

Publication of Detection Times on the IFHA Website for Legitimate Therapeutic Substances Controlled by International Screening Limits

Detection Times for Legitimate Therapeutic Substances Controlled by International Screening Limits				
Substance	Preparation	Dose	Route of Administration (no of horses)	Detection Time (hours)
Acepromazine	Sedalin® Vetoquinol UK Ltd	0.15mg/kg, single dose	Oral (6)	72
Butorphanol	Torbugesic® Fort Dodge Animal Health Ltd	100µg/kg, single dose	i.v. (6)	72
Butyl scopolamine	Buscopan® Boehringer Ingelheim	0.3mg/kg, single dose	i.v. (6)	≤48 ^
Butyl scopolamine/ Dipyrone (Metamizole)	Buscopan® Compositum Boehringer Ingelheim	0.2mg/kg butyl scopolamine / 25mg/kg dipyrone (Metamizole), single dose	i.v. (6)	72
Carprofen	Rimadyl® Pfizer Ltd	0.7mg/kg, single dose	i.v. (6)	264 (11 days)
Clenbuterol	Ventipulmin® Syrup (25 micrograms/mL) Boehringer Ingelheim	1.6µg/kg/day for 10 days, once daily	Oral (6)	312 (13 days)
Clenbuterol	Ventipulmin® Injection (30 micrograms/mL) Boehringer Ingelheim	0.3µg/kg/day for 5 days, once daily	Nebulised \$ (6)	144 (6 days)
Dantrolene	Dantrium®	500mg for 3 days, once daily	Oral (12)	≤48
Dembrexine	Sputolysin® Boehringer Ingelheim	0.3mg/kg, 9 doses at 12h intervals	Oral (6)	96
Detomidine	Domosedan® Orion Pharma, Finland	0.02mg/kg, single dose	i.v. (10)	≤48 ^
Detomidine/ Butorphanol	Domosedan® Janssen Torbugesic® Pfizer	10µg/kg followed after 5 minutes with 25µg/kg Torbugesic®, single dose	i.v. (6)	72
Dexamethasone isonicotinate	Voren® Boehringer Ingelheim Ltd	0.03mg/kg, single dose (15ml/500kg horse)	i.m. (6)	336 (14 days)
Dexamethasone sodium phosphate	Dexadreson® Intervet UK Ltd	0.06mg/kg, single dose (15ml/500kg horse)	i.v. (6)	120 (5 days)
Dipyrone	Vetalgin® Intervet Deutschland GmbH	30mg/kg, single dose	i.v. (10)	72
Eltenac	Telzenac® Schering Plough Animal Health	0.5mg/kg for 5 days, once daily	i.v. (6)	192 (8 days)

Flunixin	Finadyne® Schering Plough	1mg/kg, single dose	i.v. (4)	144 (6 days)
Furosemide	Dimazon® Intervet	1mg/kg, single dose	i.v. (6)	≤48 ^
Ipratropium	Atrovent® solution for nebulisation (0.5 mg/ml) Boehringer Ingelheim	5.5µg/kg/day for 3 days, once daily (16.5µg/kg in total)	Nebulised ** (6) [MDI-Spacer]	120 (5 days) [168, 7 days]
Ketoprofen	Ketofen® Merial Animal Health Ltd	2.2mg/kg for 5 days, once daily	i.v. (6)	96
Lidocaine	Norocaine® Norbrook Laboratories	300mg/15mL, single dose 60mg/3mL, single dose	s/c (6) s/c (6)	72
Meclofenamic acid	Not commercially available. Sigma †	2.2mg/kg, single dose	i.v. (6)	≤48 ^
Meclofenamic acid	Dynoton Biove Laboratory, Arques, France	4mg/kg for 5 days, once daily	Oral (6)	120 (5 days)
Meloxicam	Metacam® Boehringer Ingelheim	0.6mg/kg for 14 days, once daily	Oral (8)	72
Mepivacaine	Intra-Epicaine® Arnolds Vet Products Ltd #	2mL/40mg, single dose (0.07 – 0.09mg/kg)	s/c to lateral aspect of distal limb (6)	72
Mepivacaine	Intra-Epicaine® Arnolds Vet Products Ltd #	8mL/160mg, single dose (0.28-0.36mg/kg)	s/c neck (6)	72
Naproxen	Naprosyn® Roche	10mg/kg for 5 days, once daily	Oral (6)	>360 (>15 days)
Omeprazole	Gastrogard® 37% Oral Paste, Merial	1mg/kg for 28 days, once daily	Oral *	≤48 ^
Phenylbutazone	Equipazolone® Arnolds Vet Products Ltd	4.7mg/kg for 5 days, twice daily	Oral (2)	168 (7 days)
	Phenylarthrite® Vetoquinol SA	8.8mg/kg, single dose	i.v. (6)	
	Equipazolone® Intervet SA	8.8mg/kg twice daily for 1 day, followed by 4.4mg/kg for 10 days, twice daily	Oral (6)	
Romifidine	Sedivet® Boehringer Ingelheim	80µg/kg, single dose	i.v. (8)	60
Romifidine/ Butorphanol	Sedivet® Boehringer Ingelheim Torbugesic® Pfizer	60µg/kg, followed after 5 minutes with 25µg/kg Torbugesic®, single dose	i.v. (6)	72

Salbutamol	Ventolin Evohaler® Allen & Hansburys	5 x 100µg actuations per dose for 2 days at 4 hourly dosing during the day	Inhaled via a pMDI through a spacer into nostrils ‡ (6)	72
Vedaprofen	Quadrisol® Intervet SA	2mg/kg, single dose	i.v. (6)	96

^ The British Horseracing Authority (BHA), a member country of the European Horserace Scientific Liaison Committee (EHSLC), requires that a prohibited substance may not be given on the day of a race. Other EHSLC member countries advise that a prohibited substance may not be given within 48 hours, or longer, of a race. Therefore, no Detection Times ≤ 48 hours will be advised by the EHSLC with whom the BHA harmonise Detection Times.

§ This route of administration is not licensed in the UK.

** Note that the previously released DT of 7 days relates to this product being given via a Metered Dose Inhaler/Spacer administration system, whereas this 5 day advice relates to true nebulisation.

† Prepared according to Johansson *et al*, Pharmaceutical & Biomedical Analysis (1986) 4, 2 171-179.

These preparations from Arnolds Vet Products Ltd are now marketed and licensed under Dechra Veterinary Products.

* Calculated from several studies involving differing numbers of horses.

‡ These products are licenced human medications and therefore should be used in accordance with Veterinary Medicine Regulations guidance on the use of the cascade, including precautions to ensure human safety.

The Advisory Council on Equine Prohibited Substances and Practices and the International Federation of Horseracing Authorities acknowledges the significant effort of the EHSLC over a number of years in determining these Detection Times. The EHSLC comprises the Racing Authorities of France, Ireland, UK, Germany, Italy and Scandanavia.

It must be noted that these detection times are for specific proprietary preparations, at specified dose and dosing regimens and for specified routes of administration, and veterinarians using this information should be aware of its limitations and are advised to read the following document “International Screening Limits and Detection Times - Information for Practicing Veterinary Surgeons”.

International Screening Limits and Detection Times - Information for Practicing Veterinary Surgeons

Introduction

There are three reasons for having rules to control the use of drugs in horse racing:

- i) To ensure fair competition;
- ii) To protect the welfare of racehorses; and
- iii) To protect the breed.

However, the Rules of Racing are not intended to discourage the proper veterinary treatment of sick racehorses if such treatment would not threaten any of these three important objectives.

The following information is intended to help veterinary surgeons to give advice as to when racehorses may be raced following treatment. International harmonisation for the control of certain therapeutic substances has been achieved through the application of International Screening Limits and information is provided on the observed Detection Times corresponding to these screening limits for drugs after they have been administered to horses at the reported dose rates. However, veterinary surgeons using this information should be aware of its limitations.

Limitations

Detection Time definition: the time at which the urinary concentration of the drug, or its metabolites or isomers, in all the horses in the study was below internationally agreed screening limit for the drug using routine or standard screening methods.

Veterinary surgeons are reminded of the following:

The Rules of Racing regarding prohibited substances continue to apply a strict liability on the trainer and the promulgation of this information does not alter this. Therefore veterinary surgeons should use their professional judgment when they are asked for advice.

In the administration studies for the determination of the published Detection Times, the drugs were administered at the manufacturer's recommended dose using the usual route of administration to a limited number of horses under controlled, scientific conditions.

The following points should be clearly noted in respect of the stated Detection Times:

- In the experiments, the drugs were administered only to healthy horses under controlled, scientific conditions. These horses were not exercised under conditions that might be expected in routine training.
- The use of these drugs therapeutically in unhealthy animals may result in longer Detection Times due to a number of factors, including variation in urine pH, altered biotransformation and/or excretory processes.
- The effect of training /exercise programmes, different diet and stable management may cause variation in drug elimination.
- The Detection Times are valid only in respect of the particular formulation, dose or dosage regimen employed.
- The use of different proprietary formulations may result in different Detection Times on account of variations in bioavailability. Repeat dosing will alter the Detection Time due to possible drug accumulation.

- The stated Detection Times reflect only the precise conditions of the administration protocol used for the scientific study. Even a slight variation in the route of administration, such as intra-articular injections that have become partly extra-articular, can increase Detection Times significantly. Veterinary surgeons should therefore regard these data as information. There may be variables encountered in routine treatment of horses in training that affect drug elimination.
- Irrespective of the route of administration, there is a risk that a horse may ingest excreted drug from the bedding of its stable (thus increasing the Detection Time unpredictably) if its stable is not regularly and carefully cleaned out after the treatment has been administered.
- These recommendations for Screening Limits/Detection Times may not necessarily apply in the event of the detection of two or more pharmacologically related substances, or any substance and a diuretic, in an official sample.

The 'Detection Times' given here are not synonymous with 'Withdrawal Times'. To decide a Withdrawal Time an adequate safety margin must be added to the stated Detection Time. This safety margin must be chosen by the treating veterinarian using his/her professional judgement and discretion, to allow for biological, pharmaceutical and pharmacological variation, so as to minimise the possibility that a positive finding will occur on the day of racing.

It is incumbent on the veterinary surgeon to exercise full professional judgement, taking into account all relevant circumstances, and the most up to date information, before advising when a horse may race after drug treatment.

The International Federation of Horseracing Authorities accepts no liability or responsibility for the direct or indirect consequences of any person using or relying exclusively upon the data in these information sheets, to the exclusion of professional judgement, under any given circumstances.