



# RECOMMENDED



## Therapeutic Substance Withdrawal Times and Thresholds

Substance	Restricted Admin Time	Threshold*	Route of Admin
Acepromazine	48 hours	10 ng/mL of urine	Intravenous
Betamethasone	7 days	10 pg/mL in plasma or serum	Intra-articular
Butorphanol	48 hours	Free butorphanol – 2 ng/mL of plasma, or Total butorphanol – 300 ng/mL of urine	Intravenous
Clenbuterol	14 days	140 pg/mL in urine or LOD in plasma	Orally
Dantrolene	48 hours	5-OH dantrolene – 0.1 ng/mL of plasma or serum	Orally
Detomidine	72 hours	1 ng/mL of carboxydetomidine in urine	Sublingual (Domosedan gel)
Dexamethasone	72 hours	5 pg/mL in plasma or serum	Oral, Intravenous, IM
Diclofenac	48 hours	5 ng/mL of serum or plasma	Topically
DMSO	48 hours	10 mcg/mL of plasma or serum	Topical
Firocoxib	14 days	20 ng/mL in plasma or serum	Orally
Flunixin	24 hours	20 ng/mL of serum or plasma	Intravenous
Furosemide	4 hours	100 ng/mL in blood and urine specific gravity < 1.010	Intravenous
Glycopyrrolate	48 hours	3 pg/mL of serum or plasma	Intravenous
Ketoprofen	24 hours	10 ng/mL of serum or plasma	Intravenous
Lidocaine	72 hours	20 pg/mL of total 30H-lidocaine in plasma	Subcutaneous – distal limb
Mepivacaine	72 hours	OH-mepivacaine – 10 ng/mL in urine or mepivacaine at LOD in plasma	Subcutaneous – distal limb
Methocarbamol	48 hours	1 ng/mL of serum or plasma	Orally
Methylprednisolone	7 days	100 pg/mL in plasma or serum	Intra-articular
Omeprazole	24 hours	omeprazole sulfide – 1 ng/mL in urine	Orally
Phenylbutazone	24 hours	2 mcg/mL of serum or plasma	Intravenous
Prednisolone	48 hours	1 ng/mL of plasma or serum	Orally
Procaine penicillin	Time of entry	25 ng/mL of plasma	Intra-muscular (IM)
Triamcinolone acetonide	7 days	100 pg/mL of plasma or serum	Intra-articular
Xylazine	48 hours	0.01 ng/mL of plasma	Intravenous

\*Threshold concentrations are as follows: mcg=micrograms (1 millionth of a gram); ng=nanograms (1 billionth of a gram), pg=picogram (1 trillionth of a gram)  
LOD, means any level of detection.

Rules effective as of April 29, 2013