DRUG METABOLISM
AND DISPOSITION
A Publication of the American Society for Pharmacology and Experimental Therapeutics

July 2019

Vol. 47, No. 7

CONTENTS

COMMENTARY

Potential for Underestimation of d-Methylphenidate Bioavailability Using Chiral Derivatization/Gas Chromatography. Kennerly S. Patrick and Wendy Rodriguez ........................................... 764

ARTICLES

Pharmacokinetic Interaction between Naloxone and Naltrexone Following Intranasal Administration to Healthy Subjects. Philip Krieter, C. Nora Chiang, Shwe Gyaw, Phil Skolnick, and Rebekah Snyder ........................................... 690


Coexpression of ABCB1 and ABCG2 in a Cell Line Model Reveals Both Independent and Additive Transporter Function. Andrea N. Robinson, Bethelihem G. Tebase, Sonia C. Francone, Lyn M. Huff, Hanna Kozlowski, Dominique Cossari, Jung-Min Lee, Dominic Esposito, Robert W. Robey, and Michael M. Gottesman ................................... 715

Indinavir Increases Midazolam N-Glucuronidation in Humans: Identification of an Alternate CYP3A Inhibitor Using an In Vitro to In Vivo Approach. Dan-Dan Tian, Cathrine Leonowens, Emily J. Cox, Vanessa González-Pérez, Kosea S. Frederick, Yolanda V. Scarlett, Michael B. Fisher, and Mary F. Paine .................................................. 724


Quantifying Hepatic Enzyme Kinetics of (−)-Δ⁹-Tetrahydrocannabinol (THC) and Its Psychoactive Metabolite, 11-OH-THC, through In Vitro Modeling. Gabriela I. Patilea-Vrana and Jashvant D. Unadkat ........................................... 743

Contributions of Hepatic and Intestinal Metabolism to the Disposition of Niclosamide, a Repurposed Drug with Poor Bioavailability. Xiaoyu Fan, Hongmin Li, Xinxin Ding, and Qing-Yu Zhang ........... 756

A Systematic In Vitro Investigation of the Inhibitor Preincubation Effect on Multiple Classes of Clinically Relevant Transporters. Péter Tátrai, Patrick Schweigler, Birg Poller, Norbert Domance, Roelof de Wilde, Inmad Hanna, Zsuzsanna Gáborik, and Felix Huth ............................................ 768

SHORT COMMUNICATION

Effects of Epacadostat on Brain Extracellular Fluid Concentrations of Serotonin—an Intracerebral Microdialysis Study in Sprague-Dawley Rats. Yan Zhang, Kevin Bowman, Janet Maleski, Sharon Diamond, and Swamy Yeleswaram ........................................... 710

LETTER TO THE EDITOR

Regulatory Recommendations for Calculating the Unbound Maximum Hepatic Inlet Concentration: A Complicated Story with a Surprising and Happy Ending. Andrew Parkinson ........................................... 779

ERRATUM

Correction to “RNA Editing Enzymes Modulate the Expression of Hepatic CYP2B6, CYP2C8, and Other Cytochrome P450 Isoforms” 753

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

About the cover: Plasma concentration-time profiles for midazolam (A), midazolam N-glucuronide (B), 1’-hydroxymidazolam (C), and midazolam 1’-O-glucuronide (D) in the absence (midazolam only, open symbols) or presence (midazolam + indinavir, solid symbols) of indinavir. See the article by Tian et al. (dx.doi.org/10.1124/dmd.119.087007).