

DRUG METABOLISM AND DISPOSITION

A Publication of the American Society for Pharmacology and Experimental Therapeutics

November 2019

Vol. 47, No. 11

CONTENTS

ARTICLES

- Kinetic Modeling of Steady-State Situations in Cytochrome P450 Enzyme Reactions. *F. Peter Guengerich* **1232**

- Impact of Different Selectivity between Soluble and Membrane-bound Forms of Carcinoembryonic Antigen (CEA) on the Target-mediated Disposition of Anti-CEA Monoclonal Antibodies. *Junko Iwano, Daisuke Shinmi, Kazuhiro Masuda, Takashi Murakami, and Junichi Enokizono* **1240**

- Metabolism of Strained Rings: Glutathione S-transferase-Catalyzed Formation of a Glutathione-Conjugated Spiro-azetidine without Prior Bioactivation. *Xue-Qing Li, Gunnar Grönberg, Eva-Henriette Bangur, Martin A. Hayes, Neal Castagnoli, Jr., and Lars Weidolf* **1247**

- Interindividual Variation in CYP3A Activity Influences Lapatinib Bioactivation. *Jennifer E. Bissada, Vivian Truong, Arsany A. Abouda, Kahari J. Wines, Rachel D. Crouch, and Klarissa D. Jackson* **1257**

- Elucidation of N^1 -methyladenosine as a Potential Surrogate Biomarker for Drug Interaction Studies Involving Renal Organic Cation Transporters. *Takeshi Miyake, Tadahaya Mizuno, Issey Takehara, Tatsuki Mochizuki, Miyuki Kimura, Shunji Matsuki, Shin Irie, Nobuaki Watanabe, Yukio Kato, Ichiro Ieiri, Kazuya Maeda, Osamu Ando, and Hiroyuki Kusuhara* **1270**

- Glutathione Conjugation and Protein Adduction Derived from Oxidative Debromination of

- Benzbromarone in Mice. *Hui Wang, Wenbao Wang, Bowen Gong, Zedan Wang, Yukun Feng, Weige Zhang, Shaojie Wang, Ying Peng, and Jiang Zheng* **1281**

- Systematic Development and Verification of a Physiologically Based Pharmacokinetic Model of Rivaroxaban. *Eleanor Jing Yi Cheong, Denise Wun Xi Teo, Denise Xin Yi Chua, and Eric Chun Yong Chan* **1291**

- Investigating the Impact of Albumin on the Liver Uptake of Pitavastatin and Warfarin in Nagase Analbuminemic Rats. *Jae H. Chang, Yi-Chen Chen, Jonathan Cheong, Robert S. Jones, and Jodie Pang* **1307**

- Absolute Quantitation of Drug-Metabolizing Cytochrome P450 Enzymes and Accessory Proteins in Dog Liver Microsomes Using Label-Free Standard-Free Analysis Reveals Interbreed Variability. *Stephanie E. Martinez, Jian Shi, Hao-Jie Zhu, Tania E. Perez Jimenez, Zhaohui Zhu, and Michael H. Court* **1314**

- A Role for the Orphan Human Cytochrome P450 2S1 in Polyunsaturated Fatty Acid ω -1 Hydroxylation Using an Untargeted Metabolomic Approach. *Mostafa I. Fekry, Yi Xiao, Jeannette Zinggeler Berg, and F. Peter Guengerich* **1325**

- The Molecular Mechanism Regulating Diurnal Rhythm of Flavin-Containing Monooxygenase 5 in Mouse Liver. *Min Chen, Baozhang Guan, Haiman Xu, Fangjun Yu, Tianpeng Zhang, and Baojian Wu* **1333**

Downloaded from dmd.aspetjournals.org at ASPET Journals on March 13, 2024

Continued on next page

- ☐ Glucocorticoids Increase Renal Excretion of Urate in Mice by Downregulating Urate Transporter 1. *Gentao Li, Lifeng Han, Ruicong Ma, Khawar Saeed, Hui Xiong, Curtis D. Klaassen, Yuanfu Lu, and Youcai Zhang* **1343**
- ☐ Development of a Gold Nanoparticle–Functionalized Surface Plasmon Resonance Assay for the Sensitive Detection of Monoclonal Antibodies and Its Application in Pharmacokinetics.

Haihong Bai, Mei Yuan, Xiaojing Wang, Xinghe Wang, and Jinjing Che **1361**

SHORT COMMUNICATION

- Enhanced and Persistent Inhibition of Organic Cation Transporter 1 Activity by Preincubation of Cyclosporine A. *Erika Panfen, Weiqi Chen, Yueping Zhang, Michael Sinz, Punit Marathe, Jinping Gan, and Hong Shen* **1352**

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

About the cover: Different epitope causes different target-mediated disposition of monoclonal antibodies. See the article by Iwano et al. (dx.doi.org/10.1124/dmd.119.088179)