CONTENTS

SPECIAL SECTION ON NEW ERA OF TRANSPORTER SCIENCE: UNRAVELING THE FUNCTIONAL ROLE OF ORPHAN TRANSPORTERS

Special Section on New Era of Transporter Science: Unraveling the Functional Role of Orphan Transporters—Editorial. Yurong Lai and Xiaobo Zhong ............................. 1190

 Emerging Roles of the Human Solute Carrier 22 Family. Sook Wah Yee and Kathleen M. Giacomini ............. 1193

Transports in Regulatory Science: Notable Contributions from Dr. Giacomini in the Past Two Decades. Lei Zhang, Qi Liu, Shiew-Mei Huang, and Robert Lionberger ......................... 1211

Clinical Applications and the Roles of Transporters in Disposition, Tumor Targeting, and Tissue Toxicity of meta-Iodobenzylguanidine. Antonio J. López Quiñones, Leticia Salvador Vieira, and Joanne Wang .................. 1218

Amino Acid Solute Carrier Transporters in Inflammation and Autoimmunity. Linlin Sheng, Qi Luo, and Ligong Chen ................................. 1228

Transcriptional Regulation of Solute Carrier Drug Transporters. Shiwei Zhou and Yan Shu ................ 1238


ARTICLES

The rs35217482 (T755I) Single-Nucleotide Polymorphism in Aldehyde Oxidase-1 Attenuates Protein Dimer Formation and Reduces the Rates of Phthalazine Metabolism. Hinata Ueda, Katsuya Narumi, Ayako Furugen, Yoshihiko Saito, and Masaki Kobayashi .................. 1126

Is the Protein-Mediated Uptake of Drugs by Organic Anion Transporting Polypeptides a Real Phenomenon or an Artifact? Mengyue Yin, Flavia Storelli, and Jashvant D. Unadkat .......... 1132

Antibiotics-Induced Disruption of Gut Microbiota Increases Systemic Exposure of Clopidogrel Active Metabolite in Type 2 Diabetic Rats. Xue Chen, Yingrui Liu, Hongwei Yao, Weifang Song, Yu Song, Jingkai Gu, and Yingjie Guo ........ 1142


Physiologically Based Pharmacokinetic Models Can Be Used to Predict the Unique Nonlinear Absorption Profiles of Vismodegib. Louis Lin, Matthew R. Wright, Cornelis E.C.A. Hop, and Harvey Wong ... 1170

High-Throughput Production of Diverse Xenobiotic Metabolites with Cytochrome P450–Transduced Huh7 Hepatoma Cell Lines. Choonyoung Lee, Ken H. Liu, Grant Singer, Gary W. Miller, Shuzhao Li, Dean P. Jones, and Edward T. Morgan .......... 1182

Defining the Selectivity of Chemical Inhibitors Used for Cytochrome P450 Reaction Phenotyping: Overcoming Selectivity Limitations with a Six-Parameter Inhibition Curve-Fitting Approach. Angela C. Doran, Woodrow Burchett, Connor Landers, Gabriele M. Gualtieri, Amanda Balesano, Heather Eng, Alyssa L. Dantonio, Theunis C. Goosen, and R. Scott Obach ........... 1259


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

About the cover: Timeline showing main key discoveries and events in research on the SLC22 family. See the article by Yee and Giacomini. (dx.doi.org/10.1124/dmd.121.000702).