

Lauren Trepanier

Selected publications (of 88), for Pharm Sci
9.18.18

1. Kurian JR, Bajad S, Miller JL, Chin N, Trepanier LA. NADH cytochrome *b₅* reductase and cytochrome *b₅* catalyze the microsomal reduction of xenobiotic hydroxylamines and amidoximes in humans. *J Pharmacol Exp Ther* 311:1171-8, 2004.
2. Lavergne SN, Volkmann EM, Maki JE, Yoder AR, Trepanier LA. Evaluation of the clinical, immunologic, and biochemical effects of sulfamethoxazole-nitroso administration to dogs: a pilot study. *Toxicology* 208: 63-72, 2005.
3. Trepanier LA, Bajad SU, Kurian JR. Evaluation of the cytochrome *b₅* / cytochrome *b₅* reductase pathway *Current Protocols in Toxicology* (invited review) 4.16.1-4.16.17, 2005.
4. Lavergne SN, Kurian JR, Bajad SU, Maki JE, Yoder AE, Guzinski MV, Graziano FM, Trepanier LA. Roles of endogenous ascorbate and glutathione in the cellular reduction and cytotoxicity of sulfamethoxazole-nitroso. *Toxicology* 222: 25-36, 2006.
5. Lavergne SN, Drescher NJ, Trepanier LA. Anti-myeloperoxidase and anti-cathepsin G antibodies in sulfonamide hypersensitivity *Clin Exp Allergy* 38: 199-207, 2008.
6. Moyer KL, Trepanier LA. Antioxidant glutathione and cysteine concentrations in young versus old dogs. *J Am Vet Med Assoc* 234(1):95-9, 2009.
7. Viviano K, Lavergne SN, Goodman L, Vanderwielen B, Grundahl L, Padilla M, Trepanier LA. Glutathione, cysteine, and ascorbate status in clinically ill dogs and cats. *J Vet Intern Med* 23:250-7, 2009.
8. Sacco JS, Trepanier LA. Cytochrome *b₅* and NADH cytochrome *b₅* reductase: genotype-phenotype correlations for hydroxylamine reduction. *Pharmacogenetics and Genomics*. 20 :26-37, 2010.
9. Bhusari S, Padilla ML, Pinkerton ME, Drescher NJ, Trepanier LA. Combined ascorbate and glutathione deficiency leads to decreased cytochrome *b₅* expression and impaired reduction of sulfamethoxazole hydroxylamine. *Archives of Toxicology* 84: 597-607, 2010.
10. Abouraya M, Sacco JS, Kahl, BS, Trepanier LA. Evaluation of sulphonamide detoxification pathways in hematologic malignancy patients prior to intermittent

- trimethoprim-sulphamethoxazole prophylaxis. *British J Clin Pharmacol*, 71: 566-74, 2011.
11. Rhoads KM, Sacco JC, Drescher N, Wong A, Trepanier LA. Individual variability in the detoxification of carcinogenic arylhydroxylamines in human breast. *Toxicol Sci*. 121(2):245-56, 2011. Highlighted article in June 2011 issue.
 12. Abouraya M, Sacco JS, Hayes K, Thomas S, Kitchens C, Trepanier LA. Dapsone-associated methemoglobinemia in a patient with slow *NAT2*5B* haplotype and impaired cytochrome *b₅* reductase activity. *J Clin Pharmacol* 52:272-278, 2012. PMC3153586
 13. Branter E, Drescher N, Padilla M, Trepanier LA. Antioxidant status before and after radioiodine treatment in hyperthyroid cats. *J Vet Intern Med* 26:582-6, 2012.
 14. Funk-Keenan J, Sacco J, Wong YY, Rasmussen S, Motsinger-Reif A, Trepanier LA. Evaluation of polymorphisms in the sulfonamide detoxification genes *CYB5A* and *CYB5R3* in dogs with sulfonamide hypersensitivity. *J Vet Intern Med*. 6:1126-33, 2012.
 15. Sacco J, Abouraya M, Motsinger-Reif A, Yale S, McCarty C, Trepanier LA. Evaluation of polymorphisms in the sulfonamide detoxification genes *NAT2*, *CYB5A*, and *CYB5R3* in patients with sulfonamide hypersensitivity. *Pharmacogenet Genom*. 22:733-40, 2012. PMC3619396.
 16. Martinez M, Antonovic L, Court M, Dacastro M, Fink-Gremmels J, Kukanich B, Locuson C, Mealey K, Myers M, Trepanier LA. Challenges in exploring the cytochrome P450 system as a source of variation in canine drug pharmacokinetics. *Drug Metab Rev* 45:218-30, 2013.
 17. Ginn J, Sacco J, Wong YY, Motsinger-Reif A, Chun R, and Trepanier LA. Positive association between a glutathione-S-transferase (GSTT1) polymorphism and lymphoma in dogs. *Vet Comp Oncol* 12:227-236, 2014.
 18. Blanke K, Sacco J, Millikan R, Olshan AF, Luo J, Trepanier LA. Polymorphisms in the carcinogen detoxification genes *CYB5A* and *CYB5R3* and breast cancer risk in African American women. *Cancer Causes and Control*. 25:1513-21, 2014.
 19. Clare S, Hartmann F, Jooss M, Bachar E, Wong YY, Trepanier LA, Viviano K. Short- and long-term cure rates of short duration trimethoprim-sulfamethoxazole treatment in female dogs with uncomplicated bacterial cystitis. *J Vet Intern Med* 28:818-26, 2014.
 20. McKenna JA, Sacco J, Son TT, Trepanier LA, Callan MB, Harvey JW, Arndt JW. Diagnosis of congenital methemoglobinemia in a dog with a non-synonymous coding variant in the gene encoding cytochrome *b₅* and the pre-operative

- management of this condition with administration of methylene blue. *J Vet Intern Med.* 28: 1626-31, 2014.
21. Delamaide Gasper J, Barnes Heller H, Robertson M, Trepanier LA. Therapeutic serum phenobarbital concentrations obtained using chronic transdermal administration of phenobarbital in healthy cats. *J Fel Med Surg.* 17: 359-63, 2015 (epub in 2014).
 22. Wallisch K, Trepanier LA. Incidence, timing, and risk factors of azathioprine hepatotoxicosis in dogs. *J Vet Intern Med.* 29:513-8, 2015.
 23. Wheatley LM, Plaut M, Schwaninger JM, Banerji A, Castells M, Finkelman FD, Gleich GJ, Guttman-Yassky E., Mallal SAK· Naisbitt DJ, Ostrov DA, Phillips EJ, Pichler WJ, Platts-Mills TAE, Roujeau J-C, Schwartz LB, Trepanier LA. Report from the National Institute of Allergy and Infectious Disease Workshop on Drug Allergy. *J Allergy Clin Immunol* 136:262-71.e2, 2015.
 24. Reinhart JM. Motsinger-Reif, Dickey A, Yale S, Trepanier LA. Genome wide association study in immunocompetent patients with delayed hypersensitivity to sulfonamide antimicrobials. *PLoS ONE*, 11(6)e0156000, 2016.
 25. Wong YY, Rakasz EG, Gasper DJ, Friedrich TC, Trepanier LA. Immunogenicity of trimethoprim/sulfamethoxazole in a macaque model of HIV infection. *Toxicol* 368:10-18, 2016.
 26. Wong, YY, Johnson B, Friedrich TC, Trepanier LA. Hepatic expression profiles in retroviral infection: relevance to drug hypersensitivity risk. *Pharmacol Res*
 27. Craft A, Ekena J, Mayer B, Thamm DH, Saba C, Chun R, Trepanier LA. Characterization of a low expression haplotype in canine glutathione-S-transferase (*GSTT1*) and its prevalence in golden retrievers. *Vet Comp Oncol*, 16:E61-E67, 2018.
 28. Manolio TA, Hutter C, Avigan A, Cibotti R, Davis RL, Denny JC, La Grenade L, Wheatley LM, Carrington MN, Chantratita W, Chung W-H., Dalton AD, Hoofnagle J, Hung S-I, Katz SI, Lee MTM, Leeder JS, Lertora JJL, Mahasirimongkol S, McLeod H, Mockenhaupt M, Pacanowski M, Phillips EJ, Pinheiro S, Pirmohamed M, Sung C, Suwankesawong W, Trepanier LA, Tumminia SJ, Veenstra D, Yuliwulandari R, Shear, NH. Research directions in genetic predisposition to Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis. *Clin Pharmacol Ther* 103:390-394, 2018.
 29. Craft A, Ekena J, Sacco J, Luetchke, Trepanier LA. A 6 bp deletion variant in a novel canine glutathione-S-transferase gene (*GSTT5*) leads to loss of enzyme function. *J Vet Intern Med* 31:183301840, 2017.

30. Reinhart J, Ekena J, Cioffi A, Trepanier LA. A single nucleotide polymorphism in the canine cytochrome b5 reductase (*CYB5R3*) gene is associated with sulfonamide hypersensitivity and is overrepresented in Doberman Pinschers. *J Vet Pharmacol Ther* (epub Jan 15, 2018).
31. Reinhart JM, Rose W, Panyard DJ, Newton MA, Liebenstein T, Yee, J, Trepanier LA. RNA expression profiling in sulfamethoxazole-treated patients with a range of *in vitro* lymphocyte cytotoxicity phenotypes. *Pharmacol Res Perspect*, (epub March 2, 2018).
32. Ekena J, Wood E, Manchester A, Chun R, Trepanier LA. GST-theta genotypes and the risk of cyclophosphamide toxicity in dogs, *Vet Comp Oncol*, in press 2018.