

DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

June 2015

Vol. 43, No. 6

CONTENTS

SHORT COMMUNICATION

Inflammation-Associated MicroRNA-130b Down-Regulates Cytochrome P450 Activities and Directly Targets CYP2C9. *Jessica K. Rieger, Sandra Reutter, Ute Hofmann, Matthias Schwab, and Ulrich M. Zanger* **884**

ACCELERATED COMMUNICATION

Use of Transgenic Mouse Models to Understand the Oral Disposition and Drug-Drug Interaction Potential of Cobimetinib, a MEK Inhibitor. *Edna F. Choo, Sarah Woolsey, Kevin DeMent, Justin Ly, Kirsten Messick, Ann Qin, and Ryan Takahashi* **864**

ARTICLES

Mechanistic Investigation of the Preclinical Pharmacokinetics and Interspecies Scaling of PF-05231023, a Fibroblast Growth Factor 21–Antibody Protein Conjugate. *Craig Giragossian, Chandra Vage, Jun Li, Kathleen Pelletier, Nicole Piché-Nicholas, Manoj Rajadhyaksha, Jennifer Liras, Alison Logan, Roberto A. Calle, and Yan Weng*. **803**

Targeted Screen for Human UDP-Glucuronosyltransferases Inhibitors and the Evaluation of Potential Drug-Drug Interactions with Zafirlukast. *Shingo Oda, Ryoichi Fujiwara, Yuki Kutsuno, Tatsuki Fukami, Tomoo Itoh, Tsuyoshi Yokoi, and Miki Nakajima*. **812**

Short-Term Fasting Alters Cytochrome P450–Mediated Drug Metabolism in Humans. *Laureen A. Lammers, Roos Achterbergh, Emmely M. de Vries, F. Samuel van Nierop, Heinz-Josef Klümpen, Maarten R. Soeters, Anita Boelen, Johannes A. Romijn, and Ron A. A. Mathôt*. **819**

Altered Regulation of Hepatic Efflux Transporters Disrupts Acetaminophen Disposition in Pediatric Nonalcoholic Steatohepatitis. *Mark J. Canet,*

Matthew D. Merrell, Rhiannon N. Hardwick, Amy M. Bataille, Sarah N. Champion, Daniel W. Ferreira, Stavra A. Xanthakos, Jose E. Manautou, H. Hesham A-Kader, Robert P. Erickson, and Nathan J. Cherrington. **829**

Prediction of Gestational Age–Dependent Induction of In Vivo Hepatic CYP3A Activity Based on HepaRG Cells and Human Hepatocytes. *Zufei Zhang, Muhammad Farooq, Bhagwat Prasad, Sue Grepper, and Jashvant D. Unadkat* **836**

The Effects of Endoxifen and Other Major Metabolites of Tamoxifen on the Sulfation of Estradiol Catalyzed by Human Cytosolic Sulfotransferases hSULT1E1 and hSULT1A1*1. *Edwin J. Squirewell and Michael W. Duffel* **843**

Evaluation of Cynomolgus Monkeys for the Identification of Endogenous Biomarkers for Hepatic Transporter Inhibition and as a Translatable Model to Predict Pharmacokinetic Interactions with Statins in Humans. *Xiaoyan Chu, Shian-Jiun Shih, Rachel Shaw, Hannes Hentze, Grace H. Chan, Karen Owens, Shubing Wang, Xiaoxin Cai, Deborah Newton, Jose Castro-Perez, Gino Salituro, Jairam Palamanda, Aaron Fernandis, Choon Keow Ng, Andy Liaw, Mary J. Savage, and Raymond Evers* **851**

Prediction of In Vivo Clearance and Associated Variability of CYP2C19 Substrates by Genotypes in Populations Utilizing a Pharmacogenetics-Based Mechanistic Model. *Boyd Steere, Jessica A. Roseberry Baker, Stephen D. Hall, and Yingying Guo* **870**

Induction of UDP-Glucuronosyltransferase 2B15 Gene Expression by the Major Active Metabolites of Tamoxifen, 4-Hydroxytamoxifen and Endoxifen, in Breast Cancer Cells. *Apichaya Chanawong, Dong Gui Hu, Robyn Meech, Peter I. Mackenzie, and Ross A. McKinnon* **889**

Continued on next page

Biodistribution of Etanercept to Tissues and Sites of Inflammation in Arthritic Rats. *Xi Chen, Debra C. DuBois, Richard R. Almon, and William J. Jusko* **898**

☐ A Novel Reaction Mediated by Human Aldehyde Oxidase: Amide Hydrolysis of GDC-0834. *Jasleen K. Sodhi, Susan Wong, Donald S. Kirkpatrick, Lichuan Liu, S. Cyrus Khojasteh, Cornelis E. C. A. Hop, John T. Barr, Jeffrey P. Jones, and Jason S. Halladay* **908**

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

About the cover: Hepatic MRP2 Localization in Patients with NASH. See the article by Canet et al. ([dx.doi.org/10.1124/dmd.114.062703](https://doi.org/10.1124/dmd.114.062703)).