CONTENTS

CENTENNIAL PERSPECTIVE


SHORT COMMUNICATIONS

The Contributions of Cytochromes P450 3A4 and 3A5 to the Metabolism of the Phosphodiesterase Type 5 Inhibitors Sildenafil, Udenafil, and Vardenafil. Hei-Young Ku, Hee-Jeong Ahn, Kyung-Ah Seo, Hyunmi Kim, Minkyung Oh, Soo Kyung Bae, Jae-Gook Shin, Ji-Hong Shon, and Kwang-Hyeon Liu .................. 986


ARTICLES


Identification of Human Liver Cytochrome P450 Isoforms Involved in Autoinduced Metabolism of the Antiangiogenic Agent (Z)-5-[(1,2-Dihydro-2-oxo-3H-indol-3-ylidene)methyl]-2,4-dimethyl-1H-pyrole-3-propanoic Acid (TSU-68), Ryuichi Kitamura, Hisae Asanoma, Sekio Nagayama, and Masaki Otagiri .................................. 1003


Hepatic Uptake and Excretion of (−)-N-(2-(R)-3-(6,7-Dimethoxy-1,2,3,4-tetrahydroisoquinoline-2-carbonyl)piperidino)ethyl)-4-fluorobenzamide (YM758), a Novel If Channel Inhibitor, in Rats and Humans. Ken-ichi Umehara, Megumi Iwai, Yasuhiyo Adachi, Takafumi Iwatsubo, Takashi Usui, and Hidetaka Kamimura .......... 1030

Characterization of Cytochrome P450 Protein Expression along the Entire Length of the Intestine of Male and Female Rats. Doreen Mitschke, Andreas Reichel, Gert Fricker, and Ursula Moenning ........................................... 1039

Comparison of Immortalized Fa2N-4 Cells and Human Hepatocytes as in Vitro Models for Cytochrome P450 Induction. Niresh Hariparsad, Brian A. Carr, Raymond Evers, and Xiaoyan Chu ..................... 1046

The “Albumin Effect” and Drug Glucuronidation: Bovine Serum Albumin and Fatty Acid-Free Human Serum Albumin Enhance the Glucuronidation of UDP-Glucuronosyltransferase (UGT)
Contents (cont’d.)

IA9 Substrates but Not UGT1A1 and UGT1A6 Activities. Andrew Rowland, Kathleen M. Knights, Peter I. Mackenzie, and John O. Miners .......................................................... 1056

ATF5 Is a Highly Abundant Liver-Enriched Transcription Factor that Cooperates with Constitutive Androstane Receptor in the Transactivation of CYP2B6: Implications in Hepatic Stress Responses. Maya Pascual, M. Jose Gómez-Lechón, José V. Castell, and Ramiro Jover ............... 1063


Forkhead Box A2–Mediated Regulation of Female-Predominant Expression of the Mouse Cyp2b9 Gene. Tadahiro Hashita, Tsutomu Sakuma, Mami Akada, Asuka Nakajima, Hirofumi Yamahara, Sumiyo Ito, Hidekazu Takesako, and Nobuo Nemoto ........................................ 1080

Involvement of Multidrug Resistance-Associated Protein 2 (Abcc2) in Molecular Weight-Dependent Biliary Excretion of β-Lactam Antibiotics. Yukio Kato, Seiko Takahara, Yoshiyuki Kubo, Yoshimichi Sai, Ikumi Tamai, Hikaru Yabuuchi, and Akira Tsuji ........................................ 1088

Hydroxyitraconazole, Formed During Intestinal First-Pass Metabolism of Itraconazole, Controls the Time Course of Hepatic CYP3A Inhibition and the Bioavailability of Itraconazole in Rats. Sara K. Quinney, Raymond E. Galinsky, Vanida A. Jiyamapa-Serna, Yong Chen, Mitchell A. Hamman, Stephen D. Hall, and Robert E. Kimura ................. 1097


Long-Term Functional Stability of Human HepaRG Hepatocytes and Use for Chronic Toxicity and Genotoxicity Studies. Rozenn Jossé, Caroline Aninat, Denise Glaise, Julie Dumont, Valérie Fessard, Fabrice Morel, Jean-Michel Poul, Christiane Guguen-Guillouzo, and André Guillouzo ........................................ 1111

Role of Flavin-Containing Monooxygenase in Oxidative Metabolism of Voriconazole by Human Liver Microsomes. Souzan B. Yanni, Pieter P. Annaert, Patrick Augustijns, Arlene Bridges, Yan Gao, Daniel K. Benjamin, Jr., and Dhiren R. Thakker ........................................ 1119


Metabolism of Boswellic Acids in Vitro and in Vivo. Phillip Krüger, Ramboe Daneshfar, Gunter P. Eckert, Jochen Klein, Dietrich A. Volmer, Ute Bahr, Walter E. Müller, Michael Karas, Manfred Schubert-Zsilavecz, and Mona Abdel-Tawab ... 1135

N-Demethylation Is a Major Route of 2-Amino-3-Methylimidazo[4,5-f]quinoline Metabolism in Mouse. Vijaya M. Lakshmi, Fong Fu Hsu, and Terry V. Zenser ........................................ 1143

Predictive Physiologically Based Pharmacokinetic Model for Antibody-Directed Enzyme Prodrug Therapy. Lanyan Fang and Duxin Sun ................. 1153


PDZK1 Regulates Two Intestinal Solute Carriers (Slc15a1 and Slc22a5) in Mice. Tomoko Sugiuira, Yukio Kato, Tomohiko Wakayama, David L. Silver, Yoshiyuki Kubo, Shiochi Iseki, and Akira Tsuji ........................................ 1181

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

About the cover: Immunohistochemical analysis of PEPT1 expression in the small intestine. See article by Sugiura et al. on page 1181 of this issue.