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 Verbeke, 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 Reignault, Hughes Greney, Vincent Gasparik, Adeline Muscat, Jean-Pierre Max, Luc Gigou, Valérie Orèa, 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

381

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

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

406

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

414

Anodal Iontophoresis of a Soluble Guanylate Cyclase Stimulator Induces a Sustained Increase in Skin Blood Flow in Rats
Sylvain Kotzki, Matthieu Rousiti, Claire Arnaud, Jean Bourtomrat, Sophie Blaise, Diane Godin-Ribout, and Jean-Luc Cracowski

424

 Modeling Tumor Response after Combined Administration of Different Immune-Stimulatory Agents
Zinnia P. Parra-Guillen, Pedro Berraondo, Benjamin Ribba, and Iñaki F. Trocóniz

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-κB 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 A2B 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 γ-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 [\(^{3}H\)]JNJ-40068782
Hilde Lavreysen, Xavier Langlois, Abdel Ahnaou, Wilhelmus 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 Corresponds to Its Long-Lasting Antagonistic Effect on κ-Opioid Receptors
Kshitij A. Patkar, Jinhua Wu, Michelle L. Ganno, Harminder D. Singh, Nicolette C. Ross, Khampaseuth Rasakham, Lawrence Toll, and Jay P. McLaughlin

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

About the cover: Schematic representation of the combination therapy model. See the article by Parra-Guillen et al. on page 432 of this issue.