

## ANNEX II

### EQUINE PROHIBITED LIST

#### SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

#### PROHIBITED SUBSTANCES (DOPING)

Agents, cocktails or mixtures of substances that may affect the performance of a horse; masking agents; substances with no generally accepted medical use in competition horses; substances which are usually products prescribed for use in humans or other species; agents used to hypersensitise or desensitise the limbs or body parts, including but not limited to:

- two or more anti-inflammatory drugs (steroidal and/or non-steroidal) or other combinations of anti-inflammatory substances with similar or distinct pharmacological actions;
- antipsychotic, anti-epileptic and antihypertensive substances including reserpine, gabapentin, fluphenazine, and guanabenz;
- antidepressants such as selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs), and tricyclic antidepressants (TCAs);
- tranquilizers, sedatives (including sedating antihistaminics) commonly used in humans and/or non-equine species, including benzodiazepines, barbiturates and azaperone ;
- narcotics and opioid analgesics; endorphins;
- amphetamines and other central nervous system (CNS) stimulants including cocaine and related psychotic drugs;
- beta-blockers including propranolol, atenolol, and timolol;
- diuretics and other masking agents;
- anabolic steroids (including testosterone in mares and geldings) and growth promoters;
- peptides and genetically recombinant substances such as erythropoietin, insulin growth factor and growth hormone;
- hormonal products (natural or synthesized) including adrenocorticotrophic hormone (ACTH) and cortisol (above the threshold);
- substances designed and marketed primarily for human use or use in other species and for which alternative and generally accepted products are available for use in horses;
- hypersensitizing or desensitizing agents (organic or inorganic or other substances likely to have been applied to body parts or to tack to influence performance);
- oxygen carriers;

and other substances with a similar chemical structure or similar biological effect(s).

## PROHIBITED SUBSTANCES (MEDICATION CLASS A)

Agents which could influence performance by relieving pain, sedating, stimulating or producing/modifying other physiological or behavioural effects, including:

- local anaesthetics;
- sympathomimetic cardiac stimulants;
- central and respiratory stimulants;
- clenbuterol and other bronchodilators and products used for the treatment of recurrent airway disease (RAD);
- a single non-steroidal anti-inflammatory drug  $\pm$  metabolite(s);
- a single corticosteroid;
- sedatives or tranquillisers indicated for equine use including antihistamines; thiamine; valerian and other herbal products other than those listed as Prohibited Substances (Doping);
- muscle relaxants including methocarbamol and propantheline;
- anti-coagulants including heparin or warfarin;

and other substances with a similar chemical structure or similar biological effect(s).

## PROHIBITED SUBSTANCES (MEDICATION CLASS B)

Substances that either have limited performance enhancing potential or to which horses may have been accidentally exposed, including certain dietary contaminants. These are listed below:

- isoxsuprine;
- dimethylsulfoxide (DMSO) when above the threshold;
- mucolytics and cough suppressants: bromhexine and other substances with a similar chemical structure or similar biological effect(s);
- hyoscine (n-butyl-scopolamine); Atropine and other anticholinergic substances with a similar chemical structure or similar biological effect(s);
- plant or animal derivatives: bufotenine, hordenine, tyrosine, gamma-oryzanol and other substances with a similar chemical structure or similar biological effect(s);
- terpenes and inorganic contaminants (other than those detected on skin or tack swabs);
- evacuants: magnesium sulphatesulfate and other substances with a similar chemical structure or similar biological effect(s).

## THRESHOLD SUBSTANCES

Horses may compete with the presence of certain substances in their tissues, body fluids or excreta for which threshold levels/ratios are listed below, provided the concentration of the substance is not greater than the threshold level/ratio indicated. Thresholds only apply to:

- substances endogenous to the horse;
- substances arising from plants traditionally grazed or harvested as equine feed; or
- substances in equine feed arising from contamination during normal cultivation, processing or treatment, storage or transportation.

The following constitutes an exclusive list of substances for which a threshold has been established. For each substance, a concentration level beneath that indicated is not an EADMC Rule violation:

Available carbon dioxide (CO <sub>2</sub> )	36 millimoles per litre in plasma
Boldenone (other than geldings)	free and conjugated boldenone 0.015 micrograms per ml in urine from male horses
Dimethyl sulphoxide	15 micrograms per ml in urine or 1 microgram per ml in plasma
Estradiol in male Horses (other than Geldings)	Free and conjugated 5 $\alpha$ -estrane-3 $\beta$ , 17 $\alpha$ -diol 0.045 micrograms per ml in urine
Hydrocortisone	1 microgram per ml in urine
Salicylic acid	625 micrograms per ml in urine or 5.4 micrograms per ml in plasma
Testosterone	0.02 micrograms free and conjugated testosterone per ml in urine from geldings, or 0.055 micrograms free and conjugated testosterone per ml in urine from fillies and mares (unless in foal).

## A note on analytical detection levels and irrelevant concentrations of certain substances

Screening Limits of Detection (SLODs) are established on the basis of risk management to control the sensitivity of the screening method for a specified substance in a horse's urine or blood sample to ensure the integrity of the sport. Where SLODs have been established they are universally applied by FEI laboratories. Substances for which Detection Times have been or are being established can be found on the FEI website ([http://www.fei.org/Athletes\\_AND\\_Horses/Medication\\_Control\\_AND\\_Antidoping/Horses/Pages/Information.aspx](http://www.fei.org/Athletes_AND_Horses/Medication_Control_AND_Antidoping/Horses/Pages/Information.aspx)).

It is important to recognise that the Detection Time (DT) is the period of time during which a drug remains in a horse's system such that it can be detected by the laboratory. The DT is influenced by numerous factors including the size of the horse, the route of administration, the drug formulation, the number of doses administered, individual horse factors (e.g. metabolism, disease, etc.) and the detection limit of the screening method used to detect the drug (unless a quantitative threshold has been adopted by the regulatory authorities). The Withdrawal Time (WT) for a drug is decided upon by the treating veterinarian and includes the detection time plus a safety margin, chosen with professional judgment and discretion of the treating veterinarian, to allow for individual differences between horses.

*This information is provided with the intent to inform Treating Veterinarians and Persons Responsible as fully as possible about current scientific research on certain Prohibited Substances that may be prescribed for treatment of a horse from time to time. The existence or non-existence of a SLOD or Detection Time for a particular substance shall not affect the validity of an Adverse Analytical Finding or the determination of an anti-doping or medication control rule violation according to Article 2 of the EADMC Rules. A horse, as a biological entity, does not necessarily follow the scientific modelling used to provide indicative information.*