

Drug Metabolism and Disposition:

the biological fate of chemicals

May/June 1991

Vol. 19, No. 3

CONTENTS

Evidence for the Involvement of Several Cytochromes P-450 in the First Steps of Caffeine Metabolism by Human Liver Microsomes. FRANÇOIS BERTHOU, JEAN-PIERRE FLINOIS, DAMRONG RATANASAVANH, PHILIPPE BEAUNE, CHRISTIAN RICHE, AND ANDRÉ GUILLOUZO	561	Glutathione Conjugation with Phosphoramidate Mustard and Cyclophosphamide: A Mechanistic Study Using Tandem Mass Spectrometry. ZHI-MIN YUAN, P. B. SMITH, R. B. BRUNDRETT, MICHAEL COLVIN, AND CATHERINE FENSELAU	625
Enzymatic Detoxification of Phosphoramidate Mustard by Soluble Fractions from Rat Organ Tissues. PHILLIP S. HONG AND KENNETH K. CHAN	568	A Quaternary Ammonium Glucuronide is the Major Metabolite of Lamotrigine in Guinea Pigs: <i>In Vitro</i> and <i>In Vivo</i> Studies. RORY P. REMMEL AND MICHAEL W. SINZ	630
The Disposition and Pharmacokinetics of Alpidem, a New Anxiolytic, in the Rat. D. GARRIGOU-GADENNE, A. DURAND, J. P. THENOT, AND P. L. MORSELLI	574	Stereoselective Metabolism of Prazepam and Halazepam by Human Liver Microsomes. XIANG-LIN LU, F. PETER GUENGERICH, AND SHEN K. YANG	637
1,1-Dichloroethylene Elicits Dose-Dependent Alterations in Covalent Binding and Glutathione in Murine Liver. P. GEK FORKERT AND MADELEINE MOUSSA	580	Clinical Pharmacology of 1- β -D-Arabinofuranosyl-5-azacytosine (Fazarabine) following 72-Hour Infusion. DAH H. HO, NITA BROWN, JUAN R. LIN, WENDY COVINGTON, ROBERT A. NEWMAN, MARTIN RABER, ROBERT AMATO, SUE SCHMIDT, AND IRWIN H. KRAKOFF	643
Biotransformation of Territrems by S ₉ Fraction from Rat Liver. KUO HUANG LING, CHI MING CHIOU, AND YUN LONG TSENG	587	The <i>N</i> -Acetylation of Sulfamethazine and <i>p</i> -Aminobenzoic Acid by Human Liver Slices in Dynamic Organ Culture. L. GUNAWARDHANA, J. BARR, A. J. WEIR, K. BRENDEN, AND I. G. SIPES	648
Geometric Isomerization of Doxepin during its <i>N</i> -Demethylation in Humans. HANY GHABRIAL, CHANDRA PRAKASH, ULRICH G. TACKE, IAN A. BLAIR, AND GRANT R. WILKINSON	596	Physiological Pharmacokinetic and Pharmacodynamic Model of Physostigmine in the Rat. SATU M. SOMANI, SAMIR K. GUPTA, ABDUL KHALIQUE, AND LATHA K. UNNI	655
The Disposition and Metabolism of [¹⁴ C]Piritrexim in Rats after Intravenous and Oral Administration. JOSEPH L. WOOLLEY, DIANE V. DEANGELIS, RONALD C. CROUCH, JOHN P. SHOCKCOR, AND CARL W. SIGEL	600	Metabolism and Pharmacokinetics of 1,3-Dinitrobenzene in the Rat and the Hamster. STEVEN F. MCEUEN AND MARION G. MILLER	661
Enantioselective Hydrolysis of Lorazepam 3-Acetate by Esterases in Human and Rat Liver Microsomes and Rat Brain S ₉ Fraction. KAN LIU, F. PETER GUENGERICH, AND SHEN K. YANG	609	Disposition Kinetics and Metabolism of Nicotine-1'- <i>N</i> -Oxide in Rabbits. MIN JIANG DUAN, LISA YU, CHIN SAVANAPRIDI, PEYTON JACOB, III, AND NEAL L. BENOWITZ	667
The Pharmacokinetics of Dobutamine in Pediatric Intensive Care Unit Patients. PHILIP H. SCHWARTZ, MAHER K. ELDADAH, AND CHRISTOPHER J. L. NEWTH	614	Low Dose Chlordecone Pretreatment Altered Cholesterol Disposition without Induction of Cytochrome P-450. HILLARY M. CARPENTER AND LAWRENCE R. CURTIS	673
Nordihydroguaiaretic Acid, an Inhibitor of Lipoxygenase, also Inhibits Cytochrome P-450-Mediated Monooxygenase Activity in Rat Epidermal and Hepatic Microsomes. RAJESH AGARWAL, ZHI Y. WANG, DANIEL P. BIK, AND HASAN MUKHTAR ..	620	Mechanisms Responsible for the Thermal Sensitivity of Adrenal Microsomal Monooxygenases. HOWARD D. COLBY, PEGGY B. JOHNSON, AND MARLENE R. POPE	679

Continued on next page

Contents (cont'd)

Degradation of Peptide Drugs by Immobilized Digestive Proteases. RICHARD B. VAN BREEMEN, MICHAEL G. BARTLETT, YINHSIEN TSOU, CATHERINE CULVER, HAROLD SWAISGOOD, AND STEVE E. UNGER	683	Comparative Study of Phase II Biotransformation in Rabbit Ocular Tissues. JOHN B. WATKINS, III, DARREN P. WIRTHWEIN, AND RUTH A. SANDERS	708
Determination of Metabolically Derived Nitroprocaïnamide in the Urine of Procaïnamide-Dosed Humans and Rats by Liquid Chromatography with Electrochemical Detection. JOHN F. WHEELER, LOUIS E. ADAMS, ANNE-BARBARA MONGEY, STEPHEN M. ROBERTS, WILLIAM R. HEINEMAN, AND EVELYN V. HESS	691	SHORT COMMUNICATIONS	
Metabolism of the Acyl-Coa:Cholesterol Acyltransferase Inhibitor 2,2-Dimethyl-N-(2,4,6-trimethoxyphenyl)dodecanamide in Rat and Monkey: ω -/ β -Oxidation Pathway. THOMAS F. WOOLF, SUSAN M. BJORGE, ANN E. BLACK, ANN HOLMES, AND TSUN CHANG	696	<i>In Vitro</i> Metabolism of the Equatorial C ₁₁ -Methyl Isomer of Hexahydrocannabinol in Several Mammalian Species. D. J. HARVEY AND N. K. BROWN ..	714
Intestinal Absorption of S-(Pentachlorobutadienyl) glutathione and S-(Pentachlorobutadienyl)-L-cysteine, the Glutathione and Cysteine S-Conjugates of Hexachlorobuta-1,3-Diene. Y. GIETL, S. VAMVAKAS, AND M. W. ANDERS	703	Stereoselective Disposition of Ketoprofen in Rats. SEIGO IWAKAWA, XIWEN HE, SUMIKO HASHIMOTO, CHRISTINE VOLLAND, LESLIE Z. BENET, AND EMIL T. LIN	717
		Chronic Administration of Phencyclidine: Pharmacokinetic Comparison of Intravenous and Subcutaneous Infusions in Sprague-Dawley Rats. WILLIAM D. WESSINGER AND S. MICHAEL OWENS	719
		The Quaternary Ammonium-Linked Glucuronide of Doxepin: A Major Metabolite in Depressed Patients Treated with Doxepin. H. LUO, E. M. HAWES, G. MCKAY, E. D. KORCHINSKI, AND K. K. MIDHA	722