December 2015 Vol. 355, No. 3

Contents

HIGHLIGHTED PAPERS

COMMENTARY
Editor’s Note
Michael F. Jarvis

MINIREVIEWS
Cracking the Egg: Potential of the Developing Chicken as a Model System for Nonclinical Safety Studies of Pharmaceuticals
Sigrid Bjørnstad, Lars Peter Engset Austdal, Borghild Roald, Joel Clinton Glover, and Ragnhild Elisabeth Paulsen

Matrix Metalloproteinases as Regulators of Vein Structure and Function: Implications in Chronic Venous Disease
Elisabeth MacColl and Raouf A. Khalil

BEHAVIORAL PHARMACOLOGY
Directly Observable Behavioral Effects of Lorcaserin in Rats
Katherine M. Serafine, Kenner C. Rice, and Charles P. France

The M1 Muscarinic Positive Allosteric Modulator PQCA Improves Performance on Translatable Tests of Memory and Attention in Rhesus Monkeys
Henry S. Lange, Christopher E. Cannon, Jason T. Drott, Scott D. Kuduk, and Jason M. Uslaner

CARDIOVASCULAR
Magnesium Modifies the Impact of Calcitriol Treatment on Vascular Calcification in Experimental Chronic Kidney Disease

Early Administration of Carvedilol Protected against Doxorubicin-Induced Cardiomyopathy

DRUG DISCOVERY AND TRANSLATIONAL MEDICINE
LG308, a Novel Synthetic Compound with Antimicrotubule Activity in Prostate Cancer Cells, Exerts Effective Antitumor Activity
Min Qin, Shihong Peng, Ning Liu, Meichuan Hu, Yundong He, Guoliang Li, Huang Chen, Yuan He, Ang Chen, Xin Wang, Mingyao Liu, Yihua Chen, and Zhonggang Yi

Integrated Pharmacokinetic/Pharmacodynamic Analysis for Determining the Minimal Anticipated Biological Effect Level of a Novel Anti-CD28 Receptor Antagonist BMS-931699

GASTROINTESTINAL, HEPATIC, PULMONARY, AND RENAL
Autophagy Deficiency Diminishes Indomethacin-Induced Intestinal Epithelial Cell Damage through Activation of the ERK/Nrf2/HO-1 Pathway
Satoshi Harada, Takatoshi Nakagawa, Shunichi Yokoe, Shoko Edogawa, Toshihisa Takeuchi, Takaya Inoue, Kazuhide Higuchi, and Michio Asahi
Cinnamamides, Novel Liver X Receptor Antagonists that Inhibit Ligand-Induced Lipogenesis and Fatty Liver

Woo-Cheol Sim, Dong Gwang Kim, Kyeong Jin Lee, You-Jin Choi, Yeon Jae Choi, Kye Jung Shin, Dae Won Jun, So-Jung Park, Hyun-Ju Park, Jiwon Kim, Won Keun Oh, and Byung-Hoon Lee

INFLAMMATION, IMMUNOPHARMACOLOGY, AND ASTHMA

NLRP3 Inflammasome Involvement in the Organ Damage and Impaired Spermatogenesis Induced by Testicular Ischemia and Reperfusion in Mice

Letteria Minutoli, Pietro Antonuccio, Natasha Irrera, Mariagrazia Rinaldi, Alessandra Bitto, Herbert Marini, Gabriele Pizzino, Carmelo Romeo, Antonina Pisanu, Giuseppe Santoro, Domenico Pazzolo, Carlo Magn, Francesca Squadrito, Antonio Micali, and Domenica Altavilla

METABOLISM, TRANSPORT, AND PHARMACOGENOMICS

Transcriptional Regulation of Cytosolic Sulfotransferase 1C2 by Intermediates of the Cholesterol Biosynthetic Pathway in Primary Cultured Rat Hepatocytes

Elizabeth A. Rondini, Asmita Pant, and Thomas A. Kocarek

NEUROPHARMACOLOGY

MLi-2, a Potent, Selective, and Centrally Active Compound for Exploring the Therapeutic Potential and Safety of LRRK2 Kinase Inhibition

Matthew J. Fell, Christian Mirescu, Kallol Basu, Boonlert Cheewatrakoolpong, Duane E. DeMong, J. Michael Ellis, Lynn A. Hyde, Yinghui Lin, Carrie G. Markgraf, Hong Mei, Michael Miller, Frederique M. Poulet, Jack D. Scott, Michelle D. Smith, Zhizhang Yin, Xiaoping Zhou, Eric M. Parker, Matthew E. Kennedy, and John A. Morrow

Chronic Nicotine Exposure Attenuates Methamphetamine-Induced Dopaminergic Deficits

Paula L. Vieira-Brock, Lisa M. McFadden, Shannon M. Nielsen, Jonathan D. Ellis, Elliot T. Walters, Kristen A. Stout, J. Michael McIntosh, Diana G. Wilkins, Glen R. Hanson, and Annette E. Fleckenstein

Inhibition of Plasma Membrane Na/Ca-Exchanger by KB-R7943 or Lithium Reveals Its Role in Ca-Dependent N-methyl-D-aspartate Receptor Inactivation

Dmitry A. Sibarov, Polina A. Abushik, Ekaterina E. Poguzhelskaya, Konstantin V. Bolshakov, and Sergei M. Antonov

Phosphorylation of the N-methyl-D-aspartate receptor is increased in the nucleus accumbens during both acute and extended morphine withdrawal

Ethan M. Anderson, Turi Reeves, Katherine Kapernaros, John K. Neubert, and Robert M. Caudle

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

About the cover: LG308 disrupted the microtubule organization in interphase and mitotic phase in PC-3M cells. See the article by Qin et al (dx.doi.org/10.1124/jpet.115.225912).