

# DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

January 2019

Vol. 47, No. 1

## CONTENTS

### ARTICLE

- Mechanistic In Vitro Studies Indicate that the Clinical Drug-Drug Interaction between Telithromycin and Simvastatin Acid Is Driven by Time-Dependent Inhibition of CYP3A4 with Minimal Effect on OATP1B1. *Robert Elsby, Victoria Hare, Hannah Neal, Samuel Outteridge, Catherine Pearson, Katie Plant, Rachel Upcott Gill, Philip Butler, and Robert J. Riley* . . . . . 1
- Characterization of the In Vitro Inhibitory Potential of the Oligonucleotide Imetelstat on Human Cytochrome P450 Enzymes with Predictions of In Vivo Drug-Drug Interactions. *Faraz Kazmi, Carlo Sensenhauser, and Tony Greway* . . . . . 9
- Oral Coadministration of Fluconazole with Tramadol Markedly Increases Plasma and Urine Concentrations of Tramadol and the *O*-Desmethyltramadol Metabolite in Healthy Dogs. *Tania E. Perez Jimenez, Butch Kukanich, Hyun Joo, Katrina L. Mealey, Tamara L. Grubb, Stephen A. Greene, and Michael H. Court* . . . . . 15
- Evaluation of Carbazeran 4-Oxidation and *O*<sup>6</sup>-Benzylguanine 8-Oxidation as Catalytic Markers of Human Aldehyde Oxidase: Impact of Cytosolic Contamination of Liver Microsomes. *Jiarong Xie, Nur Fazilah Saburulla, Shiyun Chen, Siew Ying Wong, Ze Ping Yap, Linghua Harris Zhang, and Aik Jiang Lau* . . . . . 26
- Quantitative Analysis of UDP-Glucuronosyltransferase Ugt1a and Ugt2b mRNA Expression in the Rat Liver and Small Intestine: Sex and Strain Differences. *Takaya Kutsukake, Yoichi Furukawa, Kyoko Ondo, Saki Gotoh, Tatsuki Fukami, and Miki Nakajima* . . . . . 38
- Quantitation of Lysosomal Trapping of Basic Lipophilic Compounds Using In Vitro Assays and In Silico Predictions Based on the Determination of the Full pH Profile of the Endo-/Lysosomal System in Rat Hepatocytes. *Maximilian V. Schmitt, Philip Lienau, Gert Fricker, and Andreas Reichel* . . . . . 49

### SHORT COMMUNICATION

- A Novel Pathogenic *UGT1A1* Variant in a Sudanese Child with Type 1 Crigler-Najjar Syndrome. *Walaa Elfär, Erkka Järvinen, Weizhen Ji, Johanna Mosorin, Annalisa G. Segà, Alina C. Iuga, Steven J. Lobritto, Monica Konstantino, Albert Chan, Moshe Finel, and Saquib A. Lakhani* . . . . . 45

### CORRECTION

- Correction:* Meeting the Challenge of Predicting Hepatic Clearance of Compounds Slowly Metabolized by Cytochrome P450 Using a Novel Hepatocyte Model, *Hepatopac*. *Tom S. Chan, Hongbin Yu, Amanda Moore, Salman R. Khetani, and Donald Tweedie*, appeared on pages 2024-2032 of the December 2013 issue. A correction for this article appears on page 58. . . . . 58

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

About the cover: Truncated structures of (A) imetelstat, (B) phosphorothioate and (C) phosphodiester oligonucleotide linkages. See the article by Kazmi et al. (<https://dx.doi.org/10.1124/dmd.118.084103>).