

DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

August 2017

Vol. 45, No. 8

CONTENTS

ARTICLES

- PKC/Nedd4-2 Signaling Pathway Regulates the Cell Surface Expression of Drug Transporter hOAT1. *Da Xu, Jinghui Zhang, Qiang Zhang, Yunzhou Fan, Chenchang Liu, and Guofeng You* **887**
- Comparison of ^{19}F NMR and ^{14}C Measurements for the Assessment of ADME of BYL719 (Alpelisib) in Humans. *Alexander David James, Cyrille Marvalin, Alexandre Luneau, Axel Meissner, and Gian Camenisch* **900**
- Comparative Evaluation of Plasma Bile Acids, Dehydroepiandrosterone Sulfate, Hexadecanedioate, and Tetradecanedioate with Coproporphyrins I and III as Markers of OATP Inhibition in Healthy Subjects. *Hong Shen, Weiqi Chen, Dieter M. Drexler, Sandhya Mandekar, Vinay K. Holenarsipur, Eric E. Shields, Robert Langish, Kurex Sidik, Jinping Gan, W. Griffith Humphreys, Punit Marathe, and Yurong Lai* **908**
- Development of a Novel Maternal-Fetal Physiologically Based Pharmacokinetic Model I: Insights into Factors that Determine Fetal Drug Exposure through Simulations and Sensitivity Analyses. *Zufei Zhang, Marjorie Z. Imperial, Gabriela I. Patilea-Vrana, Janak Wedagedera, Lu Gaohua, and Jashvant D. Unadkat* **920**
- Development of a Novel Maternal-Fetal Physiologically Based Pharmacokinetic Model II: Verification of the model for passive placental permeability drugs. *Zufei Zhang and Jashvant D. Unadkat* **939**
- Direct Comparison of the Enzymatic Characteristics and Superoxide Production of the Four Aldehyde Oxidase Enzymes Present in Mouse. *Gökhan Küçükgoze, Mineko Terao, Enrico Garattini, and Silke Leimkühler* **947**
- CRISPR/Cas9 Genetic Modification of *CYP3A5* *3 in HuH-7 Human Hepatocyte Cell Line Leads to Cell

- Lines with Increased Midazolam and Tacrolimus Metabolism. *Casey R. Dorr, Rory P. Remmel, Amutha Muthusamy, James Fisher, Branden S. Moriarity, Kazuto Yasuda, Baolin Wu, Weihua Guan, Erin G. Schuetz, William S. Oetting, Pamala A. Jacobson, and Ajay K. Israni* **957**
- Oxetane Substrates of Human Microsomal Epoxide Hydrolase. *Francesca Toselli, Marlene Fredenwall, Peder Svensson, Xue-Qing Li, Anders Johansson, Lars Weidolf, and Martin A. Hayes* **966**

SHORT COMMUNICATIONS

- Molecular Cloning and Characterization of Marmoset Aldehyde Oxidase. *Shotaro Uehara, Yasuhiro Uno, Eriko Okamoto, Takashi Inoue, Erika Sasaki, and Hiroshi Yamazaki* **883**
- Regio- and Stereo-Selective Oxidation of a Cardiovascular Drug, Metoprolol, Mediated by Cytochrome P450 2D and 3A Enzymes in Marmoset Livers. *Shotaro Uehara, Sakura Ishii, Yasuhiro Uno, Takashi Inoue, Erika Sasaki, and Hiroshi Yamazaki* **896**
- Rosuvastatin and Atorvastatin Are Ligands of the Human Constitutive Androstane Receptor/Retinoid X Receptor α Complex. *Tadeja Režen, Mateja Hafner, Sandhya Kortagere, Sean Ekins, Vesna Hodnik, and Damjana Rozman* **974**
- Role of CYP2B in Phenobarbital-Induced Hepatocyte Proliferation in Mice. *Lei Li, Xiaochen Bao, Qing-Yu Zhang, Masahiko Negishi, and Xinxin Ding* **977**

ERRATUM

- Correction to "Molecular Cloning, Tissue Distribution, and Functional Characterization of Marmoset Cytochrome P450 1A1, 1A2, and 1B1". **956**

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

About the cover: Impact of changes in fetoplacental metabolism and placental transport on fetal plasma and placental drug Y concentration, P:M AUC, F:M AUC and UV:MP ratio following a single 15 mg oral dose of drug Y. Please see the article by Unadkat et al. (dx.doi.org/10.1124/dmd.117.075192).