Drug Metabolism and Disposition: the biological fate of chemicals

CONTENTS

January/February 1994

Vol. 22, No. 1

Dedication to Vincent G. Zannoni .......................... 1

Pharmacokinetic Analysis of Enterobacterial Circulation of Buprenorphine and Its Active Metabolite, Norbuprenorphine, in Rats. Michitter Ohtani, Hajime Kotaki, Katuyoshi Uchino, Yasufumi Sawada, and Tatsuji Iga .......... 2

Renal Excretion of Famotidine and Role of Adenosine in Renal Failure Induced by Bacterial Lipopolysaccharide in Rats. Takaaki Hasegawa, Masayuki Nadai, Li Wang, Yu-ichi Takayama, Katuyoshi Katoh, Toshitaka Nabeshima, and Nobuo Kato ......... 8

Codeine Toxicokinetics in Rats during a Two-Year Dosed Feed Study. Jinhua Yuan, June K. Dunic, Evelyn R. Barnes, and John W. A. Findlay ...... 14

Tissue Distribution and Metabolism of Amitriptyline after Repeated Administration in Rats. Natsumu Oshihima, Hajime Kotaki, Yasufumi Sawada, and Tatsuji Iga ............. 21

Kinetics of Tissue Distribution and Elimination of Retinoid Drugs in the Rat. I. Acitretin. E. U. Eisenhardt and M. H. Bickel ............... 26

Kinetics of Tissue Distribution and Elimination of Retinoid Drugs in the Rat. II. Etrretinate. E. U. Eisenhardt and M. H. Bickel ............... 31


Suppression of In Vivo Clearance of N-Nitrosodimethylamine in Mice by Cotreatment with Ethanol. Lucy M. Anderson, Raymond Koseniauskas, Eric S. Burak, Daniel L. Logsdon, John P. Carter, Craig L. Driver, Charles T. Gombar, Peter N. Magee, and George W. Harrington ...... 43

Linear Relationship between GABA<sub>A</sub> Receptor Occupancy of Muscimol and Glucose Metabolic Response in the Conscious Mouse Brain: Clinical Implication Based on Comparison with Benzodiazepine Receptor Agonist. Kiyoaki Ito, Yasufumi Sawada, Yuichi Sugiyama, Hiroshi Suzuki, Manabu Hanano, and Tatsuji Iga ................. 50

Metabolic Fate and Pharmacokinetics of the Acyclovir Prodrug Valaciclovir in Cynomolgus Monkeys. Paulo de Miranda and Thimysta C. Burnett .......... 55

Metabolic Disposition of the Acyclovir Prodrug Valaciclovir in the Rat. Thimysta C. Burnette and Paulo de Miranda .............. 60

Induction of Cytochromes P-450 2B and 3A in Mice following the Dietary Administration of the Novel Cognitve Enhancer Linopirdine. Sharon Diamond, Daniel Rakestraw, James O'Neil, Gilbert N. Lam, and David D. Christ ............. 65

Metabolism of Cyclophosphamide by Lipoygenases. Sarathchandra Kaneelal and James P. Kehler .......... 74

In Vitro Biotransformation of Finasteride in Rat Hepatic Microsomes: Isolation and Characterization of Metabolites. Yasuyuki Ishii, Hiroko Mukuyma, and Masakatsu Ohtawa ............. 79

FK 506 Metabolism in Male and Female Rat Liver Microsomes. Beatrice Y. T. Perrotti, Noriko Okudaira, Thomayant Prueksaritanont, and Leslie Z. Benet .......... 85


Pharmacokinetics and Saturable Blood-Brain Barrier Transport of Biotin Bound To a Conjugate of Avidin and a Monoclonal Antibody To the Transferrin Receptor. Young-Sook Kang, Ulrich Bickel, and William M. Fardridge .......... 99

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
Telephone 313–961–4943
Fax 313–577–0082