhanced Rates of Cytochrome P450 Metabolic-Intermediate Complex Formation from Nonmac roline 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 Monoxygenase. GUANG-PING CHEN, L. L. POULSEN, AND D. M. ZIEGLER .......................... 1390

Pharmacokinetics of O6-Benzylguanine in Rats and Its Metabolism by Rat Liver Microsomes. SANDIP K. ROY, ELORA GUPTA, AND M. EILEEN DOLAN .......................... 1394

Continued on next page
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. Gires, P. Chapelle, M. Martinet, and J. M. Scherrmann ................................. 1400


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


Benzyloxyresorufin 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