The Journal of

PHARMACOLOGY

And Experimental Therapeutics

A Publication of the American Society for Pharmacology and Experimental Therapeutics

September 2013 Vol. 346, No. 3

Contents

HIGHLIGHTED PAPERS

342

PERSPECTIVES IN PHARMACOLOGY

Pharmacology at Work for Cardio-Oncology: Ranolazine to Treat Early Cardiotoxicity Induced by Antitumor Drugs

Giorgio Minotti

343

BEHAVIORAL PHARMACOLOGY


Lisa K. Brents, Sarah M. Zimmerman, Amanda R. Saffell, Paul L. Prather, and William E. Fantegrossi

350

CARDIOVASCULAR

Fetal Rat Hearts Do Not Display Acute Cardiotoxicity in Response to Maternal Doxorubicin Treatment

Mina Mhallem Gziri, Peter Pokreisz, Rita De Vos, Eric Verbeken, Frédéric Debiève, Luc Mertens, Stefan P. Janssens, and Frédéric Amant

362

A New Pyrroline Compound Selective for I1-Imidazoline Receptors Improves Metabolic Syndrome in Rats

Lyne Fellmann, Véronique Regnault, Hugues Greney, Vincent Gasparik, Adeline Muscat, Jean-Pierre Max, Luc Gigou, Valérie Orèu, Gérard Chetrite, Anne Pizard, Nathalie Niederhoffer, Claude Julien, Patrick Lacolley, Bruno Fève, and Pascal Bousquet

370

CHEMOTHERAPY, ANTIBIOTICS, AND GENE THERAPY

The Novel Anticancer Agent JNJ-26854165 Induces Cell Death through Inhibition of Cholesterol Transport and Degradation of ABCA1

Richard J. Jones, Dongmin Gu, Chad C. Bjorklund, Isere Kuiatse, Alan T. Remaley, Tarig Bashir, Veronique Vreys, and Robert Z. Orlowski

DNA-Damaging Imidazoacridinone C-1311 Induces Autophagy followed by Irreversible Growth Arrest and Senescence in Human Lung Cancer Cells

Joanna Polewska, Anna Skwarska, Ewa Augustin, and Jerzy Konopa

381

393

DRUG DISCOVERY AND TRANSLATIONAL MEDICINE

Pharmacokinetics and Pharmacodynamics of the Glutamate Carboxypeptidase II Inhibitor 2-MPPA Show Prolonged Alleviation of Neuropathic Pain through an Indirect Mechanism

James J. Vornov, Krystyna M. Wozniak, Ying Wu, Camilo Rojas, Rana Rais, and Barbara S. Slusher

Effect of the Mixed Phosphodiesterase 3/4 Inhibitor RPL554 on Human Isolated Bronchial Smooth Muscle Tone

Luigino Calzetta, Clive P. Page, Domenico Spina, Mario Cazzola, Paola Rogliani, Francesco Facciolo, and Maria Gabriella Matera

Anodal Iontophoresis of a Soluble Guanylate Cyclase Stimulator Induces a Sustained Increase in Skin Blood Flow in Rats

Sylvain Kotzki, Matthieu Roussé, Claire Arnaud, Jean Boutonnet, Sophie Blaize, Diane Godin-Ribaut, and Jean-Luc Cracowski

 Modeling Tumor Response after Combined Administration of Different Immune-Stimulatory Agents

Zinnia P. Parra-Guillen, Pedro Berraondo, Benjamin Ribba, and Iñaki F. Trocóniz

406

414

424

432
ENDOCRINE AND DIABETES
Chronic Treatment with Novel GPR40 Agonists Improve Whole-Body Glucose Metabolism Based on the Glucose-Dependent Insulin Secretion
Hirotsugu Tanaka, Shigeru Yoshida, Hiroyuki Oshima, Hideaki Minoura, Kenji Negoro, Takao Yamazaki, Shuichi Sakuda, Fumiyoshi Iwasaki, Tetsuo Matsui, and Masayuki Shibasaki

GASTROINTESTINAL, HEPATIC, PULMONARY, AND RENAL
Short- and Long-Term Regulation of Intestinal Na\(^+\)/H\(^+\) Exchange Activity Associated with TLR2 Receptor Activation Is Independent of Nuclear Factor-\(\kappa\)B Signaling
José Miguel Cabral, Patrício Soares-da-Silva, and Fernando Magro
NLRP3 Inflammasome Knockout Mice Are Protected against Ischemic but Not Cisplatin-Induced Acute Kidney Injury
Hyun-Jung Kim, Dong Won Lee, Kameswaran Ravichandran, Daniel O. Keys, Ali Akcay, Quocan Nguyen, Zhibin He, Alkesh Jani, Danica Ljubanovic, and Charles L. Edelstein

INFLAMMATION, IMMUNOPHARMACOLOGY, AND ASTHMA
Concurrent Agonism of Adenosine A\(_2\)B and Glucocorticoid Receptors in Human Airway Epithelial Cells Cooperatively Induces Genes with Anti-Inflammatory Potential: A Novel Approach to Treat Chronic Obstructive Pulmonary Disease
Stephanie Greer, Cara W. Page, Taruna Joshi, Dong Yan, Robert Newton, and Mark A. Giembycz

METABOLISM, TRANSPORT, AND PHARMACOGENOMICS
Impact of P-Glycoprotein (ABCB1) and Breast Cancer Resistance Protein (ABCG2) Gene Dosage on Plasma Pharmacokinetics and Brain Accumulation of Dasatinib, Sorafenib, and Sunitinib
Seng Chuan Tang, Niels de Vries, Rolf W. Sparidans, Els Wagenaar, Jos H. Beijnen, and Alfred H. Schinkel
Substrate-Dependent Inhibition of Human MATE1 by Cationic Ionic Liquids
Lucy J. Martinez-Guerrero and Stephen H. Wright
Toxicokinetics/Toxicodynamics of \(\gamma\)-Hydroxybutyrate-Ethanol Intoxication: Evaluation of Potential Treatment Strategies
Bridget L. Morse and Marilyn E. Morris

NEUROPHARMACOLOGY
Pharmacological Characterization of JNJ-40068782, a New Potent, Selective, and Systemically Active Positive Allosteric Modulator of the mGlu2 Receptor and Its Radioligand \([\text{H}]\)JNJ-40068782
Hilde Lavreysen, Xavier Langlois, Abdel Ahnaou, Wilhelms Drinkenburg, Paula te Riele, Ilse Biesmans, Ilse Van der Linden, Luc Peeters, Anton Megens, Cindy Wintmolders, Jose Maria Cid, Andrés A. Trabanco, Jose Ignacio Andrés, Frank M. Dautzenberg, Robert Lütjens, Gregor Macdonald, and John R. Atack
Long-Lasting Attenuation of Amygdala-Kindled Seizures after Convection-Enhanced Delivery of Botulinum Neurotoxins A and B into the Amygdala in Rats
Maciej Gasior, Rebecca Tang, and Michael A. Rogawski
Stronger Antinociceptive Efficacy of Opioids at the Injured Nerve Trunk Than at Its Peripheral Terminals in Neuropathic Pain
Dominika Labuz and Halina Machelska
Physical Presence of Nor-Binaltorphimine in Mouse Brain over 21 Days after a Single Administration Corresonds to Its Long-Lasting Antagonistic Effect on \(\kappa\)-Opioid Receptors
Kshitij A. Patkar, Jinhua Wu, Michelle L. Ganno, Harminder D. Singh, Nicolette C. Ross, Khampaseth Rasakham, Lawrence Toll, and Jay P. McLaughlin

Supplemental material is available online at http://jpet.aspetjournals.org.