

**RULE SERIES 4000**

**PROHIBITED LIST**

## **4000. PROHIBITED LIST.**

### **4010. Purpose.**

In accordance with Rule 3111, the Prohibited List identifies substances and methods that are prohibited at all times (**Banned Substances and Banned Methods**) and those that are prohibited for Use on or Administration to a Covered Horse during the Race Period and prohibited to be present in a Sample collected from a Covered Horse on Race Day, except as otherwise specified in the Prohibited List (**Controlled Medication Substances or Controlled Medication Methods**). The Prohibited List also designates certain Prohibited Substances as **Specified Substances**, which are subject to more flexible sanctions (see Rule 4400). In accordance with the definition of 'Race Period' (see Rule 1010) the Prohibited List may specify that for certain specified Controlled Medication Substances and Controlled Medication Methods the Race Period shall be shorter or longer in duration.

### **4100. Banned Substances and Banned Methods**

#### **4110. Banned Substances.**

##### **4111. S0 Non-approved Substances.**

Any pharmacological substance that is not addressed by Rules 4112 through 4117 and with no current approval by any governmental regulatory health authority for veterinary or human therapeutic use or any substance not universally recognized by veterinary regulatory authorities as a valid veterinary therapeutic Treatment is prohibited at all times.

##### **4112. S1 Anabolic Agents.**

The following substances, and other substances with similar chemical structure or similar biological effect(s), are prohibited at all times:

- (a) Anabolic Androgenic Steroids when administered exogenously.
- (b) Other Anabolic Agents, including but not limited to:
  - (1) Selective androgen receptor modulators (SARMs);
  - (2) Zeranol;
  - (3) Zilpaterol; and
  - (4) Ractopamine.

##### **4113. S2 Peptide Hormones, Growth Factors, Related Substances, and Mimetics.**

The following substances, and other substances with similar chemical structure or similar biological effect(s), are prohibited at all times:

- (a) Erythropoietins (EPO) and Agents affecting erythropoiesis, including but not limited to:
  - (1) Erythropoietin-Receptor Agonists;
  - (2) Hypoxia-Inducible Factor (HIF) Activating Agents;

- (3) GATA (Erythroid Transcription Factor) Inhibitors;
  - (4) Transforming Growth Factor-beta (TGF- $\beta$ ) signaling inhibitors; and
  - (5) Innate Repair Receptor Agonists.
- (b) Peptide Hormones and their Releasing Factors, including but not limited to:
- (1) Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their Releasing Factors in stallions, ridglings, and geldings;
  - (2) Corticotrophins and their Releasing Factors;
  - (3) Growth Hormone (GH), its analogues and fragments; and
  - (4) Growth hormone releasing factors.
- (c) Growth factors and growth factor modulators and other growth factors or growth factor modulators affecting muscle, tendon, or ligament protein synthesis/degradation, vascularization, energy utilization, regenerative capacity or fiber type switching.

#### **4114. S3 Beta-2 Agonists.**

The following substances, and other substances with similar chemical structure or similar biological effect(s), are prohibited at all times:

All selective and non-selective beta-2 agonists, including all optical isomers.

Notwithstanding the above, the following are permitted: (a) inhaled beta-2 agonists e.g., albuterol (salbutamol) when prescribed by a Veterinarian as a bronchodilator, and (b) clenbuterol when prescribed by a Veterinarian for a duration not to exceed thirty (30) days in a six (6) month period and provided that following administration of clenbuterol the Covered Horse shall not be eligible to participate in any Workout or Covered Horserace until a urine and a blood Sample have been collected from it by or on behalf of the Agency, and analysis by a Laboratory of those Samples does not detect the presence of clenbuterol or its Metabolites or Markers.

#### **4115. S4 Hormone and Metabolic Modulators.**

The following substances, and other substances with similar chemical structure or similar biological effect(s), are prohibited at all times:

- (a) Aromatase Inhibitors;
- (b) Anti-estrogenic substances, anti-estrogens, and selective estrogen receptor modulators (SERMS), Agents preventing activin receptor IIB activation;
- (c) Myostatin inhibitors;
- (d) Metabolic modulators including but not limited to:

- (1) Insulins and Insulin-Mimetics;
  - (2) Meldonium; and
  - (3) Trimetazidinet; and
- (e) Thyroid hormone and thyroid hormone modulators.

**4116. S5 Diuretics and Masking Agents.**

(a) Diuretics and masking agents, and other substances with a similar chemical structure or similar biological effect(s), are prohibited at all times.

(b) Notwithstanding the above, the following are permitted:

- (1) Drospirenone, pamabrom, and topical ophthalmic administration of carbonic anhydrase inhibitors (e.g. dorzolamide, brinzolamide);
- (2) Trichlormethiazide for treatment of edema; and
- (3) Plasma expanders for life-saving procedures.

**4117. S6 Miscellaneous Substances.**

The following substances, and other substances with similar chemical structure or similar biological effect(s), are prohibited at all times:

- (a) Bisphosphonates (except that bisphosphonates may be administered for the purpose of diagnostic imaging, i.e. gamma scintigraphy);
- (b) Toxins (e.g. botulinum toxin, botox);
- (c) Venoms of any species, their synthetic analogs, or derivatives thereof;
- (d) Altrenogest in stallions, ridglings, or geldings; and
- (e) Pitcher plant extract (Sarapin).

**4120. Banned Methods.**

**4121. M1 Manipulation of Blood and Blood Components.**

(a) The Administration or reintroduction of any quantity of autologous, allogenic (homologous), or heterologous blood or red blood cell products of any origin into the circulatory system.

(b) Artificially enhancing the uptake, transport, or delivery of oxygen, including, but not limited to: Perfluorochemicals, efaproxiral (RSR13), and modified haemoglobin products, e.g. haemoglobin-based blood substitutes and microencapsulated haemoglobin products, excluding supplemental oxygen by inhalation.

(c) Any form of intravascular manipulation of the blood or blood components by physical or chemical means.

(d) Withdrawal of blood for any purpose other than for diagnostic/Laboratory Testing procedures.

(e) Notwithstanding the above, manipulation of blood or blood components is permitted for:

(1) Procedures performed for life-saving purposes; and

(2) Use of veterinary regenerative therapies (autologous conditioned serum or platelet-rich plasma) for the treatment of musculoskeletal injury or disease.

#### **4122. M2 Chemical and Physical Manipulation.**

(a) Use of chemical castration or immunocastration. In case of chemical castration or immunocastration, the horse shall remain designated as an intact male.

#### **4123. M3 Gene and Cell Doping.**

The following, which have the potential to enhance performance or modify the heritable genome, are prohibited at all times:

(a) The use of nucleic acids or nucleic acid analogues that may alter genome sequences and/or alter gene expression by any mechanism. This includes but is not limited to gene editing, gene silencing, and gene transfer technologies;

(b) The use of normal or genetically modified cells; and

(c) Modification of the heritable genome.

#### **4200. Controlled Medication Substances and Controlled Medication Methods.**

(a) Medications administered by Regulatory Veterinarians or Attending Veterinarians providing emergency medical care to a Covered Horse as a result of an injury sustained or other adverse health event during an Official Workout or Covered Horserace are not prohibited.

(b) Unless specified otherwise in the Prohibited List, Controlled Medication Substances and Controlled Medication Methods are prohibited for Use on or Administration to a Covered Horse during the Race Period and prohibited to be present in a Sample collected from a Covered Horse on Race Day.

#### **4210. Controlled Medication Substance(s).**

Except as otherwise provided in Rule 4211, the following shall be prohibited on Race Day and during the Race Period:

(a) S7 Medications, supplements, nutraceuticals, feed additives, and substances capable at any time of causing an action or effect, or both an action and effect, within one or more of the following mammalian body systems:

(1) the blood system;

(2) the urinary system;

(3) the cardiovascular system;

- (4) the digestive system;
- (5) the endocrine system;
- (6) the immune system;
- (7) the musculoskeletal system;
- (8) the nervous system;
- (9) the reproductive system; and/or
- (10) the respiratory system.

(b) All substances, including all optical isomers, e.g., d- and l- where relevant; and

(c) Metabolites, artifacts, and isomers of S7 substances.

S7 substances exclude those (i) lacking current approval by any governmental regulatory health authority for veterinary or human therapeutic use (e.g. drugs under pre-clinical or clinical development or designer drugs), and (ii) any substance not universally recognized by veterinary regulatory authorities as a valid veterinary therapeutic treatment that falls under section S0. Such substances are Banned Substances.

#### **4211. Exceptions to Rule 4210.**

(a) Notwithstanding the provisions of Rule 4210, the following may be administered up to twenty four (24) hours prior to the Race Day in which a Covered Horse participates or is entered (the start of the 'Race Period' shall be modified accordingly for these substances):

- (1) Orally administered vitamins;
- (2) Ranitidine;
- (3) Licensed vaccines against infectious agents;
- (4) Unsupplemented, isotonic electrolyte solutions;
- (5) Altrenogest in female horses;
- (6) Antimicrobials (antibiotics) and other anti-infective agents, excluding procaine penicillin or other antimicrobial/anti-infective agents containing or metabolizing to Controlled Medication Substances;
- (7) Antiparasitic/anthelmintics approved and registered for use in horses, excluding levamisole or other antiparasitic/anthelmintics metabolizing to and/or containing other Controlled Medication Substances;
- (8) Cimetidine; and
- (9) Omeprazole.

(b) Notwithstanding the provisions of Rule 4210:

(1) Furosemide (aka Lasix or Salix) is permitted during Workouts and Official Workouts;

(2) Furosemide (aka Lasix or Salix) may be administered during the Race Period in connection with a Covered Horserace in accordance with specific provisions of the Act and any guidance or exceptions approved by the Authority;

(b) Notwithstanding the foregoing, the presence of the following Controlled Medication Substances is prohibited in Covered Horses performing Workouts:

(1) Analgesics;

(2) Nonsteroidal anti-inflammatory drugs; (NSAIDs)

(3) Local anesthetics; and

(4) Corticosteroids.

#### **4220. Controlled Medication Method(s).**

In addition to any prohibited practices set forth in the Rule 2000 Series, and except as may otherwise be provided in Rule 4211:

(a) M4 Alkalinization shall be prohibited on Race Day and during Official Workouts.

(b) M5 Intra-articular injections shall be prohibited on Race Day and within the fourteen (14) days preceding Race Day. The Covered Horse is not eligible to race for fourteen (14) days from the date on which such Covered Horse received the administration of the intra-articular injection.

(c) M6 The use of a nasogastric tube is prohibited within twenty-four (24) hours preceding Race Day for any Covered Horserace in which the Covered Horse is entered.

(d) M7 Intra-articular injections of polyacrylamide hydrogels shall be prohibited within one hundred and eighty (180) days preceding Race Day.

The start of the 'Race Period' shall be modified for each of the methods above (i.e. each of M4-M7) based on the time period specified for such method (e.g. the Race Period for M5 shall start fourteen (14) days prior to Race Day).

#### **4300. Ineligibility Periods for Covered Horse.**

(a) *Prohibited Substances.* The period of Ineligibility of a Covered Horse resulting from a violation of this Rule 4000 Series involving a Prohibited Substance shall be as set forth in Table 1 to this Rule 4300.

**TABLE 1**

| <b><u>Violation</u></b>  | <b><u>Ineligibility Period</u></b>   |
|--|--|
| S0 BANNED Substances-Non-approved substances   | 14 months  |
| S1 BANNED Substances-Anabolic Agents   | 14 months  |
| S2 BANNED Substances-Peptide Hormones  | 6 months   |
| S3 BANNED Substances-Beta-2 Agonists   | 14 months  |
| S4 BANNED Substances-Hormone and Metabolic Modulators  | 3 months   |
| S5 BANNED Substances-Diuretics and Masking Agents  | 0 months   |
| S6 BANNED Substances-Miscellaneous Substances  | —  |
| (1) Bisphosphonates  | Life   |
| (2) All other S6 Miscellaneous Substances  | 0 months   |
| S7 CONTROLLED Substances-Medications, supplements and feed additives – Covered Horserace               | 0 months   |
| S7-CONTROLLED substances-Medications, supplements, nutraceuticals, and feed additives-Official Workout | The horse is not released from the Vets' List and a subsequent Official Workout must be scheduled. |

(b) *Prohibited Methods*. The period of Ineligibility of a Covered Horse resulting from a violation of this Rule 4000 Series involving a Prohibited Method shall be as set forth in Table 2 to this Rule 4300.



**TABLE 2**

| <b><u>Violation</u></b>  | <b><u>Ineligibility Period</u></b> |
|--|------------------------------------|
| M1 Manipulation of Blood and Blood Components  | 6 months                           |
| M2 Chemical and Physical Manipulation  | 0 months                           |
| M3 Gene and Cell Doping  | Life                               |
| M4 Alkalinization  | 0 months                           |
| M5 Intra-articular injection within 14 days of a Covered Horserace                             | 1 month                            |
| M6 Use of a nasogastric tube within 24 hours of a Covered Horserace                            | 0 months                           |
| M7 Intra-articular injection of polyacrylamide hydrogel within 180 days of a Covered Horserace | 12 months                          |

**4400. Specified Substances.**

The following substances shall be categorized as Specified Substances:

| <b>CATEGORY</b> | <b>SUBSTANCE</b>  | <b>ACTIVITY</b>                  |
|-----------------|---|----------------------------------|
| BANNED          | Arsenic   | Stimulant/toxic                  |
| CONTROLLED      | Atropine  | Anticholinergic                  |
| BANNED          | Bufotenine  | Naturally occurring hallucinogen |
| CONTROLLED      | Caffeine  | Central nervous system stimulant |
| BANNED          | Natural Cannabinoids, synthetic cannabinoids and other cannabimimetics  | Psychotropic                     |
| CONTROLLED      | Cannabidiol (CBD; CBDA)   | Psychotropic                     |
| BANNED          | CBD (Cannabidiol; CBDA)   | Psychotropic                     |
| BANNED          | CBDA (Cannabidiol; CBD)   | Psychotropic                     |
| CONTROLLED      | Codeine (Specified Substance when detected as a metabolite of morphine) | Analgesic                        |
| BANNED          | Colchicine  | Rheumatic treatment/anti-cancer  |
| BANNED          | Demecolcine   | Rheumatic treatment/anti-cancer  |
| BANNED          | Dimethyltryptamine (DMT)  | Psychedelic                      |
| BANNED          | DMT (Dimethyltryptamine)  | Psychedelic                      |
| BANNED          | Ergonovine  | Vasoconstrictor                  |
| BANNED          | Ergotamine  | Plant alkaloid                   |
| CONTROLLED      | Hordenine   | Norepinephrine stimulant         |
| CONTROLLED      | Hyoscine (Scopolamine)  | Parasympathetic                  |
| BANNED          | Meconine  | Opioid                           |
| CONTROLLED      | Morphine  | Opioid analgesic                 |
| BANNED          | Muscarine   | Parasympathomimetic              |
| BANNED          | Oripavine   | Opioid analgesic                 |
| BANNED          | Papaverine  | Opiate - muscle spasm treatment  |
| CONTROLLED      | Paraxanthine  | Stimulant                        |
| CONTROLLED      | Scopolamine (Hyoscine)  | Parasympathetic                  |
| BANNED          | Sparteine   | Anti-arrhythmic                  |
| BANNED          | Synephrine  | Stimulant                        |
| BANNED          | Thebaine  | Opioid alkaloid                  |
| CONTROLLED      | Theobromine   | Vasodilator                      |
| CONTROLLED      | Theophylline  | Bronchodilator                   |