

Drug Metabolism and Disposition: the biological fate of chemicals

February

Vol. 23, No. 2

CONTENTS

LETTER TO THE EDITOR

Relevance of Tissue Distribution Studies. K. YESELWARAM 159

ARTICLES

Chiral Sulfoxidation of Albendazole by the Flavin Adenine Dinucleotide-containing and Cytochrome P450-Dependent Monooxygenases from Rat Liver Microsomes. PATRICIA MORONI, THIERRY BURONFOSSE, CHRISTIANE LONGIN-SAUVAGEON, PAUL DELATOUR, AND ETIENNE BENOIT 160

Kinetics of Sequential Metabolism: Contribution of Parallel, Primary Metabolic Pathways to the Formation of a Common, Secondary Metabolite. K. S. PANG 166

Effect of Intracellular Chloride on the Cellular Pharmacodynamics of *cis*-Diamminedichloroplatinum(II). MARGRETH JENNERWEIN AND PAUL A. ANDREWS 178

Metabolism of L-689,502 by Rat Liver Slices to Potent HIV-1 Protease Inhibitors. SURESH K. BALANI, STEVEN M. PITZENBERGER, MICHAEL S. SCHWARTZ, HARRI G. RAMJIT, AND WAYNE J. THOMPSON. 185

Fetal Hepatic Propranolol Metabolism: Studies in the Isolated Perfused Fetal Sheep Liver. JOHN A. RING, HANY GHABRIAL, MICHAEL S. CHING, ARTHUR SHULKES, RICHARD A. SMALLWOOD, AND DENIS J. MORGAN 190

Disposition of Ciprofloxacin in the Isolated Perfused Rat Liver. A. R. ABADIÀ, L. DE FRANCESCO, AND A. GUAITANI 197

Inactivation of Constitutive Hepatic Cytochromes P450 by Phencyclidine in the Rat. AKIRA HIRATSUKA, TERESA Y. Y. CHU, EMMA W. DISTEFANO, LENA Y. LIN, DEBRA A. SCHMITZ, AND ARTHUR K. CHO 201

Biotransformation of Losartan to Its Active Carboxylic Acid Metabolite in Human Liver Microsomes: Role of Cytochrome P4502C and 3A Subfamily Members. RALPH A. STEARNS, PRASUN K. CHAKRAVARTY, ROGER CHEN, AND SHUET-HING LEE CHIU 207

Gastrointestinal Distribution of the Prodrug Loperamide Oxide and Its Active Drug Loperamide in the Dog. LUDY E. C. VAN BEUJSTERVELDT, RITA J. F. GEERTS, KOEN WUYTS, ROBERT J. H. WOESTENBORGH, WILLEM E. G. MEULDERMANS, AND JOSEPH J. P. HEYKANTS. 216

Pharmacokinetics and Bioavailability of 5-Ethyl-2'-deoxyuridine and Its Novel (5R,6R)-5-Bromo-6-ethoxy-5,6-dihydro Prodrugs in Mice. A. MAJID CHERAGHALI, RAKESH KUMAR, EDWARD E. KNAUS, AND LEONARD I. WIEBE 223

Time- and Dose-dependent Kinetics of All-*trans*-retinoic Acid in Rats After Oral or Intravenous Administration(s). S. EL MANSOURI, M. TOD, M. LECLERQ, O. PETITJEAN, G. PERRET, AND M. PORTHAULT 227

Metabolism and Elimination of Oxazepam in F344 Rats. ROBERT J. GRIFFIN AND LEO T. BURKA. 232

Influence of Severity of Inflammation on the Disposition Kinetics of Propranolol Enantiomers in Ketoprofen-treated and Untreated Adjuvant Arthritis. MICHELINE PIQUETTE-MILLER AND FAKHREDDIN JAMALI 240

Oxidation of 5-Aminosalicylic Acid by Hypochlorous Acid to a Reactive Iminoquinone: Possible Role in the Treatment of Inflammatory Bowel Diseases. ZHAO CHAO LIU, ROBERT A. MCCLELLAND, AND JACK P. UETRECHT 246

Continued on next page

Contents (cont'd.)

Role of Aldehyde Oxidase in the <i>in Vitro</i> Conversion of Famciclovir to Penciclovir in Human Liver. STEPHEN E. CLARKE, ANDREW W. HARRELL, AND RICHARD J. CHENERY	251	Contribution of the Small Intestine to the First-pass Uptake and Systemic Clearance of Propranolol in Rabbits. PATRICK DU SOUCH, HÉLÈNE MAURICE, AND LUCIE HÉROUX	279
Benzoic Acid Glycine Conjugation in the Isolated Perfused Rat Kidney. KAREN POON AND K. SANDY PANG	255	Oxidation of the Angiotensin II Receptor Antagonist Losartan (DuP 753) in Human Liver Microsomes: Role of Cytochrome P4503A(4) in Formation of the Active Metabolite EXP3174. CHUL-HO YUN, HYE SUK LEE, HEEYONG LEE, JUNG KOO RHO, HYE GWANG JEONG, AND F. PETER GUENGERICH.	285
Oxidation of Toludehydes to Toluic Acids Catalyzed by Cytochrome P450-Dependent Aldehyde Oxygenase in the Mouse Liver. KAZUHIRO WATANABE, TAMIHIDE MATSUNAGA, IKUO YAMAMOTO, AND HIDETOSHI YASHIMURA	261	Contribution of Oxidation and Deacetylation to the Bioactivation of Acetaminophen <i>in Vitro</i> in Liver and Kidney from Male and Female Sprague-Dawley Rats. CHERYL A. MUGFORD AND JOAN B. TARLOFF	290
Metabolites of L-735,524, a Potent HIV-1 Protease Inhibitor, in Human Urine. SURESH K. BALANI, BYRON H. ARISON, LEENA MATHAI, LAURA R. KAUFFMAN, RANDY R. MILLER, RALPH A. STEARNS, I-WU CHEN, AND JIUNN H. LIN	266		
Antipeptide Antibodies Targeted Against Specific Regions of Rat CYP2D1 and Human CYP2D6. ELIZABETH M. LAURENZANA, SHANNON L. SORRELS, AND S. MICHAEL OWENS	271		

SHORT COMMUNICATION

Comparison of Acetyl Coenzyme A: Arylamine N-Acetyltransferase Activity in the Liver, Kidney, and Intestine of Male and Female Rats from Three Strains. JOSEPH A. WARE, PRASANNA DIVAKARUNI, AND CRAIG K. SVENSON.	295
--	-----

ANNOUNCEMENT

The 14th International Symposium of the Society of Toxicologic Pathologists
will be held from June 11 to 15, 1995
at the San Diego Marriott Hotel and Marina, San Diego, California

For information, contact Mary M. O'Connor, Society of Toxicologic Pathologists,
875 Kings Highway, Suite 200, Woodbury, NJ 08096-3172. Phone: (609) 845-1720.
Fax: (609) 853-0411. Deadline for abstract submissions is April 7, 1995.