

DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

November 2017

Vol. 45, No. 11

CONTENTS

COMMENTARY

Clearance Prediction Methodology Needs Fundamental Improvement: Trends Common to Rat and Human Hepatocytes/Microsomes and Implications for Experimental Methodology. *F. L. Wood, J. B. Houston, and D. Hallifax* **1178**

ARTICLES

Wuzhi Tablet (*Schisandra sphenanthera* Extract) is a Promising Tacrolimus-Sparing Agent for Renal Transplant Recipients Who are CYP3A5 Expressers: a Two-Phase Prospective Study. *Jiali Li, Siyang Chen, Xiaoling Qin, Qian Fu, Huichang Bi, Yu Zhang, Xueming Wang, Longshan Liu, Changxi Wang, and Min Huang* **1114**

Measurement and Mathematical Characterization of Cell-Level Pharmacokinetics of Antibody-Drug Conjugates: A Case Study with Trastuzumab-vc-MMAE. *Aman P. Singh and Dhaval K. Shah* **1120**

CYP-Mediated Sulfoximine Deimination of AZD6738. *Barry C. Jones, Roshini Markandu, Chungang Gu, and Graeme Scarfe* **1133**

Simple Evaluation Method for CYP3A4 Induction from Human Hepatocytes: The Relative Factor Approach with an Induction Detection Limit Concentration Based on the E_{\max} Model. *Shino Kuramoto, Motohiro Kato, Hidetoshi Shindoh, Akihisa Kaneko, Masaki Ishigai, and Seiji Miyauchi* **1139**

A Comprehensive Functional Assessment of Carboxylesterase 1 Nonsynonymous Polymorphisms. *Xinwen Wang, Nada Rida, Jian Shi, Audrey H. Wu, Barry E. Bleske, and Hao-Jie Zhu* **1149**

Physiologically Based Pharmacokinetic Model of the CYP2D6 Probe Atomoxetine: Extrapolation to Special Populations and Drug-Drug Interactions. *Weize Huang, Mariko Nakano, Jennifer Sager, Isabelle Ragueneau-Majlessi, and Nina Isoherranen* **1156**

Synthetic Analogs of Curcumin Modulate the Function of Multidrug Resistance-Linked ATP-Binding Cassette Transporter ABCG2. *Megumi Murakami, Shinobu Ohnuma, Michihiro Fukuda, Eduardo E. Chufan, Katsuyoshi Kudoh, Keigo Kanehara, Norihiko Sugisawa, Masaharu Ishida, Takeshi Naitoh, Hiroyuki Shibata, Yoshiharu Iwabuchi, Suresh V. Ambudkar, and Michiaki Unno* **1166**

Hepatic Flavin-Containing Monooxygenase 3 Enzyme Suppressed by Type 1 Allergy-Produced Nitric Oxide. *Tadatashi Tanino, Toru Bando, Akira Komada, Yukie Nojiri, Yuna Okada, Yukari Ueda, and Eiichi Sakurai* **1189**

Novel Interactions between Gut Microbiome and Host Drug-Processing Genes Modify the Hepatic Metabolism of the Environmental Chemicals Polybrominated Diphenyl Ethers. *Cindy Yanfei Li, Soowan Lee, Sara Cade, Li-Jung Kuo, Irvin R. Schultz, Deepak K. Bhatt, Bhagwat Prasad, Theo K. Bammler, and Julia Yue Cui* **1197**

ERRATA

Correction to "Interaction of 2,4-Diaminopyrimidine Containing Drugs Including Fedratinib and Trimethoprim with Thiamine Transporters". **1146**

Correction to "Involvement of Nuclear Factor κ B, not Pregnane X Receptor, in Inflammation-Mediated Regulation of Hepatic Transporters". **1148**

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

About the cover: Formation of unconjugated MMAE in the media and cellular space of GFP-MCF7 cells after incubation with 75 nM T-vc-MMAE. Please see the article by Singh and Shah (dx.doi.org/10.1124/dmd.117.076414).