

The Journal of PHARMACOLOGY

And Experimental Therapeutics

A Publication of the American Society for Pharmacology and Experimental Therapeutics

April 2017

Vol. 361, No. 1

Contents

BEHAVIORAL PHARMACOLOGY

- Effect of Tamoxifen and Brain-Penetrant Protein Kinase C and c-Jun N-Terminal Kinase Inhibitors on Tolerance to Opioid-Induced Respiratory Depression in Mice 51
Sarah L. Withey, Rob Hill, Abigail Lyndon, William L. Dewey, Eamonn Kelly, and Graeme Henderson
- Effects of Repeated Ropinirole Treatment on Phencyclidine-Induced Hyperlocomotion, Prepulse Inhibition Deficits, and Social Avoidance in Rats 109
Amanda M. Maple, Tanessa Call, Phylcia C. Kimmel, and Ronald P. Hammer Jr.
- Individual Differences in the Relative Reinforcing Effects of 3,4-Methylenedioxypyrovalerone under Fixed and Progressive Ratio Schedules of Reinforcement in Rats 181
Brenda M. Gannon, Kayla I. Galindo, Kenner C. Rice, and Gregory T. Collins

CARDIOVASCULAR

- PDE5 Inhibitor Tadalafil and Hydroxychloroquine Cotreatment Provides Synergistic Protection against Type 2 Diabetes and Myocardial Infarction in Mice 29
Rui Wang, Lei Xi, and Rakesh C. Kukreja
- Luteolinidin Protects the Postischemic Heart through CD38 Inhibition with Preservation of NAD(P)(H) 99
James Boslett, Craig Hemann, Yong Juan Zhao, Hon-Cheung Lee, and Jay L. Zweier
- Therapeutic Restoration of Endothelial Glycocalyx in Sepsis 115
J.W. Song, J.A. Zullo, D. Liveris, M. Dragovich, X.F. Zhang, and M.S. Goligorsky

CELLULAR AND MOLECULAR

- Dynamic Regulation of Homer Binding to Group I Metabotropic Glutamate Receptors by Preso1 and Converging Kinase Cascades 122
Jia-Hua Hu, Paul F. Worley, and Paul J. Kammermeier
- Overlapping and Divergent Actions of Structurally Distinct Histone Deacetylase Inhibitors in Cardiac Fibroblasts 140
Katherine B. Schuetze, Matthew S. Stratton, Weston W. Blakeslee, Michael F. Wempe, Florence F. Wagner, Edward B. Holson, Yin-Ming Kuo, Andrew J. Andrews, Tonya M. Gilbert, Jacob M. Hooker, and Timothy A. McKinsey

DRUG DISCOVERY AND TRANSLATIONAL MEDICINE

- A Tumor Cell-Selective Inhibitor of Mitogen-Activated Protein Kinase Phosphatases Sensitizes Breast Cancer Cells to Lymphokine-Activated Killer Cell Activity 39
Christof T. Kaltenmeier, Laura L. Vollmer, Lawrence A. Verneti, Lindsay Caprio, Keanu Davis, Vasilij N. Korotchenko, Billy W. Day, Michael Tsang, Keren I. Hulkower, Michael T. Lotze, and Andreas Vogt
- Antibody-Conjugated, DNA-Based Nanocarriers Intercalated with Doxorubicin Eliminate Myofibroblasts in Explants of Human Lens Tissue 60
Jacquelyn Gerhart, Marvin Greenbaum, Lou Casta, Anthony Clemente, Keith Mathers, Robert Getts, and Mindy George-Weinstein

ENDOCRINE AND DIABETES

- Endothelin Confers Protection against High Glucose-Induced Neurotoxicity via Alleviation of Oxidative Stress 130
Mohamed A. Fouda and Abdel A. Abdel-Rahman

GASTROINTESTINAL, HEPATIC, PULMONARY, AND RENAL

- Xenin Augments Duodenal Anion Secretion via Activation of Afferent Neural Pathways 151
Izumi Kaji, Yasutada Akiba, Ikuo Kato, Koji Maruta, Atsukazu Kuwahara, and Jonathan D. Kaunitz
- Control of Neurotransmission by NaV1.7 in Human, Guinea Pig, and Mouse Airway Parasympathetic Nerves 172
Michaela Kocmalova, Marian Kollarik, Brendan J. Canning, Fei Ru, R. Adam Herbstsomer, Sonya Meeker, Silvia Fonquerna, Monica Aparici, Montserrat Miralpeix, Xian Xuan Chi, Baolin Li, Ben Wilenkin, Jeff McDermott, Eric Nisenbaum, Jeffrey L. Krajewski, and Bradley J. Udem

METABOLISM, TRANSPORT, AND PHARMACOGENOMICS

- ☐ Impact of Nonalcoholic Fatty Liver Disease on Toxicokinetics of Tetrachloroethylene in Mice 17
Joseph A. Cichocki, Shinji Furuya, Kranti Konganti, Yu-Syuan Luo, Thomas J. McDonald, Yasuhiro Iwata, Weihsueh A. Chiu, David W. Threadgill, Igor P. Pogribny, and Ivan Rusyn

NEUROPHARMACOLOGY

- Interactions between Zinc and Allosteric Modulators of the Glycine Receptor 1
Garrett L. Cornelison, Anna W. Daszkowski, Natasha C. Pflanz, and S. John Mihic
- Antidepressant Potential of (*R*)-Ketamine in Rodent Models: Comparison with (*S*)-Ketamine 9
Kenichi Fukumoto, Hidetoh Toki, Michihiko Iijima, Takashi Hashihayata, Jun-ichi Yamaguchi, Kenji Hashimoto, and Shigeyuki Chaki
- Comparative Effects of LY3020371, a Potent and Selective Metabotropic Glutamate (mGlu) 2/3 Receptor Antagonist, and Ketamine, a Noncompetitive *N*-Methyl-D-Aspartate Receptor Antagonist in Rodents: Evidence Supporting the Use of mGlu2/3 Antagonists, for the Treatment of Depression. 68
J.M. Witkin, S.N. Mitchell, K.A. Wafford, G. Carter, G. Gilmour, J. Li, B.J. Eastwood, C. Overshiner, X. Li, L. Rorick-Kehn, K. Rasmussen, W.H. Anderson, A. Nikolayev, V.V. Tolstikov, M.-S. Kuo, J.T. Catlow, R. Li, S.C. Smith, C.H. Mitch, P.L. Ornstein, S. Swanson, and J.A. Monn
- Thermolytic Degradation of Synthetic Cannabinoids: Chemical Exposures and Pharmacological Consequences 162
Brian F. Thomas, Timothy W. Lefever, Ricardo A. Cortes, Megan Grabenauer, Alexander L. Kovach, Anderson O. Cox, Purvi R. Patel, Gerald T. Pollard, Julie A. Marusich, Richard C. Kevin, Thomas F. Gamage, and Jenny L. Wiley
- Translational Pharmacology of the Metabotropic Glutamate 2 Receptor–Preferring Agonist LY2812223 in the Animal and Human Brain 190
Christian C. Felder, Douglas A. Schober, Yuan Tu, Anne Quets, Hongling Xiao, Marla Watt, Ed Siuda, Eric Nisenbaum, Chuanxi Xiang, Beverly Heinz, Lourdes Prieto, David McKinzie, and James A. Monn

TOXICOLOGY

- Early Detection of Acute Drug-Induced Liver Injury in Mice by Noninvasive Near-Infrared Fluorescence Imaging 87
Kristine O. Vasquez and Jeffrey D. Peterson

ERRATUM

- Correction to: “Intracellular Unbound Atorvastatin Concentrations in the Presence of Metabolism and Transport.” 198

☐ Supplemental material is available at jpet.aspetjournals.org.

About the cover: Assessment of four chemical compounds and three imaging probes in liver injury imaging. See the article by Vasquez and Peterson ([dx.doi.org/10.1124/jpet.116.238378](https://doi.org/10.1124/jpet.116.238378)).