

DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

September 2018

Vol. 46, No. 9

CONTENTS

MINIREVIEW

The Roles of Xenobiotic Receptors: Beyond Chemical Disposition. *Bryan Mackowiak, Jessica Hodge, Sydney Stern, and Hongbing Wang* **1361**

ARTICLES

☐ Transport Kinetics, Selective Inhibition, and Successful Prediction of In Vivo Inhibition of Rat Hepatic Organic Anion Transporting Polypeptides. *Kazuya Ishida, Mohammed Ullah, Beáta Tóth, Viktoria Juhasz, and Jashvant D. Unadkat* **1251**

☐ An Investigation into the Prediction of the Plasma Concentration-Time Profile and Its Interindividual Variability for a Range of Flavin-Containing Monooxygenase Substrates Using a Physiologically Based Pharmacokinetic Modeling Approach. *Venkatesh Pilla Reddy, Barry C. Jones, Nicola Colclough, Abhishek Srivastava, Joanne Wilson, and Danxi Li* **1259**

Complete Substrate Inhibition of Cytochrome P450 2C8 by AZD9496, an Oral Selective Estrogen Receptor Degradator. *Tashinga E. Bapiro, Andy Sykes, Scott Martin, Michael Davies, James W. T. Yates, Matthias Hoch, Helen E. Rollison, and Barry Jones* **1268**

Disposition of Methamphetamine and Major Metabolites in Mice: Role of Organic Cation Transporter 3 in Tissue-Selective Accumulation of Para-Hydroxymethamphetamine. *David J. Wagner, Laura M. Shireman, Sojung Ahn, Danny D. Shen, and Joanne Wang* **1277**

☐ Considerations from the Innovation and Quality Induction Working Group in Response to Drug-Drug Interaction Guidances from Regulatory Agencies: Focus on CYP3A4 mRNA In Vitro Response Thresholds, Variability, and Clinical Relevance. *Jane R. Kenny, Diane Ramsden, David B. Buckley, Shannon Dallas, Conrad*

Fung, Michael Mohutsky, Heidi J. Einolf, Liangfu Chen, Joshua G. Dekeyser, Maria Fitzgerald, Theunis C. Goosen, Y. Amy Siu, Robert L. Walsky, George Zhang, Donald Tweedie, and Niresh Hariparsad **1285**

Decreased Kidney Function Is Associated with Enhanced Hepatic Flavin Monooxygenase Activity and Increased Circulating Trimethylamine N-Oxide Concentrations in Mice. *Cassandra Johnson, Alexander J. Prokopienco, Raymond E. West, III, Thomas D. Nolin, and Jason R. Stubbs* **1304**

☐ Glycyrrhizin Alleviates Nonalcoholic Steatohepatitis via Modulating Bile Acids and Meta-Inflammation. *Tingting Yan, Hong Wang, Lijuan Cao, Qiong Wang, Shogo Takahashi, Tomoki Yagai, Guolin Li, Kristopher W. Krausz, Guangji Wang, Frank J. Gonzalez, and Haiping Hao* **1310**

☐ Differences in the In Vivo and In Vitro Metabolism of Imrecoxib in Humans: Formation of the Rate-Limiting Aldehyde Intermediate. *Xiangyu Hou, Jialan Zhou, Songda Yu, Lei Zhou, Yifan Zhang, Dafang Zhong, and Xiaoyan Chen* **1320**

Comparison of Antifungal Azole Interactions with Adult Cytochrome P450 3A4 versus Neonatal Cytochrome P450 3A7. *Malika P. Godamudunage, Anne M. Grech, and Emily E. Scott* **1329**

☐ Recellularized Native Kidney Scaffolds as a Novel Tool in Nephrotoxicity Screening. *Michele Fedecostante, Koen G. C. Westphal, Michele F. Buono, Natalia Sanchez Romero, Martijn J. Wilmer, Janis Kerkering, Pedro Miguel Baptista, Joost G. Hoenderop, and Rosalinde Masereeuw* **1338**

Content and Activities of UGT2B7 in Human Liver In Vitro and Predicted In Vivo: A Bottom-Up Approach. *Chen Xu, Jie Gao, Hai-Feng Zhang, Na Gao, Yuan-yuan Guo, Yan Fang, Qiang Wen, and Hai-Ling Qiao* **1351**

Continued on next page

- Single Nucleotide Polymorphisms (SNPs) Distant from Xenobiotic Response Elements Can Modulate Aryl Hydrocarbon Receptor Function: SNP-Dependent CYP1A1 Induction. *Duan Liu, Sisi Qin, Bamiki Ray, Krishna R. Kalari, Liewei Wang, and Richard M. Weinshilboum* **1372**

NOTICE OF RETRACTION

- Notice of Retraction. **1360**

ERRATA

- Correction to “Metabolism and Disposition of a Novel Selective $\alpha 7$ Neuronal Acetylcholine Receptor Agonist ABT-126 in Humans: Characterization of the Major Roles for Flavin-Containing Monooxygenases and UDP-Glucuronosyl Transferase 1A4 and 2B10 in Catalysis”. **1382**

- Correction to “Maternal-Fetal Disposition and Metabolism of Retrorsine in Pregnant Rats”. **1383**

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

About the cover: Adenine consumption led to impaired kidney function and an increase in serum TMAO concentrations. See the article by Johnson et al. ([dx.doi.org/10.1124/dmd.118.081646](https://doi.org/10.1124/dmd.118.081646).)