

# DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

October 2018

Vol. 46, No. 10

## CONTENTS

### ARTICLES

- Associations between Cytokine Levels and CYP3A4 Phenotype in Patients with Rheumatoid Arthritis. *Birgit M. Wollmann, Silje Watterdal Syversen, Maria Vistnes, Elisabeth Lie, Lise L. Mehus, and Espen Molden* . . . . . **1384**
- Metabolism of Anethole Dithiolethione by Rat and Human Liver Microsomes: Formation of Various Products Deriving from Its *O*-Demethylation and *S*-Oxidation. Involvement of Cytochromes P450 and Flavin Monooxygenases in These Pathways. *Martin Dulac, Amor Sassi, Citra Nagarathinan, Marie-Odile Christen, Patrick M. Dansette, Daniel Mansuy, and Jean-Luc Boucher* . . . . . **1390**
- The Involvement of the Mitochondrial Amidoxime Reducing Component (mARC) in the Reductive Metabolism of Hydroxamic Acids. *Carsten Ginsel, Birte Plitzko, Danilo Froriep, Diana A. Stolf, Manfred Jung, Christian Kubitz, Axel J. Scheidig, Antje Havemeyer, and Bernd Clement* . **1396**
- The Clock Protein Bmal1 Regulates Circadian Expression and Activity of Sulfotransferase 1a1 in Mice. *Lianxia Guo, Fangjun Yu, Tianpeng Zhang, and Baojian Wu* . . . . . **1403**
- Cyclic AMP Signaling Promotes the Differentiation of Human Induced Pluripotent Stem Cells into Intestinal Epithelial Cells. *Tomoki Kabeya, Shimeng Qiu, Momona Hibino, Mizuka Nagasaki, Nao Kodama, Takahiro Iwao, and Tamihide Matsunaga* . . . . . **1411**
- Physiologically Based Pharmacokinetic Model of Itraconazole and Two of Its Metabolites to Improve the Predictions and the Mechanistic Understanding of CYP3A4 Drug-Drug Interactions. *Luna Prieto Garcia, David Janzén, Kajsa P. Kanebratt, Hans Ericsson, Hans Lennernäs, and Anna Lundahl* . . . . . **1420**
- Identification and Characterization of a Selective Human Carbonyl Reductase 1 Substrate. *Diane Ramsden, Dustin Smith, Raquel Arenas, Kosea Frederick, and Matthew A. Cerny* . . . . . **1434**
- The Importance of Incorporating OCT2 Plasma Membrane Expression and Membrane Potential in IVIVE of Metformin Renal Secretory Clearance. *Vineet Kumar, Jia Yin, Sarah Billington, Bhagwat Prasad, Colin D. A. Brown, Joanne Wang, and Jashvant D. Unadkat* . . . . . **1441**
- Oligomerization and Catalytic Parameters of Human UDP-Glucuronosyltransferase 1A10: Expression and Characterization of the Recombinant Protein. *Kyungbo Kim, Fang Zheng, and Chang-Guo Zhan* . . . . . **1446**
- Biotransformation of Ilaprazole in Human Liver Microsomes and Human: Role of CYP3A4 in Ilaprazole Clearance and Drug-Drug Interaction. *Jie Pu, Fen Wang, Wei Tang, and Mingshe Zhu* . . . . . **1453**

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

About the cover: Immunofluorescence staining of villin (A), PEPT1 (B), and P-gp (C) in the differentiated intestinal epithelial cells by 8-Br-cAMP and IBMX in combination. See the article by Kabeya et al. (<https://doi.org/10.1124/dmd.118.082123>).