

The Journal of PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

VOLUME 243
DECEMBER 1987
NUMBER 3

CONTENTS

Effect of Cyclooxygenase and Thromboxane Synthase Inhibition on the Response to Angiotensin II in the Hypoperfused Canine Kidney. F. Goto, E. K. Jackson, A. Ohnishi, W. Herzer and R. A. Branch	799
Mobilization and Redistribution of Lead Over the Course of Calcium Disodium Ethylenediamine Tetraacetate Chelation Therapy. Deborah A. Cory-Slechta, Bernard Weiss and Christopher Cox	804
Calcium Dependence of Phorbol 12,13-Dibutyrate-Induced Force and Myosin Light Chain Phosphorylation in Arterial Smooth Muscle. Harold A. Singer and Kenneth M. Baker	814
Biologically Active Atrial Natriuretic Peptides Selectively Activate Na/K/Cl Cotransport in Vascular Smooth Muscle Cells. Martha E. O'Donnell, Eugene N. Bush, William Holleman and Nancy E. Owen	822
Activation of Serotonin₁ (5-HT₁) Receptors by Quipazine Increases Arterial Pressure and Renin Secretion in Conscious Rats. Richard H. Alper and John M. Snider	829
Negative Inotropic Effect of Platelet-Activating Factor on Human Myocardium: A Pharmacological Study. Donna A. Robertson, Arturo Genovese and Roberto Levi	834
Comparative Dopamine-Cholinergic Mechanisms in the Olfactory Tubercle and the Striatum: Effects of Metoclopramide. Heberto Suarez-Roca, Timothy Lovenberg and Luigi X. Cubeddu	840
Hepatic vs. Gastrointestinal Presystemic Extraction of Oral Midazolam and Flurazepam. Hermann R. Ochs, David J. Greenblatt, Wolfgang Eichelkraut, Christian Bakker, Reinhold Göbel and Norbert Hahn	852
Pharmacological and Biochemical Characterization of the D-1 Dopamine Receptor Mediating Acetylcholine Release in Rabbit Retina. J. G. Hensler, D. J. Cotterell and M. L. Dubocovich	857
Kinetics and Pharmacodynamics of Atrial Natriuretic Peptide and Lithium Clearance in the Isolated Perfused Rat Kidney. Michael E. Brier, Richard A. Brier, Friedrich C. Luft and George R. Aronoff	868
Inhibition of Guinea Pig Ileum Contractions Mediated by a Class of Histamine Receptor Resembling the H₂ Subtype. Jerome P. Trzeciakowski	874
Indomethacin Antagonizes Furosemide's Intratubular Effects during Loop Segment Microperfusion. Kent A. Kirchner	881
Histamine Release <i>in Vivo</i> by Pentagastrin from the Canine Stomach. John C. Gerber and J. Scott Barnes	887
Effect of Parathyroid Hormone on Gentamicin Plasma Membrane Binding and Tissue Accumulation. P. D. Holohan, W. C. Elliott, E. Grace and C. R. Ross	893
Effect of a Fibrin-Derived Vasoactive Peptide on Pulmonary Angiotensin Converting Enzyme Activity and on Pressure Responses to Bradykinin. Richard Moalli, Katarina Saldeen and Tom Saldeen	897
Characterization of Substance P Contractile Activity on Isolated Guinea Pig Lung Tissues. Norma P. Gerard	901
Local Parasympathetic Mechanisms for Ragweed-Sensitized Canine Trachealis Hyperresponsiveness. R. W. Mitchell, E. A. Kroeger, W. Kepron and N. L. Stephens	907
Tiletamine is a Potent Inhibitor of N-Methyl-Aspartate-Induced Depolarizations in Rat Hippocampus and Striatum. J. M. H. ffrench-Mullen, J. Lehmann, R. Bohacek and R. S. Fisher	915
Inhibition of ³H-Leukotriene D₄ Binding to Guinea Pig Lung Receptors by the Novel Leukotriene Antagonist ICI 198,615. David Aharony, Ron C. Falcone and Robert D. Krell	921
Neuropeptide Y Release from the Adrenal Medulla after Cholinergic Receptor Stimulation. T. D. Hexum, E. A. Majane, L. R. Russett and H.-Y. T. Yang	927
Toluene, Halothane, 1,1,1-Trichloroethane and Oxazepam Produce Ethanol-Like Discriminative Stimulus Effects in Mice. David C. Rees, Janet S. Knisely, Timothy J. Breen and Robert L. Balster	931
Comparison of the Discriminative Stimulus Properties of U50,488 and Morphine in Pigeons. Mitchell Picker and Linda A. Dykstra	938
Pyrethroid Insecticides and the γ-Aminobutyric Acid_A Receptor Complex: Motor Activity and the Acoustic Startle Response in the Rat. Kevin M. Crofton and Lawrence W. Reiter	946
Discriminative Stimulus Properties of Intragastrically Administered <i>d</i>-Amphetamine and Pentobarbital in Rhesus Monkeys. René de la Garza and Chris E. Johanson	955
Theophylline Distribution Kinetics Analyzed by Reference to Simultaneously Injected Urea and Inulin. Steven M. Belknap, John E. Nelson, Tsuen Ih Ruo, Marilyn C. Frederiksen, Ewelina M. Worwag, Sang-Goo Shin and Arthur J. Atkinson, Jr.	963
Behavioral Studies with Anxiolytic Drugs. IV. Serotonergic Involvement in the Effects of Buspirone on Punished Behavior of Pigeons. J. M. Witkin, R. S. Mansbach, J. E. Barrett, G. T. Bolger, P. Skolnick and B. Weissman	970
Lorazepam and Meprobamate Dose Effects in Humans: Behavioral Effects and Abuse Liability. John D. Roache and Roland R. Griffiths	978
[³H]Dihydroergotamine as a High-Affinity, Slowly Dissociating Radioligand for 5-HT_{1B} Binding Sites in Rat Brain Membranes: Evidence for Guanine Nucleotide Regulation of Agonist Affinity States. Mark W. Hamblin, Kayvan Ariani, Peter I. Adriaenssens and Roland D. Ciaranello	989
Three-Choice Drug Discrimination in Opioid-Dependent Humans: Hydromorphone, Naloxone and Saline. Kenzie L. Preston, George E. Bigelow, Warren Bickel and Ira A. Liebson	1002

Contents Continued on iv

Effects of Morphine, Ethylketocyclazocine, U-50,488H and Naloxone on the Acquisition of a Classically Conditioned Response in the Rabbit. C. W. Schindler, I. Gormezano and J. A. Harvey	1010
Co-Regulation of Tracheal Tone by cyclic AMP- and cyclic GMP-Dependent Mechanisms. Richard J. Heaslip, Frank R. Giesa, Thomas J. Rimele and David Grimes	1018
Behavioral and Neurochemical Responses to Haloperidol and SCH-23390 in Rats Treated Neonatally or as Adults with 6-Hydroxydopamine. Gary E. Duncan, Hugh E. Criswell, Thomas J. McCown, Ian A. Paul, Robert A. Mueller and George R. Breese	1027
An Analysis of Amplifying and Potentiating Interactions between Agonists. P. Leff	1035
Resultant Action of Cimetidine in a Cardiac Adenylate Cyclase Assay: Its Elucidation by Concentration-Ratios Analysis. D. G. Trist, P. Leff, Sir James Black, V. P. Gerskowitch and N. P. Shankley	1043
Exogenous Corticosterone Acetate Attenuates the Hypotension Induced by Ganglion Blockade in Conscious Long Evans and Brattleboro Rats. R. Foulkes, S. M. Gardiner and T. Bennett	1048
Endothelium-Derived Relaxing Factor is Likely to Modulate the Tone of Resistance Arteries in Rabbit Hindlimb <i>in Vivo</i>. Ulrich Förstermann, Christian Dudel and Jürgen C. Frölich	1055
Role of Endogenous Enkephalins in Locomotion Evidenced by Acetorphan, an "Enkephalinase" Inhibitor. Adina Michael-Titus, Philippe Preterre, Bruno Giros and Jean Costentin	1062
Role of Bradykinin Generating and Degrading Systems in the Vascular Permeability Response Induced with Kaolin in Rats. Seiichiro Kumakura, Susumu Tsurufuji, Shigeru Kurooka and Noriyuki Sunahara	1067
Beta Adrenoreceptor in Vascular Smooth Muscle with Special Reference to Subcellular Localization and Number of Binding Sites. Chiu-Yin Kwan, Sylvia N. Sipos, Andrea Osterroth and Edwin E. Daniel	1074
Hepatic Uptake and Storage of Warfarin. The Relation with the Target Enzyme Vitamin K 2,3-Epoxy Reductase. H. H. W. Thijssen and L. G. M. Baars	1082
Depression of Murine Hepatic Mixed Function Oxidase during Infection with <i>Listeria monocytogenes</i>. Shana Azri and Kenneth W. Renton	1089
Enhancement by Yohimbine of Nicotine- and Dimethylphenylpiperadinium-Induced Release of Norepinephrine from Cardiac Sympathetic Nerves of the Dog: Interaction of Presynaptic α and Nicotinic Receptors. Akira Kanda, Hiroshi Koyanagawa, Ryosuke Yorikane, Tomohiko Kimura and Susumu Satoh	1095
Regional Blood Flow and Hemodynamics in the Rabbit with Adriamycin Cardiomyopathy: Effects of Isosorbide Dinitrate, Dobutamine and Captopril. Richard B. Wanless, Inder S. Anand, Jane Gurden, Peter Harris and Philip A. Poole-Wilson	1101
Beta Adrenoceptor Facilitation of Norepinephrine Release is Not Dependent on Local Angiotensin II Formation in the Rat Isolated Kidney. Lars Christian Rump and Henryk Majewski	1107
Blocking Effects of Alinidine on Negative Chronotropic and Inotropic Responses to Vagal Stimulation and Injected Acetylcholine and Carbachol in Dogs. Yasuhiro Ogiwara, Yasuyuki Furukawa, Masayoshi Takeda and Shigetoshi Chiba	1113
Intestinal Permeation of Nonquaternary Amines: A Study with Telenzepine and Pirenzepine in the Isolated Mucosa of Guinea Pig Jejunum and Colon. F. Lauterbach	1121
Possible Mechanism by Which Coenzyme Q₁₀ Improves Reoxygenation-Induced Recovery of Cardiac Contractile Force after Hypoxia. Satoshi Takeo, Kouichi Tanonaka, Yoshiko Tazuma, Keiko Miyake and Reiko Murai	1131
Potentiation in Phencyclidine-Induced Serotonin-Mediated Behaviors after Intracerebroventricular Administration of 5,7-Dihydroxytryptamine in Rats. Toshitaka Nabeshima, Kazumasa Yamaguchi, Kazuhiro Ishikawa, Hiroshi Furukawa and Tsutomu Kameyama	1139
Anion Exchanger Mediates Benzylpenicillin Transport in Rat Choroid Plexus. Hiroshi Suzuki, Yasufumi Sawada, Yuichi Sugiyama, Tatsuji Iga and Manabu Hanano	1147
Comparison of Antinicotinic Activity by Neosurugatoxin and the Structurally Related Compounds. Shizuo Yamada, Yoshiyuki Kagawa, Noriyasu Takayanagi, Koichi Nakayama, Kuniro Tsuji, Takuo Kosuge, Eiichi Hayashi, Kunisuke Okada and Shoji Inoue	1153
5-HT_{1A} and α-2 Adrenergic Receptors Mediate the Hyperglycemic and Hypoinsulinemic Effects of 8-Hydroxy-2-(di-<i>n</i>-propylamino)tetralin in the Conscious Rat. F. Chaouloff and B. Jeanrenaud	1159
Calcium-Independent Phosphorylation of Smooth Muscle Myosin Light Chain by Okadaic Acid Isolated from Black Sponge (<i>Halichondria okadae</i>). Hiroshi Ozaki, Hiroaki Ishihara, Kazuhiro Kohama, Yoshiaki Nonomura, Shoji Shibata and Hideaki Karaki	1167
Central Sympathoinhibitory Action of Ketanserin in Rats. Mitsuhiro Yoshioka, Machiko Matsumoto, Hiroko Togashi, Masaru Minami and Hideya Saito	1174
Prevention of Aspirin-Induced Gastric Mucosal Injury by Histamine H₂ Receptor Antagonists: A Crossover Endoscopic and Intragastric pH Study in the Dog. Robert L. Cavanagh, Joseph P. Buyniski and Sheldon E. Schwartz	1179
High Dose Continuous Infusion of Bleomycin in Mice: A New Model for Drug-Induced Pulmonary Fibrosis. James H. Harrison, Jr. and John S. Lazo	1185
Actions of Benzodiazepine and β-Carboline Derivatives on γ-Aminobutyric Acid-Activated Cl⁻ Channels Recorded from Membrane Patches of Neonatal Rat Cortical Neurons in Culture. Stefano Vicini, Jean-Marc Mienville and Erminio Costa	1195
Nicotinic Acetylcholine Receptor Ion Channel Blockade by Cocaine: The Mechanism of Synaptic Action. K. L. Swanson and E. X. Albuquerque	1202
Enkephalinase Inhibitor Potentiates Mammalian Tachykinin-Induced Contraction in Ferret Trachea. K. Sekizawa, J. Tamaoki, P. D. Graf, C. B. Basbaum, D. B. Borson and J. A. Nadel	1211
Frequency-Dependent Interactions of Mexiletine and Quinidine on Depolarization and Repolarization in Canine Purkinje Fibers. Dan M. Roden, David H. S. Iansmith and Raymond L. Woosley	1218
Antiarrhythmic, Electrophysiologic and Hemodynamic Effects of ACC-9358. Barry S. Brown, Samuel V. Calzadilla, Mark J. Diemer, J. Craig Hartman and Robert D. Reynolds	1225
Index, Volume 243, October-December 1987	1235