Drug Metabolism and Disposition: the biological fate of chemicals

May/June 1994

CONTENTS

LETTER TO THE EDITOR
Are Routine Tissue Distribution Studies Justifiable for Approval of Human Drugs? A. M. MONRO ..... 341

ARTICLES

Inactivation of Purified Rat Liver Cytochrome P-450 2B1 and Rabbit Liver Cytochrome P-450 2B4 by N-Methylcarbazole. STEVEN C. KUEMMERLE, TINGLIANG SHEN, AND PAUL F. HOLLENBERG ..... 343

In Vitro Metabolism of Zatosetron: Interspecies Comparison and Role of CYP 3A. BARBARA J. RING, C. JOHN PARLI, MALCOLM C. GEORGE, AND STEVEN A. WRIGHTON ..... 352

Pharmacokinetics and Kinetic-Dynamic Modeling of an 8-Aminoquinoline Candidate Anticancer and Antimalarial Drug (WR242511). MARK T. MARINO, JAMES O. PEGGINS, LARRY D. BROWN, MICHAEL R. URQUHART, AND THOMAS G. BREWER ..... 358

Carbonyl Reductase Activity for Acetohexamide in Human Erythrocytes. M. KISHIMOTO, R. KAWAMORI, T. KAMADA, AND T. INABA ..... 367

Cloning, Expression, and Functional Characterization of Two Mutant (NAT2191, and NAT22490) and Wild-Type Human Polymorphic N-Acetyltransferase (NAT2) Alleles. RONALD J. FERGUSON, MARK A. DOLL, TIMOTHY D. RUSTAN, KEVIN GRAY, AND DAVID W. HEIN ..... 371

Binding of Dorzolamide and its Metabolite, N-Deethyldorzolamide, to Human Erythrocytes in Vitro. TAKURO HASEGAWA, KEN'ICHI HARA, AND SHUNSUKE HATA ..... 377


Nonlinear Kinetics of Alendronate: Plasma Protein Binding and Bone Uptake. JIUNN H. LIN, I-WU CHEN, AND FLORENCIA A. DELUNA ..... 400

Disposition Kinetics of d- and l-Amphetamine following Intravenous Administration of Racemic Amphetamine to Rats. ATHIWAT HUTCHALEEHLAHA, JUTHAMAS SUKBUNTHERING, HSIAO-HUI CHOW, AND MICHAEL MAYERSON ..... 406

Hepatic Microsomal Azoreductase Activity: Reactivity of Azo Dye Substrates Is Determined by Their Electron Densities and Redox Potentials. SHMUEL ZBAIDA, C. FRED BREWER, AND WALTER G. LEVINE ..... 412

Reversible and Irreversible Interactions of a Cisplatin Analog Bearing a 1,2-Diphenylethylenediamine Ligand with Plasma and Plasma Proteins in Vivo. PATRICK J. BEDNARSKI, NICOLE A. KRAUCHW 229, AND ANGELA M. OTTO ..... 419


Metabolism of Thapsigargin in Rat Hepatocytes. MEL 225NE S. NIELSEN, CARL E. OLSEN, JOHN DIC H, S. BRÖGGER CHRISTENSEN, AND NIELS GRUNNET ..... 433

Urinary and Biliary Disposition of the Lactone and Carboxylate Forms of 20(S)-Camptothecin in Rats. DENNIS O. SCOTT, DILBIR S. BINDRA, STEVEN C. SUTTON, AND VALENTINO J. STELLA ..... 438

Brain Uptake and Biotransformation of Remacemide Hydrochloride, a Novel Anticonvulsant. HELEN HEYN, DENNIS J. MCCARTHY, STEPHEN H. CURRY, MARK S. EISMAN, AND M. W. ANDERS ..... 443

Continued on next page
ANNOUNCEMENT

Effective January 1, 1994 all manuscripts for submission to DRUG METABOLISM AND DISPOSITION: THE BIOLOGICAL FATE OF CHEMICALS should be sent to:

Raymond F. Novak, Editor
Institute of Chemical Toxicology
Wayne State University
2727 Second Avenue, Room 4000
Detroit, Michigan 48201-2654
Telephone 313-961-4943
Fax 313-577-0082