

The Journal of PHARMACOLOGY

And Experimental Therapeutics

A Publication of the American Society for Pharmacology and Experimental Therapeutics

November 2017

Vol. 363, No. 2

Contents

MINIREVIEWS

- Factors Contributing to the Antiviral Effectiveness of Tenofovir 156
Rachel A. Murphy and Monica A. Valentovic
- Cellular and Molecular Mechanisms of Calcium/Calmodulin-Dependent Protein Kinase II in Chronic Pain 176
Ya-Qun Zhou, Dai-Qiang Liu, Shu-Ping Chen, Jia Sun, Xue-Rong Zhou, Fang Luo, Yu-Ke Tian, and Da-Wei Ye

CARDIOVASCULAR

- ▣ Histone Deacetylase Inhibitors Relax Mouse Aorta Partly through Their Inhibitory Action on L-Type Ca²⁺ Channels 211
Changbo Zheng, Mingkui Zhong, Zenghua Qi, Fan Shen, Qiannan Zhao, Lulu Wu, Yu Huang, Suk-Ying Tsang, and Xiaoqiang Yao

CELLULAR AND MOLECULAR

- ▣ Depletion of Progranulin Reduces GluN2B-Containing NMDA Receptor Density, Tau Phosphorylation, and Dendritic Arborization in Mouse Primary Cortical Neurons 164
Francesca Longhena, Michela Zaltieri, Jessica Grigoletto, Gaia Faustini, Luca La Via, Roberta Ghidoni, Luisa Benussi, Cristina Missale, PierFranco Spano, and Arianna Bellucci
- A Model of the Block of Voltage-Gated Potassium Kv4.2 Ionic Currents by 4-Aminopyridine 184
Steven J. Kehl
- ▣ Claudin-5-Binders Enhance Permeation of Solutes across the Blood-Brain Barrier in a Mammalian Model 275
Yosuke Hashimoto, Keisuke Shirakura, Yoshiaki Okada, Hiroyuki Takeda, Kohki Endo, Maki Tamura, Akihiro Watari, Yoshifusa Sadamura, Tatsuya Sawasaki, Takefumi Doi, Kiyohito Yagi, and Masuo Kondoh

CHEMOTHERAPY, ANTIBIOTICS, AND GENE THERAPY

- Hybrid of DNA-targeting Chlorambucil with Pt(IV) Species to Reverse Drug Resistance 221
Feihong Chen, Gang Xu, Xiaodong Qin, Xiufeng Jin, and Shaohua Gou

DRUG DISCOVERY AND TRANSLATIONAL MEDICINE

- ▣ Heterogeneous Binding and Central Nervous System Distribution of the Multitargeted Kinase Inhibitor Ponatinib Restrict Orthotopic Efficacy in a Patient-Derived Xenograft Model of Glioblastoma 136
Janice K. Laramy, Minjee Kim, Shiv K. Gupta, Karen E. Parrish, Shuangling Zhang, Katrina K. Bakken, Brett L. Carlson, Ann C. Mladek, Daniel J. Ma, Jann N. Sarkaria, and William F. Elmquist
- ▣ Jadomycins Inhibit Type II Topoisomerases and Promote DNA Damage and Apoptosis in Multidrug-Resistant Triple-Negative Breast Cancer Cells 196
Steven R. Hall, Jay Toulany, Leah G. Bennett, Camilo F. Martinez-Farina, Andrew W. Robertson, David L. Jakeman, and Kerry B. Goralski
- ▣ Acalabrutinib (ACP-196): A Covalent Bruton Tyrosine Kinase Inhibitor with a Differentiated Selectivity and In Vivo Potency Profile 240
Tjeerd Barf, Todd Covey, Raquel Izumi, Bas van de Kar, Michael Gulrajani, Bart van Lith, Maaike van Hoek, Edwin de Zwart, Diana Mittag, Dennis Demont, Saskia Verkaik, Fanny Krantz, Paul G. Pearson, Roger Ulrich, and Allard Kaptein

GASTROINTESTINAL, HEPATIC, PULMONARY, AND RENAL

- ▣ Upregulation of Epac-1 in Hepatic Stellate Cells by Prostaglandin E₂ in Liver Fibrosis Is Associated with Reduced Fibrogenesis 126
Marlies Schippers, Leonie Beljaars, Eduard Post, Sophie Lotersztajn, Catharina Reker-Smit, Bing Han, Pablo Munoz-Llancao, Martina Schmidt, and Klaas Poelstra

METABOLISM, TRANSPORT, AND PHARMACOGENOMICS

- ▣ Genetic and Nongenetic Factors Associated with Protein Abundance of Flavin-Containing Monooxygenase 3 in Human Liver 265
Meijuan Xu, Deepak Kumar Bhatt, Catherine K. Yeung, Katrina G. Claw, Amarjit S. Chaudhry, Andrea Gaedigk, Robin E. Pearce, Ulrich Broeckel, Roger Gaedigk, Deborah A. Nickerson, Erin Schuetz, Allan E. Rettie, J. Steven Leeder, Kenneth E. Thummel, and Bhagwat Prasad

NEUROPHARMACOLOGY

- Adenylyl Cyclase 1 Is Required for Ethanol-Induced Locomotor Sensitization and Associated Increases in NMDA Receptor Phosphorylation and Function in the Dorsal Medial Striatum 148
Kelly E. Bosse, Max F. Oginsky, Laura L. Susick, Sailesh Ramalingam, Carrie R. Ferrario, and Alana C. Conti
- FTBMT, a Novel and Selective GPR52 Agonist, Demonstrates Antipsychotic-Like and Procognitive Effects in Rodents, Revealing a Potential Therapeutic Agent for Schizophrenia 253
Keiji Nishiyama, Hirobumi Suzuki, Toshiya Harasawa, Noriko Suzuki, Emi Kurimoto, Takayuki Kawai, Minoru Maruyama, Hidetoshi Komatsu, Kensuke Sakuma, Yuji Shimizu, and Masato Shimojo
- A Novel Bibenzyl Compound (20C) Protects Mice from 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine/Probenecid Toxicity by Regulating the α -Synuclein-Related Inflammatory Response 284
Qiu-Shuang Zhang, Yang Heng, Ying Chen, Piao Luo, Lu Wen, Zhao Zhang, Yu-He Yuan, and Nai-Hong Chen

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

About the cover: A hypothetical schematic of the equilibration of free (unbound) drug delivery between plasma (blood) and tumor sites (flank or orthotopic tumor). See the article by Laramy et al., ([dx.doi.org/10.1124/jpet.117.243477](https://doi.org/10.1124/jpet.117.243477)).