

Drug Metabolism and Disposition: the biological fate of chemicals

January/February 1993

Vol. 21, No. 1

CONTENTS

The 1992 Bernard B. Brodie Award Lecture: Bioactivation and Detoxication of Toxic and Carcinogenic Chemicals. F. PETER GUENGERICH	1	
In Vivo and In Vitro Effect of Cimetidine, Inflammation, and Hypoxia on Propofol Kinetics. G. AUDIBERT, C. G. SAUNIER, AND P. DU SOUICH ..	7	
Uptake, 3- and 6-Glucuronidation of Morphine in Isolated Cells From Stomach, Intestine, Colon, and Liver of the Guinea Pig. PIERRE DÉCHELOTTE, ALAIN SABOURAUD, PIERRE SANDOUK, INGEBORG HACKBARTH, AND MICHAEL SCHWENK	13	
Evidence That Famciclovir (BRL 42810) and Its Associated Metabolites Do Not Inhibit the 6 β -Hydroxylation of Testosterone in Human Liver Microsomes. A. W. HARRELL, S. M. WHEELER, M. PENNICK, S. E. CLARKE, AND R. J. CHENERY ..	18	
Oxidation of Desmethylpromethazine Catalyzed by Pig Liver Flavin-Containing Monooxygenase: Number and Nature of Metabolites. BERND CLEMENT, KLEMENS L. LUSTIG, AND DANIEL M. ZIEGLER ..	24	
Reduction of Cisplatin Nephrotoxicity by Sodium Selenite. Lack of Interaction at the Pharmacokinetic Level of Both Compounds. NICOLE P. E. VERMEULEN, GLENN S. BALDEW, GERRIT LOS, J. GORDON MCVIE, AND JEROEN J. M. DE GOEIJ	30	
Evidence for Peroxidase-Mediated Metabolism of Cyclophosphamide. SARATHCHANDRA KANEKAL AND JAMES P. KEHRER	37	
Caffeine, Estradiol, and Progesterone Interact with Human CYP 1A1 and CYP 1A2: Evidence from cDNA-Directed Expression in <i>Saccharomyces cerevisiae</i> . HANS-PIETRO EUGSTER, MARKUS PROBST, FRIEDRICH E. WÜRGLER, AND CHRISTIAN SENGSTAG	43	
Substrate Specificities of Two Stably Expressed Human Liver UDP-glucuronosyltransferases of the UGT 1 Gene Family. THOMAS EBNER AND BRIAN BURCHELL	50	
Inducibility of Enzyme Activities Associated With the Cytochrome P-450 1A Family, Ethoxresorufin O-Dethylase, and Methoxyresorufin O-Demethylase, in Human Hepatocyte Lines Derived from Normal Liver Tissue. EVE A. ROBERTS, ZHANG WEI XIE, SUYUN YANG, AND JOAN LIPA	56	
Pharmacokinetics and Disposition in the Rat of a DNA Intercalator 502U83. DIPAK K. PATEL, REBECCA P. LEWIS, MELVIN L. HINTON, DAVID H. SCHROEDER, JOHN P. SHOCKCOR, ROBERT L. JOHNSON, AND CARL W. SIGEL	62	
Altered Pharmacokinetics of Recombinant Human Deoxyribonuclease in Rats Due to the Presence of a Binding Protein. MARJORIE MOHLER, JENNIFER COOK, DERF LEWIS, JEROME MOORE, DOMINICK SINICROPI, ANTONIO CHAMPIONSMITH, BOBBE FERRAIOLI, AND JOYCE MORDENTI	71	
Stereoselective Sulfation of Albuterol in Humans: Biosynthesis of the Sulfate Conjugate by HEP G2 Cells. T. WALLE, U. K. WALLE, K. R. THORNBURG, AND K. L. SCHEY	76	
Identification of Major Metabolites of the Catechol-O-methyltransferase Inhibitor Entacapone in Rats and Humans. TOM WikBERG, ARJA VUORELA, PEKKA OTTOILA, AND JYRKI TASKINEN	81	
Main Urinary Metabolites of Two Cysteamine-Containing 2-(Chloroethyl) Nitrosoureas in Rats. D. GODENECHÉ, P. LABARRE, M. F. MOREAU, J. C. MADELMONT, M. RAPP, J. PAPON, AND A. VEYRE	93	
Clearance and Tissue Uptake Following 4-hour and 24-hour Infusions of Pamidronate in Rats. M. PONGCHAIDECHA AND P. T. DALEY-YATES	100	
Fluorine NMR Studies of the Metabolism of Flumecinol (3-Trifluoromethyl- α -ethylbenzhydrol). L. A. SYLVIA AND J. T. GERIG	105	
Metabolic Inversion of (<i>R</i>)-Ibuprofen: Formation of Ibuprofenyl-Coenzyme A. TIMOTHY S. TRACY, DARREN P. WIRTHWEIN, AND STEPHEN D. HALL	114	
A Simplified Methodology for Quantitation of Butadiene Metabolites: Application to the Study of 1,3-Butadiene Metabolism by Rat Liver Microsomes. XIAOQIN CHENG AND JAMES A. RUTH	121	

Continued on next page

Contents (cont'd.)

A Pharmacokinetic Study of Phenylcyclohexyldiethylamine: An Analog of Phencyclidine. A. K. CHO, M. HIRAMATSU, DEBRA A. SCHMITZ, E. M. LANDAW, A. S. CHANG, S. RAMAMURTHY, AND D. J. JENDEN	125	Disposition of Oral [^{14}C]Cefcanel Daloxate Hydrochloride in Healthy Male Subjects. BJÖRN EDWALL, ANNIE ARVIDSSON, DESMOND LAKE-BAKAAR, KERSTIN LANBECK-VALLEN, AND WOLDE YISAK	171
Metabolism of <i>N,N</i> -Diethylbenzamide and <i>N,N</i> -Diethyl- α,α' - ^{13}C -benzamide by Rat Liver Microsomes. WESLEY G. TAYLOR, TSE WAI HALL, AND DARRELL D. VEDRES	133	Caffeine Metabolism in Liver Slices During Postnatal Development in Rats. THIERRY BIENVENU, GERARD PONS, ELISABETH REY, GENEVIEVE THIROUX, AND GEORGES OLIVE	178
Effect of Atropine on Gastrointestinal Motility and the Bioavailability of Cyclosporine A in Rats. ROMEO F. QUIJANO, NORIAKI OHNISHI, KAYO UMEDA, FUSAO KOMADA, SEIGO IWAKAWA, AND KATSUHIKO OKUMURA	141	Inhibition of Human Red Blood Cell <i>N</i> -Acetyltransferase. RONALD A. VOICE, MELANIE MANIS, AND WENDELL W. WEBER	181
Pharmacokinetics of Recombinant Human Follicle Stimulating Hormone After Intravenous, Intramuscular, and Subcutaneous Administration in Monkeys, and Comparison with Intravenous Administration of Urinary Follicle Stimulating Hormone. HERVÉ C. PORCHET, JEAN-YVES LE COTONNEC, SERGIO CANALI, AND GIOVANNI ZANOLO ..	144	Hepatic Elimination in the Rat of Ditekiren (U-71038)—A Renin Inhibitor Pseudohexapeptide. A. ADEDYOYIN, P. R. PERRY, AND G. R. WILKINSON ..	184
<i>In Vivo</i> Glucuronidation in Rat and Humans of 5,6-Dihydro-7-(1H-imidazol-1-yl)-naphthalene-2-carboxylic Acid, A Selective Inhibitor of Thromboxane Synthase. J. THOMASSIN, R. BATTAGLIA, C. ALLIEVI, M. G. CASTELLI, AND M. STROLIN BENEDOTTI	151	Zidovudine Bioavailability and Linear Pharmacokinetics in Female B6C3F1 Mice. JOHN M. TRANG, J. DAVID PREJEAN, RUBY H. JAMES, RICHARD D. IRWIN, THOMAS J. GOEHL, AND JOHN G. PAGE ..	189
Effects of Propranolol on the Disposition and Negative Dromotropic Activity of Diltiazem in the Dog During Multiple Dosing. CHAIYASIT MASKASAME, SUSAN M. LANKFORD, AND STEPHEN A. BAI	156	SHORT COMMUNICATIONS	
Biotransformation of the Antiviral Agent 1,3,4-Thiadiazol-2-ylcyanamide (LY217896) and Characteristics of a Mesoinic Ribose Metabolite. WILLIAM J. EHLHARDT, WILLIAM J. WHEELER, ALAN P. BREAU, SYLVIA H. CHAY, AND GARY M. BIRCH ..	162	Biometabolic Elimination and Organ Retention Profile of Argemone Alkaloid, Sanguinarine, in Rats and Guinea Pigs. SANGITA TANDON, MUKUL DAS, AND SUBHASH K. KHANNA	194
		Identification of Two Novel Indolic Metabolites of (<i>R</i>), (<i>R</i>)-Labetalol in Monkey Urine. KEVIN B. ALTON, TZE-MING CHAN, AND BIRENDRA PRAMANIK ..	198
		Zonal Differences in the Thermal Lability of Adrenal Microsomal Monoxygenases. HOWARD D. COLBY, MIRIAM LEVITT, AND IRENA W. LARSON ..	200