CONTENTS

COMMENTARY
Theoretical Predictions of Flow Effects on Intestinal and Systemic Availability in Physiologically Based Pharmacokinetic Intestine Models: The Traditional Model, Segregated Flow Model, and Qc,int Model. K. Sandy Pang and Edwin C. Y. Chow ................................. 1869

SHORT COMMUNICATION

ARTICLES
Breast Cancer Resistance Protein (ABCG2) Determines Distribution of Genistein Phase II Metabolites: Reevaluation of the Roles of ABCG2 in the Disposition of Genistein. Zhen Yang, Wei Zhu, Song Gao, Taijun Yin, Wen Jiang, and Ming Hu ....................... 1883


Key Role of Nuclear Factor-κB in the Cellular Pharmacokinetics of Adriamycin in MCF-7/Adr Cells: The Potential Mechanism for Synergy with 20(S)-Ginsenoside Rh2. Jingwei Zhang, Meng Lu, Fang Zhou, Haopeng Sun, Gang Hao, Xiaolan Wu, and Guangji Wang ....................... 1900


Comparison of Metabolism of Sesamin and Episesa-min by Drug-Metabolizing Enzymes in Human Liver. Kaori Yasuda, Shinichi Ikashiro, Shuto Wakayama, Toshimasa Itoh, Keiko Yamamoto, Masaki Kamakura, Eiji Munetsuna, Miho Ohta, and Toshiyuki Sakaki ....................... 1917


Human UDP-Glucuronosyltransferase Expression in Insect Cells: Ratio of Active to Inactive Recombinant Proteins and the Effects of a C-Terminal His-Tag on Glucuronidation Kinetics. Hongbo Zhang, Anne-Sisko Patana, Peter I. Mackenzie, Shinichi Ikashiro, Adrian Goldman, and Moshe Finel ....................... 1935


Xenobiotic Metabolism and Disposition in Human Lung Cell Models: Comparison with In Vivo Expression Profiles. Elisabeth Courcot, Julie Leclerc, Jean-Jacques Lafitte, Eric Mensier, Sophie Jaillard, Philippe Gosset, Pirouz Shirali, Nicolas Pottier, Franck Broly, and Jean-Marc Lo-Guidice ....................... 1953

High-Resolution Mass Spectrometry Elucidates Metabolonate (False Metabolite) Formation from Alkylamine Drugs during In Vitro Metabolite Profiling. Joanna E. Barbara, Faraz Kazmi, Seema Muranjan, Paul C. Toren, and Andrew Parkinson ....................... 1966


Continued on next page


Glycemic Control and Chronic Dosing of Rhesus Monkeys with a Fusion Protein of Iduronidase and a Monoclonal Antibody Against the Human Insulin Receptor. Ruben J. Boado, Eric Ka-Wai Hui, Jeff Zhiqiang Lu, and William M. Pardridge 2021

Absolute Oral Bioavailability and Metabolic Turnover of β-Sitosterol in Healthy Subjects. Guus Duchateau, Brett Cochrane, Sam Windebank, Justyna Herudzinska, Davindera Sanghera, Angela Burian, Markus Müller, Markus Zeitlinger, and Graham Lappin 2026

Regulation of Pregnane X Receptor (PXR) Function and UGT1A1 Gene Expression by Posttranslational Modification of PXR Protein. Junko Sugatani, Takahiro Uchida, Masatoshi Kurosawa, Masahiko Yamaguchi, Yasuhiro Yamazaki, Akira Ikari, and Masao Miwa 2031

In Vitro Studies on the Oxidative Metabolism of 20(S)-Ginsenoside Rh2 in Human, Monkey, Dog, Rat, and Mouse Liver Microsomes, and Human Liver S9. Liang Li, Xiaoyan Chen, Jialan Zhou, and Dafang Zhong 2041

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