

The Journal of PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

VOLUME 236
FEBRUARY 1986
NUMBER 2

CONTENTS

Mannitol Pharmacokinetics and Serum Osmolality in Dogs and Humans. James C. Cloyd, Bruce D. Snyder, Bruce Cleeremans and Scott R. Bundlie	301
Maprotiline: An Antidepressant with an Unusual Pharmacological Profile. Maria Luisa Barbaccia, Luigi Ravizza and Erminio Costa	307
Behavioral Studies with Anxiolytic Drugs. II. Interactions of Zopiclone with Ethyl-β-Carboline-3-Carboxylate and Ro 15-1788 in Squirrel Monkeys. J. E. Barrett, L. S. Brady, J. A. Stanley, R. S. Mansbach and J. M. Witkin	313
Antagonists of Central and Peripheral Behavioral Actions of Cholecystokinin Octapeptide. Jacqueline N. Crawley, Jill A. Stivers, Daniel W. Hommer, Lana R. Skirboll and Steven M. Paul	320
Extracellular Strontium Substitutes for Calcium in <i>In Vitro</i> Renin Secretion. Paul C. Churchill, Monique C. Churchill and Franklin D. McDonald	331
Insulin Stimulation of Ornithine Decarboxylase Activity in Developing Rat Heart. Peggy J. Webb, Gary L. Kimmel, James R. Harmon, Daniel M. Sheehan and Robert R. Delongchamp	334
Sustained Coronary Vasoconstriction Provoked by a Peptidergic Substance Released from Endothelial Cells in Culture. Mark N. Gillespie, Joseph O. Owasoyo, Ivan F. McMurtry and Richard F. O'Brien	339
Adenosine Potentiates Sympathomimetic Effects of Nicotinic Agonists <i>in Vivo</i>. Reid W. von Borstel, Gary E. Evoniuk and Richard J. Wurtman	344
Adenosine Affects Sympathetic Neurotransmission at Multiple Sites <i>in Vivo</i>. Gary E. Evoniuk, Reid W. von Borstel and Richard J. Wurtman	350
Modulation of Peripheral β-1 and α-2 Receptor Sensitivities by the Administration of the Tricyclic Antidepressant, Imipramine, Alone and in Combination with α-2 Antagonists to Rats. R. A. Keith, B. B. Howe and A. I. Salama	356
Disposition of 8-Methoxypsoralen in the Rat: Methodology for Measurement, Dose-Dependent Pharmacokinetics, Tissue Distribution and Identification of Metabolites. Dennis C. Mays, Sharon L. Rogers, Robert C. Guiler, Dale E. Sharp, Stephen G. Hecht, Alfred E. Staubus and Nicholas Gerber	364
Analysis of Vascular Responses in Rat Hindquarters Arterial Resistance Vessels and Veins <i>in Situ</i>. Edmund J. Sybertz, Thomas Baum, Patricia Williams, Richard P. Tedesco and Crawford Sabin	374
Ceftriaxone Pharmacokinetics in the Central Nervous System. Reynold Spector	380
α Adrenergic Receptors in the Rabbit Bladder Base Smooth Muscle: α-1 Adrenergic Receptors Mediate Contractile Responses. Gozoh Tsujimoto, Paul V. Timmins and Brian B. Hoffman	384
Altered Pulmonary Vascular Smooth Muscle Responsiveness in Monocrotaline-Induced Pulmonary Hypertension. Ralph J. Altieri, Jack W. Olson and Mark N. Gillespie	390
Impact of Platelet Activating Factor on Vascular Responsiveness in Isolated Rat Lungs. Mark N. Gillespie and Bruce D. Bowdy	396
Effect of Calcium Antagonist Drugs on Calcium Currents in Mammalian Skeletal Muscle Fibers. Kenneth B. Walsh, Shirley H. Bryant and Arnold Schwartz	403
Responses to Norepinephrine Resistant to Inhibition by α and β Adrenoceptor Antagonists. Richard A. Bond, Kevin G. Charlton and David E. Clarke	408
Atriopeptin III Kinetics and Pharmacodynamics in Normal and Anephric Rats. Friedrich C. Luft, Rudolf E. Lang, George R. Aronoff, Heikki Ruskoaho, Miklos Toth, Detlev Ganten, R. Bernd Sterzel and Thomas Unger	416
Vasodilation of the Rat Mesenteric Vasculature by Parathyroid Hormone. G. Allen Nickols, Maureen A. Metz and William H. Cline, Jr	419
Contribution of Ca^{++} and Calmodulin to the Action of Norepinephrine on Renal Prostaglandin Synthesis and Vascular Tone. Christy L. Cooper and Kafait U. Malik	424

Contents Continued on iv

Diabetes-Induced Alteration in Brain Monoamine Metabolism in Rats. Milad Bitar, Markku Koulu, Stanley I. Rapoport and Markku Linnoila	432
Identification and Characterization of Functional Angiotensin II Receptors on Cultured Heart Myocytes. Terry B. Rogers, Shirley T. Gaa and Ira S. Allen	438
Cytochrome P-450-Dependent Monooxygenase Activity and Endothelial-Dependent Relaxations Induced by Arachidonic Acid. Aldo Pinto, Nader G. Abraham and Kevin M. Mullane	445
Functional Effects of the Purinergic Innervation of the Rabbit Urinary Bladder. Robert M. Levin, Michael R. Ruggieri and Alan J. Wein	452
Acute Effects of Ethanol and Other Short-Chain Alcohols on the Guanylate Cyclase System of Murine Neuroblastoma Cells (Clone N1E-115). Scott Stenstrom, Lori Enloe, Michael Pfenning and Elliott Richelson	458
Mechanisms of Decreased Cerebrospinal Fluid Production by Radiographic Contrast Media: Role of Adenylate Cyclase Activation. Phillip P. Harnish, Frances K. Northington, Victor DiStefano and Shailesh Banerjee	464
In Vivo Uptake Kinetics of Aminoglycosides in the Kidney Cortex of Rats. Rubén A. Giuliano, Gert A. Verpooten, Ludo Verbist, Richard P. Wedeen and Marc E. De Broe	470
Diethyldithiocarbamate Provides Partial Protection Against Pulmonary and Lymphoid Oxygen Toxicity. Hamza Mansour, Maryse Levacher, Marie-Anne Gougerot-Pocidaló, Bernard Rouveix and Jean-Jacques Pocidaló	476
Selectivity of the Cimetidine-Induced Alterations in the Renal Handling of Organic Substrates in Humans. Studies with Anionic, Cationic and Zwitterionic Drugs. Jacoba van Crugten, Felix Bochner, Julie Keal and Andrew Somogyi ..	481
Piperine-Mediated Inhibition of Glucuronidation Activity in Isolated Epithelial Cells of the Guinea-Pig Small Intestine: Evidence that Piperine Lowers the Endogeneous UDP-Glucuronic Acid Content. Jaswant Singh, Raghvendra K. Dubey and Chand K. Atal	488
Role of 5'-Nucleotidase in Adenosine-Mediated Renal Vasoconstriction during Hypoxia. A. Ramos-Salazar and A. D. Baines	494
Inhibitory Effect of <i>Alpha</i>-1 Adrenoceptor Stimulation on Cardiac Sympathetic Neurotransmission in Pithed Normotensive Rats. A. de Jonge, G. van den Berg, J. Q. Qian, B. Wilfert, M. J. M. C. Thoolen, P. B. M. W. M. Timmermans and P. A. van Zwieten	500
A Pharmacological Explanation of the Use-Dependency of the Verapamil (and D-600) Block of Slow Calcium Channels. George B. Frank	505
Effect of Antihypertensive Treatment on the Left Ventricular Isomyosin Profile in One-Clip, Two Kidney Hypertensive Rats. Jean-Claude Dussaule, Jean-Baptiste Michel, Colette Auzan, Ketty Schwartz, Pierre Corvol and Joel Menard ..	512
Effect of Indapamide on the Electromechanical Properties of Rat Myometrium and Rat Portal Vein. Jean Mironneau, Jean-Pierre Savineau and Chantal Mironneau	519
Comparison of the Effects of Sodium Sulfate and N-Acetylcysteine on the Hepatotoxicity of Acetaminophen in Mice. Jerry J. Hjelle, Elzbieta A. Brzeznicka and Curtis D. Klaassen	526
Acetylcholine-Induced Contractions in Isolated Rabbit Pulmonary Arteries: Role of Thromboxane A₂. Ralph J. Altieri, Judith A. Kiritsy-Roy and John D. Catravas	535
<i>Alpha</i>-2 Adrenergic Receptor Localization in the Rat Heart and Kidney using Autoradiography and Tritiated Rauwolscine. Kathryn H. Muntz, Lisa Meyer, Steven Gadol and Theodore A. Calianos	542
[³H]Tryptamine Autoradiography in Rat Brain and Choroid Plexus Reveals Two Distinct Sites. David C. Perry	548