### CONTENTS

**SPECIAL SECTION ON PEDIATRIC DRUG DISPOSITION AND PHARMACOKINETICS**

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges and Opportunities for Increasing the Knowledge Base Related to Drug Biotransformation and Pharmacokinetics during Growth and Development.</td>
<td>J. Steven Leeder and Bernd Meibohm</td>
<td>916</td>
</tr>
<tr>
<td>Role of Quantitative Clinical Pharmacology in Pediatric Approval and Labeling.</td>
<td>Nitin Mehrotra, Atul Bhattaram, Justin C. Earp, Jeffry Florian, Kevin Krudivs, Jee Eun Lee, Joo Yeon Lee, Jiang Liu, Yeruk Mulugeta, Jingyu Yu, Ping Zhao, and Vikram Sinha</td>
<td>924</td>
</tr>
<tr>
<td>Physiologically Based Pharmacokinetic Modeling in Pediatric Oncology Drug Development.</td>
<td>Nathalie Rioux and Nigel J. Waters</td>
<td>934</td>
</tr>
<tr>
<td>Effect of Age on The Hepatocellularinity Number for Wistar rats.</td>
<td>Sarinj Fattah, Patrick Augustijns, and Pieter Annaert</td>
<td>944</td>
</tr>
<tr>
<td>Age-Dependent Human Hepatic Carboxylesterase 1 (CES1) and Carboxylesterase 2 (CES2) Postnatal Ontogeny.</td>
<td>Ronald N. Hines, Pippa M. Simpson, and D. Gail McCarver</td>
<td>959</td>
</tr>
<tr>
<td>The Ontogeny and Population Variability of Human Hepatic NADPH Dehydrogenase Quinone Oxido-Reductase 1 (NQO1).</td>
<td>Luc R.A. Rougéé, Zoe Riches, Jacob M. Berman, and Abby C. Collier</td>
<td>967</td>
</tr>
</tbody>
</table>

Quantification of Flavin-containing Monooxygenases 1, 3, and 5 in Human Liver Microsomes by UPLC-MRM-Based Targeted Quantitative Proteomics and Its Application to the Study of Ontogeny.  
Yao Chen, Nicole R. Zane, Dhiren R. Thakker, and Michael Zhuo Wang  
975

- Hepatic Cytochrome P450 Activity, Abundance, and Expression Throughout Human Development.  
  Natalie C. Sadler, Premchandaran Nandhikonda, Bobbie-Jo Webb-Robertson, Charles Ansong, Lindsey N. Anderson, Jordan N. Smith, Richard A. Corley, and Aaron T. Wright  
  984

Ontogeny of Hepatic Drug Transporters and Relevance to Drugs Used in Pediatrics.  
Yasmine Elmorsli, Jill Barber, and Amin Rostami-Hodjegan  
992

Expression Patterns of Organic Anion Transporting Polypeptides 1B1 and 1B3 Protein in Human Pediatric Liver.  
Margaret M. S. Thomson, Ronald N. Hines, Erin G. Schuetz, and Bernd Meibohm  
999

Proteomic Analysis of the Developmental Trajectory of Human Hepatic Membrane Transporter Proteins in the First Three Months of Life.  
Miriam G. Mooij, Evita van de Steeg, Joost van Rosmalen, Jonathan D. Windster, Barbara A.E. de Koning, Wouter H. J. Vaes, Bianca D. van Groen, Dick Tibboel, Helen M. Wortelboer, and Saskia N. de Wildt  
1005

Human Intestinal PEPT1 Transporter Expression and Localization in Preterm and Term Infants.  
Miriam G. Mooij, Barbara E. A. de Koning, Dicky J. Lindenbergh-Kortleve, Ytje Simons-Oosterhuis, Bianca D. van Groen, Dick Tibboel, Janneke N. Samsom, and Saskia N. de Wildt  
1014

Dynamics of Cytosine Methylation in the Proximal Promoters of CYP3A4 and CYP3A7 in Pediatric and Prenatal Livers.  
Carrie A. Vyhlidal, Chengpeng Bi, Shui Qing Ye, and J. Steven Leeder  
1020

Role of Chromatin Structural Changes in Regulating Human CYP3A Ontogeny.  
Nicholas L. Giebel, Jeffrey D. Shadley, D. Gail McCarver, Kenneth Dorko, Roberto Gramignoli, Stephen C. Strom, Ke Yan, Pippa M. Simpson, and Ronald N. Hines  
1027

Age-Specific Regulation of Drug-Processing Genes in Mouse Liver by Ligands of Xenobiotic-Sensing Transcription Factors.  
Cindy Yanfei Li, Helen J. Renaud, Curtis D. Klaassen, and Julia Yue Cui  
1038

Continued on next page