

Drug Metabolism and Disposition:

the biological fate of chemicals

May/June 1993

Vol. 21, No. 3

CONTENTS

Oxidation of the Antihistamine Drug Terfenadine in Human Liver Microsomes: Role of Cytochrome P-450 3A(4) in <i>N</i> -Dealkylation and C-Hydroxylation. CHUL-HO YUN, RICHARD A. OKERHOLM, AND F. PETER GUENGERICH	403	<i>In Vivo</i> and <i>In Vitro</i> Metabolism Studies on a Class III Antiarrhythmic Agent. S. VICKERS, C. A. DUNCAN, P. H. KARI, C. F. HOMNICK, J. M. ELLIOTT, S. M. PITZENBERGER, M. HICHENS, AND K. P. VYAS	467
<i>In Vitro</i> Differential Metabolism of Merbarone by Xanthine Oxidase and Microsomal Flavoenzymes: The Role of Reactive Oxygen Species. JOSEPHIA F. MUINDI, YEE-WAN STEVENS, RAYMOND P. WARELL, JR., AND CHARLES W. YOUNG	410	Increased Renal Drug Metabolism in Treadmill-Exercised Fischer-344 Male Rats. T. S. PIATKOWSKI, WESLEY W. DAY, AND MYRON WEINER	474
Metabolic Profiling of Clobazam, a 1,5-Benzodiazepine, in Rats. ANTHONY G. BOREL AND FRANK S. ABBOTT	415	Pharmacokinetics and Metabolism of Vigabatrin Following a Single Oral Dose of [¹⁴ C]Vigabatrin in Healthy Male Volunteers. SHERRIE L. DURHAM, JOHN F. HOKE, AND TENG-MAN CHEN	480
Influence of Temperature and Plasma Protein on Doxorubicin Uptake by Isolated Lungs. ROBERT D. BONGARD, DAVID L. ROERIG, MICHAEL R. JOHNSTON, JOHN H. LINEHAN, AND CHRISTOPHER A. DAWSON	428	Hepatic and Extrahepatic Metabolism of Salbutamol in Anaesthetized Rabbits. SYLVIE PERREAULT, LOUIS DUMONT, VALERIE VILLIERE, HUY ONG, ALBERT ADAM, AND PATRICK DU SOUICH	485
Presystemic Elimination of the Beta-Blocker Pafenolol in the Rat After Oral and Intraperitoneal Administration and Identification of a Main Metabolite in Both Rats and Humans. HANS LENNERNÄS, LARS RENBERG, KURT-JÜRGEN HOFFMANN, AND CARL-GUNNAR REGÅRDH	435	Stereo- and Regioselective <i>N</i> - and <i>S</i> -Oxidation of Tertiary Amines and Sulfides in the Presence of Adult Human Liver Microsomes. JOHN R. CASHMAN, ZICHENG YANG, LIHONG YANG, AND STEVEN A. WRIGHTON	492
Sulfamethazine as a Model Compound to Assess Sex Hormone-Dependent Cytochrome P-450 Activity in Rats. RENGER F. WITKAMP, SANDRA M. NIJMEIJER, HYOIN YUN, JAN NOORDHOEK, AND ADELBERT S. J. P. A. M. VAN MIERT	441	Pharmacokinetics, Absolute Bioavailability, and Disposition of [¹⁴ C]Nefazodone in the Dog. U. A. SHUKLA, P. H. MARATHE, K. A. PITTMAN, AND R. H. BARBHAIYA	502
Absorption, Disposition, and Metabolism of [¹⁴ C]Didanosine in the Beagle Dog. SANJEEV KAUL, WEN C. SHYU, UMESH A. SHUKLA, KISHOR A. DANDEKAR, AND RASHMI H. BARBHAIYA	447	Qualitative and Quantitative Influences of Ortho Chlorine Substituents on the Microsomal Metabolism of 4-Toluidines. BOZENA TYRAKOWSKA, SJEF BOEREN, BART GEURTSSEN, AND IVONNE M. C. M. RIETJENS	508
The Biotransformation of the Ergot Derivative CQA 206-291 in Human, Dog, and Rat Liver Slice Cultures and Prediction of <i>In Vivo</i> Plasma Clearance. ALISON E. M. VICKERS, SUZANNE CONNORS, MARKUS ZOLLINGER, WENDY A. BIGGI, AMPARO LARRAURI, JOHN P. W. VOGELAAR, AND KLAUS BRENDEL	454	Modulation of Rat Hepatic CYP3A1 Induction by the Interferon Inducer Polyinosinic Acid-Polycytidylic Acid (polyIC). ENOCK DELAPORTE, ALASTAIR E. CRIBB, AND KENNETH W. RENTON	520
Toxicokinetics of Allylnitrile in Rats. MOHAMMED Y. H. FAROQUI, BENJAMIN YBARRA, AND JOHN PIPER	460	Metabolic <i>N</i> -Demethylation of 1,3-Bis[[1-cycloheptyl-3-(<i>P</i> -dimethylaminophenyl)ureido]methyl]benzene Dihydrochloride, a Novel Acyl-Coenzyme A: Cholesterol Acyltransferase Inhibitor. TAISUKE UCHIDA, TAKASHI USUI, TOSHIO TERAMURA, TAKASHI WATANABE, AND SABURO HIGUCHI	524

Continued on next page

Contents (cont'd.)

Metabolism of the Experimental Antitumor Agent Acridine Carboxamide in the Mouse. I. G. C. ROBERTSON, B. D. PALMER, J. W. PAXTON, AND T. J. BLAND	530
Inhibition by Ethanol of the Metabolism of Cocaine to Benzoyllecgonine and Ecgonine Methyl Ester in Mouse and Human Liver. STEPHEN M. ROBERTS, RAYMOND D. HARBISON, AND ROBERT C. JAMES .	537
SHORT COMMUNICATIONS	
Enantiomer-Enantiomer Interaction on <i>N</i> -Monodemethylation of Diuretic in Rat Liver Microsomes. MASAYUKI NAKANO, TOSHIYUKI CHIKAI, AND TAKASHI MATSUBARA	542
2',3'-Dideoxyinosine is Not Metabolized in Human Placenta. JAMES T. DALTON AND JESSIE L.-S. AU	544
Characterization of Nonlinear Elimination of the Xanthine-Related Drug Ethimizol in 3-Methylcholanthrene-Induced Rat Liver by the "Parallel-Tube" Model. MARIÁN KUKAN, THOMAS F. WOOLF, MIKULÁŠ MELUŠ, AND ŠTEFAN BEZEK	547
Conditions Influencing the Rat Liver Microsomal Metabolism of 2,2,-Dichloro-1,1,1-trifluoroethane (HCFC-123). C. S. GODIN, J. M. DRERUP, AND A. VINEGAR	551