

RMTC/RCI Controlled Therapeutic Substances

Reference Chart

Controlled Therapeutic Substance	Reference
Acepromazine	Wieder, M.E., <i>Identification of acepromazine and its metabolites in horse plasma and urine by LC-MS/MS and accurate mass measurement</i> , Chromatographia, 75:635-43 (2012)(methodology); UC Davis data (summary chart available upon request)
Albuterol	Boehringer Ingelheim VetMedica, Inc ., FOIA Summary, New Animal Drug Application NADA 141-180 Torpex; <i>see also</i> , Sams, R.; <i>Albuterol Monograph</i>
Betamethasone	HFLSS Study – pre publication (summary chart available upon request)
Butorphanol	Knych, H., <i>Pharmacokinetics and pharmacodynamics of butorphanol following intravenous administration to the horse</i> , J. vet. Pharmacol. Therap. 36(1):21-30 (Feb. 2013)
Clenbuterol	Knych, H., <i>Detection, pharmacokinetics and cardiac effects following administration of clenbuterol to exercised horses</i> , Equine Vet Journal, 2014 May; 46(3):380-5
Dantrolene	Knych, H., <i>Pharmacokinetics and metabolism of dantrolene in horses</i> , J. vet Pharmacol. Therap., 34: 238-46 (June 2011)
Detomidine	L'ami, J.J., <i>Sublingual administration of detomidine in horses: Sedative effect, analgesia and detection time</i> , Vet. Journal, 2013 May; 196(2):253-9; Knych, H.K. and Stanley, S., <i>Pharmacokinetics and Pharmacodynamics of Detomidine Following Sublingual Administration to Horses</i> , AJVR, 72(10): 1378-1385; Grimsrud, K.N., <i>et al.</i> , <i>Pharmacokinetics of Detomidine and its Metabolites Following Intravenous and Intramuscular Administration in Horses</i> , Equine vet. J. 41: 1-5 (2009); Mama, K.R., <i>et al.</i> , <i>Plasma Concentrations, Behavioural and Physiological Effects Following Intravenous and Intramuscular Detomidine in Horses</i> , Equine vet. J. 41(8): 772-77 (2009).
Dexamethasone	Soma, L., <i>Pharmacokinetics of dexamethasone following intra-articular, intravenous, intramuscular, and oral administration in horses and its effects on endogenous hydrocortisone</i> , Journal of Veterinary Pharmacology and Therapeutics, 36: 181–191 (April 2013)
Diclofenac	Anderson, D., <i>Urinary and serum concentrations of diclofenac after topical application to horses</i> , Vet. Ther., 6(1): 57-66 (2005)

Controlled Therapeutic Substance	Reference
DMSO	Blythe, L.L., <i>Pharmacokinetic disposition of dimethyl sulfoxide administered intravenously to horses</i> , Am. J. Vet. Res., 47(8): 1739-43 (Aug. 1986)
Firocoxib	University of Florida – HFLSS Lexington preparing publication (summary chart available upon request); <i>see also</i> , Knych, H.K., <i>Detection and pharmacokinetics of three formulations of firocoxib following multiple administrations to horses</i> , Equine Vet J., 2014 Nov; 46(6):734-8.
Flunixin	Soma, L.R., <i>Disposition and excretion of flunixin meglumine in horses</i> , Am. J. Vet. Res., 49(11): 1894-98 (Nov. 1988); <i>See also</i> , Knych, H.K., <i>Pharmacokinetics and effects on thromboxane B2 production following intravenous administration of flunixin meglumine to exercised thoroughbred horses</i> , J. vet. Pharmacol. Therap. E-publication ahead of print - Doi: 10.1111/jvp.12197 (January, 2015)
Furosemide	Chay, S., <i>The pharmacology of furosemide in the horse. V. Pharmacokinetics and blood levels of furosemide after intravenous administration</i> , Drug. Metab. Dispos., 11(3): 226-31 (May/June 1983)
Glycopyrrolate	Rumpler, M., <i>Pharmacokinetics of glycopyrrolate following intravenous administration in the horse</i> , J. vet Pharmacol. Therap., 2011 Dec; 34(6):605-8
Isoflupredone	Benson, D., <i>Development of a plasma threshold and withdrawal guidance for isoflupredone administered intra-articularly and subcutaneously</i> , presented at 2014 ICRAV – publication pending, summary information available upon request.
Ketoprofen	Sams, R., <i>Pharmacokinetics of ketoprofen after multiple intravenous doses to mares</i> , J. Vet. Pharmacol. Ther., 18(2): 108-16 (April 1995)
Lidocaine	EHS LC Data, Iowa State; <i>see also</i> , Sillence, M., <i>The pharmacokinetics of equine medications</i> , RIRDC publication (January 2012), available online at http://researchdata.ands.org.au/pharmacokinetic-data-for-twelve-therapeutic-equine-medications .
Mepivacaine	EHS LC Data; <i>see also</i> , Sillence, M., <i>The pharmacokinetics of equine medications</i> , RIRDC publication (January 2012), available online at http://researchdata.ands.org.au/pharmacokinetic-data-for-twelve-therapeutic-equine-medications .

Controlled Therapeutic Substance	Reference
Methocarbamol	Rumpler, M., et al, <i>The pharmacokinetics of methocarbamol and guaifenesin after single intravenous and multiple-dose oral administration of methocarbamol in the horse</i> , J. Vet. Pharmacol. Therap., 2014 Feb;37(1):25-34, see also, University of Pennsylvania – pre-publication
Methylprednisolone	Soma, L. R., <i>Pharmacokinetics of methylprednisolone acetate after intra-articular administration and its effect on endogenous hydrocortisone and cortisone secretion in horses</i> , Am. J. Vet. Res. 67(4): 108-16 (April 2006); Knych, H., et al, <i>Disposition of methylprednisolone acetate in plasma, urine, and synovial fluid following intra-articular administration to exercised thoroughbred horses</i> , J Vet Pharmacol Ther. 2014 Apr;37(2):125-32
Omeprazole	ARCI Rule
Phenylbutazone	Chay, S., <i>Population distributions of phenylbutazone and oxyphenbutazone after oral and i.v. dosing in horses</i> , Am. J. Vet. Res., 67(4): 654-62 (Dec. 1984)
Prednisolone	Peroni, D.L., et al., <i>Prednisone per os is likely to have limited efficacy in horses</i> , Equine Vet J. 2002 May;34(3):283-7
Procaine Penicillin	Kuchembuck, N.L, <i>Plasma Concentration and Local Anesthetic Activity of Procaine Hydrochloride Following Subcutaneous Administration to Horses</i> , American Journal of Veterinary Research 68(5): 495-500 (2007)
Triamcinolone acetonide	Knych, H., <i>Pharmacokinetics of triamcinolone acetonide following intramuscular and intra-articular administration to exercised Thoroughbred horses</i> , Equine Vet J. 2013 Nov;45(6):715-20; Soma, L.R., <i>Pharmacokinetics of intra-articular, intravenous, and intramuscular administration of triamcinolone acetonide and its effect on endogenous plasma hydrocortisone and cortisone concentrations in horses</i> , Am J Vet Res., 72(9):1234-42 (Sept. 2011)
Xylazine	Laboratory derived interim recommendation based upon Limit of Detection