**CONTENTS**

**THE 2006 BERNARD B. BRODIE AWARD LECTURE**
CYP2E1. FRANK J. GONZALEZ ........................... 1

**MINIREVIEW**
PEGylated Proteins: Evaluation of Their Safety in the Absence of Definitive Metabolism Studies. ROB WEBSTER, ERIC DIDIER, PHILIP HARRIS, NED SIEGEL, JEANNE STADLER, LORRAINE TILBURY, AND DENNIS SMITH ............................ 9

**SHORT COMMUNICATION**
Cellular Localization Studies on Human Estrogen Sulfotransferase SULT1E1 in Human Embryonic Kidney 293 Cells. RUCHITA KAPOOR, DEEPTHI NIMMAGADDA, AND JONATHAN J. SHENG ............ 17

**ARTICLES**
Biotransformation of Geldanamycin and 17-Allyl-17-Demethoxygeldanamycin by Human Liver Microsomes: Reductive versus Oxidative Metabolism and Implications. WENSHENG LANG, GARY W. CALDWELL, JAN LI, GREGORY C. LEO, WILLIAM J. JONES, AND JOHN A. MASUCCI ............. 21

Organic Anion Transporting Polypeptide 2B1 and Breast Cancer Resistance Protein Interact in the Transepithelial Transport of Steroid Sulfates in Human Placenta. MARKUS GRUBE, SEBASTIAN REUTHER, HENRIETTE M. MEYER ZU SCHWABEDISSEN, KATHLEEN KÖCK, KATRIN DRABER, CHRISTOPH A. RITTER, CHRISTOPH FUSCH, GABRIELE JEDLITSCHKY, AND HEYO K. KROEMER .................. 30

Gender Dictates the Nuclear Receptor-Mediated Regulation of CYP3A44. SAYEPPRIYADARSHINI ANAKK, WENDONG HUANG, JEFFREY L. STAUDINGER, KENG TAN, TIMOTHY J. COLE, DAVID D. MOORE, AND HENRY W. STROBEL ......................... 36

Specificity of Aminoacylase III-Mediated Deacetylation of Mercapturic Acids. DEBRA NEWMAN, NATALIA ABULADZE, KAROLINE SCHOLZ, WOLFGANG DEKANT, VLADIMIR TSUPRUN, SERGEY RYAZANTSEV, GALLYNA BONDAR, PAKAN SASSANI, IRA KURTZ, AND ALEXANDER PUSHKIN ............................. 43

The Disposition and Metabolism of Naveglitazar, a Peroxisome Proliferator-Activated Receptor α-γ Dual, γ-Dominant Agonist in Mice, Rats, and Monkeys. PING YI, CHAD E. ADDISON, WILLIAM F. ANNES, DAVID A. JACKSON, BARRY C. PETERSON, TODD A. GILLESPEL, AND JASON T. JOHNSON ............. 51

Elevated Warfarin Metabolism in Warfarin-Resistant Roof Rats (Rattus rattus) in Tokyo. MAYUMI ISHIZUKA, FUMIE OKAJIMA, TSUTOMU TANIKAWA, HEEWON MIN, KAZUYUKI D. TANAKA, KENTARO Q. SAKAMOTO, AND SHOICHI FUJITA ............... 62

A New CYP3A5 Variant, CYP3A5*1J, Is Shown to Be Defective in Nifedipine Metabolism in a Recombinant cDNA Expression System. SUCUN LEE, ILSE P. VAN DER HEIDEN, JOYCE A. GOLDSTEIN, AND RON H. N. VAN SCHAAT ....... 67

Identification of Human Cytochrome P450 Isozymes Involved in Diphenhydramine N-Demethylation. TOMOKO AKUTSU, KAORU KOBAYASHI, KOICHI SAKURADA, HIROSHI IKEGAYA, TOMOMI FURUHATA, AND KAN CHIBA .................. 72


Humanized IgG1 Variants with Differential Binding Properties to the Neonatal Fc Receptor: Relation-
Contents (cont'd.)

ship to Pharmacokinetics in Mice and Primates.
AMITA DATTA-MANNAN, DERRICK R. WITCHER,
YING TANG, JEFFRY WATKINS, WEIDONG JIANG, AND
VICTOR J. WROBLEWSKI .......................... 86

Pregnane X Receptor-Dependent Induction of the
CYP3A4 Gene by o,p'-1,1,1-Trichloro-2,2-Bis
(p-Chlorophenyl)ethane. IRMA M. MEDINA-DIAZ,
GEORGINA ARTEAGA-ILAN, MARIO BERMUDEZ DE
LEON, BULMARO CISNEROS, ADOLFO SIERRA-
SANTOYO, LIBIA VEGA, FRANK J. GONZALEZ, AND
GUILLERMO ELIZONDO ........................ 95

A Real-Time Fluorescence Assay for Measuring
N-Dealkylation. RICHARD T. MAYER, E. KURT
DOLENCE, AND GABRIELE E. MAYER ............ 103

Impact of Curcumin-Induced Changes in P-Glyco-
protein and CYP3A Expression on the Pharma-
cinetics of Peroral Celirolol and Midazolam
in Rats. WENXIA ZHANG, THERESA MAY CHIN TAN,
AND LEE-YONG LIM .......................... 110

Isolation of the UDP-Glucuronosyltransferase 1A3
and 1A4 Proximal Promoters and Characteriza-
tion of Their Dependence on the Transcription
Factor Hepatocyte Nuclear Factor 1α. DIANE A.
GARDNER-STEPHEN AND PETER I. MACKENZIE ...... 116

Tissue- and Gender-Specific mRNA Expression of
UDP-Glucuronosyltransferases (UGTs) in Mice.
DAVID B. BUCKLEY AND CURTIS D. KLAASSEN .... 121

CYP2B6, CYP2D6, and CYP3A4 Catalyze the
Primary Oxidative Metabolism of Perhexiline
Enantiomers by Human Liver Microsomes. BEN-
JAMIN J. DAVIES, JANET K. COLLER, ANDREW A.
SOMOGYI, ROBERT W. MILNE, , AND BENEDETTA C.
SALLUSTIO ................................. 128

Involvement of Multiple Cytochrome P450 and UDP-
Glucuronosyltransferase Enzymes in the in Vitro
Metabolism of Muraglitazar. DONGLU ZHANG,
LIFEI WANG, GAMINI CHANDRASENA, LI MA, MING-
SHE ZHU, HONGHAN ZHANG, CARL D. DAVIS, AND
W. GRIFFITH HUMPFREYS ..................... 139

Comparative Metabolism of Radiolabeled Muragli-
tazar in Animals and Humans by Quantitative
and Qualitative Metabolite Profiling. DONGLU
ZHANG, LIFEI WANG, NRIMALA RAGHAVAN, HAIYING
ZHANG, WENYING LI, PETER T. CHENG, MING YAO,
LITAO ZHANG, MINGSHI ZHU, SAMUEL BONACORSI,
SURESH YEOLA, JAMES MITROKA, NARAYANAN
HARIHARAN, VINAYAK HOSAGRAHARA, GAMINI
CHANDRASENA, WEN CHYI SHYU, AND W. GRIFFITH
HUMPFREYS ................................. 150

Cytochrome P450 and Glutathione S-Transferase
mRNA Expression in Human Fetal Liver Hema-
topoietic Stem Cells. JING SHAO, PATRICIA L.
STAPLETON, YVONNE S. LIN, AND EVAN P.
GALLAGHER ................................. 168

Genetic Variation of Human Cytochrome P450 Re-
ductase as a Potential Biomarker for Mitomycin
C-Induced Cytotoxicity. SHOU-LIN WANG, JING-
FEN HAN, XIAO-YANG HE, XIN-RU WANG, AND
JUN-YAN HONG ............................. 176

An Evaluation of the Cytochrome P450 Inhibition
Potential of Lisdexamfetamine in Human Liver
Microsomes. SUMA KRISHNAN AND SCOTT
MONCRIEF ................................. 180


About the cover: Immunolocalization of BCRP and OATP2B1 in the human placenta, as well as in BCRP-, OATP2B1-, and double-transfected MDCKII cells. See the article by Grube et al. on page 30 of this issue.