

PUBLICATIONS

<http://www.ncbi.nlm.nih.gov/pubmed/23688132>

Nelson CH, Buttrick BR, Isoherranen N. "Therapeutic potential of the inhibition of the retinoic acid hydroxylases CYP26A1 and CYP26B1 by xenobiotics." *Curr Top Med Chem.* 2013; 13(12):1402-28.

<http://www.ncbi.nlm.nih.gov/pubmed/23748241>

Parkinson OT, Liggitt HD, Rettie AE, Kelly EJ. "Generalization and characterization of a Cyp4b1 null mouse and the role of CYP4B1 in the activation and toxicity of Ipomeanol." *Toxicol Sci.* 2013 Aug; 134(2):243-50.

<http://www.ncbi.nlm.nih.gov/pubmed/23660171>

McDermott CL, Sandmaier BM, Storer B, Li H, Mager DE, Boeckh MJ, Bemer MJ, Knutson J, McCune JS. "Nonrelapse mortality and mycophenolic acid exposure in nonmyeloablative hematopoietic cell transplantation." *Biol Blood Marrow Transplant* 2013 Aug; 19(8):1159-66.

<http://www.ncbi.nlm.nih.gov/pubmed/23620487>

Shirasaka Y, Sager JE, Lutz JD, Davis C, Isoherranen N. "Inhibition of CYP2C19 and CYP3A4 by omeprazole metabolites and their contribution to drug-drug interactions." *Drug Metab Dispos.* 2013 Jul; 41(7):1414-24.

<http://www.ncbi.nlm.nih.gov/pubmed/23620487>

Shirasaka Y, Sager JE, Lutz JD, Davis C, Isoherranen N. "Inhibition of CYP2C19 and CYP3A4 by omeprazole metabolites and their contribution to drug-drug interactions." *Drug Metab Dispos.* 2013 Jul; 41(7):1414-24.

<http://www.ncbi.nlm.nih.gov/pubmed/22517924>

Guo L, Zhang X, Zhoou D, Okunade AL, Su X. "Stereospecificity of fatty acid 2-hydroxylase and differential functions of 2-hydroxy fatty acid enantiomers." *J Lipid Res.* 2013 Jul; 53(7):1327-35.

<http://www.ncbi.nlm.nih.gov/pubmed/23348398>

Roth MY, Nya-Ngatchou JJ, Lin K, Page ST, Anawalt BD, Matsumoto AM, Marck BT, Bremner WJ, Amory JK. "Androgen synthesis in the gonadotropin-suppressed human testes can be markedly suppressed by ketoconazole." *J Clin Endocrinol Metab.* 2013 Mar; 98(3):1198-206.

<http://www.ncbi.nlm.nih.gov/pubmed/23223499>

Papageorgiou I, Grepper S, Unadkat JD. "Induction of hepatic CYP3A enzymes by pregnancy-related hormones: studies in human hepatocytes and hepatic cell lines." *Drug Metab Dispos.* 2013 Feb; 41(2):281-90.

<http://www.ncbi.nlm.nih.gov/pubmed/23071109>

Shimshoni JA, Roberts AG, Scian M, Topletz AR, Blankert SA, Halpert JR, Nelson WL, Isoherranen N. "Stereoselective formation and metabolism of 4-hydroxy-retinoic Acid enantiomers by cytochrome P450 enzymes." *J Biol Chem.* 2012 Dec 7; 287(50):42223-32.

<http://www.ncbi.nlm.nih.gov/pubmed/22498895>

Liu L, Mugundu GM, Kirby BJ, Samineni D, Desai PB, Unadkat JD. "Quantification of human hepatocyte cytochrome P450 enzymes and transporters induced by HIV protease inhibitors using newly validated LC-MS/MS cocktail assays and RT-PCR." *Biopharm Drug Dispos.* 2012 May; 33(4):207-17.

<http://www.ncbi.nlm.nih.gov/pubmed/22318656>

Deo AK, Prasad B, Balogh L, Lai Y, Unadkat JD. "Interindividual variability in hepatic expression of the multidrug resistance-associated protein 2 (MRP2/ABCC2): quantification by liquid chromatography/tandem mass spectrometry." *Drug Metab Dispos.* 2012 May; 40(5):852-5.

<http://www.ncbi.nlm.nih.gov/pubmed/22192917>

Arnold SL, Amory JK, Walsh TJ, Isoherranen N. "A sensitive and specific method for measurement of multiple retinoids in human serum with UHPLC-MS/MS." *J Lipid Res.* 2012 Mar; 53(3):587-98.

<http://www.ncbi.nlm.nih.gov/pubmed/22402285>

Takakusa H, Mohar I, Kavanagh TJ, Kelly EJ, Kaspera R, Nelson SD. "Protein tyrosine nitration of mitochondrial carbamoyl phosphate synthetase 1 and its functional consequences." *Biochem Biophys Res Commun.* 2012 Mar 30; 420(1):54-60.

<http://www.ncbi.nlm.nih.gov/pubmed/22106171>

Peng CC, Shi W, Lutz JD, Kunze KL, Liu JO, Nelson WL, Isoherranen N. "Stereospecific metabolism of itraconazole by CYP3A4: dioxolane ring scission of azole antifungals." *Drug Metab Dispos.* 2012 Mar; 40(3):426-35.

<http://www.ncbi.nlm.nih.gov/pubmed/22281497>

Kaspera R, Sahele T, Lakatos K, Totah RA. "Cytochrome P450BM-3 reduces aldehydes to alcohols through a direct hydride transfer." *Biochem Biophys Res Commun.* 2012 Feb 17; 418(3):464-8.

<http://www.ncbi.nlm.nih.gov/pubmed/21976622>

Raccor BS, Claessens AJ, Dinh JC, Park JR, Hawkins DS, Thomas SS, Makar KW, McCune JS, Totah RA. "Potential contribution of cytochrome P450 2B6 to hepatic 4-hydroxycyclophosphamide formation in vitro and in vivo." *Drug Metab Dispos.* 2012 Jan; 40(1):54-63.

<http://www.ncbi.nlm.nih.gov/pubmed/21930825>

Kirby BJ, Collier AC, Kharasch ED, Dixit V, Desai P, Whittington D, Thummel KE, Unadkat JD. "Complex drug interactions of HIV protease inhibitors 2: in vivo induction and in vitro to in vivo correlation of induction of cytochrome P450 1A2, 2B6, and 2C9 by ritonavir or nelfinavir." *Drug Metab Dispos.* 2011 Dec; 39(12):2329-37.

<http://www.ncbi.nlm.nih.gov/pubmed/21784054>

Wang Z, Senn T, Kalhorn T, Zheng XE, Zheng S, Davis CL, Hebert MF, Lin YS, Thummel KE. "Simultaneous measurement of plasma vitamin D(3) metabolites, including 4 β , 25-dihydroxyvitamin D(3), using liquid chromatography-tandem mass spectrometry." *Anal Biochem* 2011 Nov 1; 418(1):126-33.

<http://www.ncbi.nlm.nih.gov/pubmed/21863800>

Guttman M, Scian M, Lee KK. "Tracking hydrogen/deuterium exchange at glycan sites in glycoproteins by mass spectrometry." *Anal Chem.* 2011 Oct 1; 83(19):7492-9.

<http://www.ncbi.nlm.nih.gov/pubmed/21726541>

Kaspera R, Naraharisetti SB, Evangelista EA, Marciante KD, Psaty BM, Totah RA. "Drug metabolism by CYP2C8.3 is determined by substrate dependent interactions with cytochrome P450 reductase and cytochrome b5." *Biochem Pharmacol.* 2011 Sep 15; 82(6):681-91.

<http://www.ncbi.nlm.nih.gov/pubmed/21363997>

Takakusa H, Wahlin MD, Zhao C, Hanson KL, New LS, Chan EC, Nelson SD. "Metabolic intermediate complex formation of human cytochrome P450 3A4 by lapatinib." *Drug Metab Dispos.* 2011 Jun; 39(6):1022-30.

<http://www.ncbi.nlm.nih.gov/pubmed/21490593>

Peng CC, Templeton I, Thummel KE, Davis C, Kunze KL, Isoherranen N. "Evaluation of 6 β -hydroxycortisol, 6 β -hydroxycortisone, and a combination of the two as endogenous probes for inhibition of CYP3A4 in vivo." *Clin Pharmacol Ther.* 2011 Jun; 89(6):888-95.

<http://www.ncbi.nlm.nih.gov/pubmed/21329376>

Stamper BD, Mohar I, Kavanagh TJ, Nelson SD. "Proteomic analysis of acetaminophen-induced changes in mitochondrial protein expression using spectral counting." *Chem Res Toxicol.* 2011 Apr 18; 24(4):549-58.

<http://www.ncbi.nlm.nih.gov/pubmed/20705791>

Amory JK, Muller CH, Shimshoni JA, Isoherranen N, Paik J, Moreb JS, Amory DW Sr, Evanoff R, Goldstein AS, Griswold MD. "Suppression of spermatogenesis by bisdichloroacetyl diamines is mediated by inhibition of testicular retinoic acid biosynthesis." *J Androl.* 2011 Jan-Feb; 32(1):111-9.

<http://www.ncbi.nlm.nih.gov/pubmed/20739919>

Templeton I, Peng CC, Thummel KE, Davis C, Kunze KL, Isoherranen N. "Accurate prediction of dose-dependent CYP3A4 inhibition by itraconazole and its metabolites from in vitro inhibition data." *Clin Pharmacol Ther.* 2010 Oct; 88(4):499-505.

<http://www.ncbi.nlm.nih.gov/pubmed/20570945>

Claessens AJ, Risler LJ, Eyal S, Shen DD, Easterling TR, Hebert MF. "CYP2D6 mediates 4-hydroxylation of clonidine in vitro: implication for pregnancy-induced changes in clonidine clearance." *Drug Metab Dispos.* 2010 Sep; 38(9):1393-6.

<http://www.ncbi.nlm.nih.gov/pubmed/20200233>

Hanson KL, VandenBrink BM, Babu KN, Allen KE, Nelson WL, Kunze KL. "Sequential metabolism of secondary alkyl amines to metabolic-intermediate complexes: opposing roles for the secondary hydroxylamine and primary amine metabolites of desipramine, (S)-fluoxetine, and N-desmethyldiltiazem." *Drug Metab Dispos.* 2010 Jun; 38(6):963-72.

<http://www.ncbi.nlm.nih.gov/pubmed/20118196>

Eyal S, Easterling TR, Carr D, Umans JG, Miodovnik M, Hankins GD, Clark SM, Risler L, Wang J, Kelly EJ, Shen DD, Hebert MF. "Pharmacokinetics of metformin during pregnancy." *Drug Metab Dispos.* 2010 May; 38(5):833-40.

<http://www.ncbi.nlm.nih.gov/pubmed/20085333>

Balogh LM, Le Trong I, Kripps KA, Shireman LM, Stenkamp RE, Zhang W, Mannervik B, Atkins WM. "Substrate specificity combined with stereopromiscuity in glutathione transferase A4-4-dependent metabolism of 4-hydroxynonenol." *Biochemistry* 2010 Feb 23; 49(7):1541-8.

<http://www.ncbi.nlm.nih.gov/pubmed/19385002>

Takemoto JK, Davies NM. "A high-performance liquid chromatographic analysis and preliminary pharmacokinetic characterization of 3'-hydroxypterstilbene in rats." *Biomed Chromatogr.* 2009 Oct; 23(10):1086-91.

<http://www.ncbi.nlm.nih.gov/pubmed/19398645>

Li M, Andrew MA, Wang J, Salinger DH, Vicini P, Grady RW, Phillips B, Shen DD, Anderson GD. "Effects of cranberry juice on pharmacokinetics of beta-lactam antibiotics following oral administration." *Antimicrob Agents Chemother.* 2009 Jul; 53(7):2725-32.

<http://www.ncbi.nlm.nih.gov/pubmed/19267323>

Vega-Villa KR, Remsberg CM, Ohgami Y, Yáñez JA, Takemoto JK, Andrews PK, Davies NM. "Stereospecific high-performance liquid chromatography of taxifolin, applications in pharmacokinetics, and determination in tu fu ling (*Rhizoma smilacis glabrae*) and apple (*Malus x domestica*)."
Biomed Chromatogr. 2009 June; 23(6):638-46.

<http://www.ncbi.nlm.nih.gov/pubmed/19070509>

Hengel SM, Shaffer SA, Nunn BL, Goodlett DR. "Tandem mass spectrometry investigation of ADP-ribosylated kemptide."
J Am Soc Mass Spectrom. 2009 Mar; 20(3):477-83.

<http://www.ncbi.nlm.nih.gov/pubmed/19130491>

Kalhorn TF, Klavand A, Cohen IE, Nelson AK, Ernst RK. "A sensitive liquid chromatography/mass spectrometry-based assay for quantitation of amino-containing moieties in lipid A."
Rapid Commun Mass Spectrom. 2009 Feb; 23(3):433-42.

<http://www.ncbi.nlm.nih.gov/pubmed/18927240>

McCune JS, Salinger DH, Vicini P, Oglesby C, Blough DK, Park JR. "Population pharmacokinetics of cyclophosphamide and metabolites in children with neuroblastoma: a report from the Children's Oncology Group."
J Clin Pharmacol. 2009 Jan; 49(1):88-102.

<http://www.ncbi.nlm.nih.gov/pubmed/19026953>

Unadkat JD, Chung F, Sasongko L, Whittington D, Eyal S, Mankoff D, Collier AC, Muzi M, Link J. "Rapid solid-phase extraction method to quantify [(11)C]-verapamil, and its [(11)C]-metabolites, in human and macaque plasma."
Nucl Med Biol. 2008 Nov; 35(8):911-7.

<http://www.ncbi.nlm.nih.gov/pubmed/18606741>

Tai G, Dickmann LJ, Matovic N, DeVoss JJ, Gillam EM, Rettie AE. "Re-engineering of CYP2C9 to probe acid-base substrate selectivity."
Drug Metab Dispos. 2008 Oct; 36(10):1992-7.