CONTENTS

SHORT COMMUNICATIONS


□ An Investigation of the Catalytic Activity of CYP2A13*4 with Coumarin and Polymorphisms of CYP2A13 in a Chinese Han Population. Ting Liu, Yanjun Hong, Zhaohui Li, Junyan Hong, Su Zeng, Mingyue Zheng, and Shuqing Chen 847


ARTICLES

□ The Impact of Single Nucleotide Polymorphisms on Human Aldehyde Oxidase. Tobias Hartmann, Mineko Terao, Enrico Garattini, Christian Teutloff, Joshua F. Alfaro, Jeffrey P. Jones, and Silke Leimkühler 856

□ Models to Predict Unbound Intracellular Drug Concentrations in the Presence of Transporters. Ken R. Korzekwa, Swati Nagar, Jalia Tucker, Erica A. Weiskircher, Siddhartha Bhooopathy, and Ismael J. Hidalgo 865

□ Exploratory Translational Modeling Approach in Drug Development to Predict Human Brain Pharmacokinetics and Pharmacologically Relevant Clinical Doses. W. Kielbasa and R. E. Stratford, Jr. 877

□ CYP2C9 Promoter Variable Number Tandem Repeat Polymorphism Regulates mRNA Expression in Human Livers. Danxin Wang, Xiaochun Sun, Yan Gong, Brian E. Gawronski, Taimour Y. Langae, Mohamed Hossam A. Shahin, Sherief I. Khalifa, and Julie A. Johnson 884

□ Using Expression Data for Quantification of Active Processes in Physiologically Based Pharmacoki-
netic Modeling. Michaela Meyer, Sebastian Schneckener, Bernd Ludewig, Lars Kuepfer, and Joerg Lippert 892

□ Conclusive Identification of the Oxybutynin-Hydrolyzing Enzyme in Human Liver. Yuichiro Sato, Aiji Miyashita, Takaomi Iwatsubo, and Takashi Usui 902

□ Cytochrome P450 3A-Mediated Microsomal Bio-
transformation of 1α,25-Dihydroxyvitamin D3 in Mouse and Human Liver: Drug-Related Induction and Inhibition of Catabolism. Subrata Deb, Mitali Pandey, Hans Adomat, and Emma S. Tomlinson Guns 907

□ Preclinical Disposition of GDC-0973 and Prospective and Retrospective Analysis of Human Dose and Efficacy Predictions. Edna F. Choo, Marcia Belvin, Jason Boggs, Yuchong Deng, Klaus P. Hoefliech, Justin Ly, Mark Merchant, Christine Orr, Emile Plise, Kirk Robarge, Jean F. Martini, Robert Kassees, Ron G. Aoyama, Atulkumar Ramaiya, and Stuart H. Johnston 919

□ Regiospecific and Stereospecific Triangulation of the Structures of Metabolites Formed by Sequential Metabolism at Multiple Prochiral Centers. Robert J. Greene, John A. Davis, Raju Subramanian, Molly R. Deane, Maurice G. Emery, and J. Greg Statter 928


□ Lymphatic Transport and Catabolism of Therapeutic Proteins after Subcutaneous Administration to Rats and Dogs. Weirong Wang, Nancy Chen, Xiaolan Shen, Paul Cunningham, Scott Faust, Kimberly Michel, Bo Wang, Xueming Hong, Christine Adreani, Christian N. Nunes, Chris V. Johnson, Kuo-chang Yin, Michelle Groff, Yan Zou, Liming Liu, Lora Hamuro, and Thomayant Prueksaritanont 952

□ Use of the Cassette-Dosing Approach to Assess Brain Penetration in Drug Discovery. Xingrong Liu,
S Supplemental material is available online at http://dmd.aspetjournals.org.

About the cover: Model of the locations of the amino acid exchanges as a result of SNPs identified in the \textit{hAOX1} gene. See the article by Hartmann et al. on page 856 of this issue.