Annexed Materials
For ARCI-011-015

- **Annex I: Prohibited List**
- **Annex II: Restricted Therapeutic Use requirements**

Annex I
PROHIBITED SUBSTANCES

All substances in the categories below shall be strictly prohibited unless otherwise provided in accordance with ARCI-011-015 or ARCI-025-015. Any reference to substances in this section does not alter the requirements for testing concentrations in race day samples.

Nothing in this list shall alter the requirements of post-race testing.

S0. NON-APPROVED SUBSTANCES

Any pharmacologic substance that is not approved by any governmental regulatory health authority for human or veterinary use within the jurisdiction is prohibited. This prohibition includes drugs under pre-clinical or clinical development, discontinued drugs, and designer drugs (a synthetic analog of a drug that has been altered in a manner that may reduce its detection); but does not include vitamins, herbs and supplements for nutritional purposes that do not contain any other prohibited substance, or the administration of a substance with the prior approval of the commission in a clinical trial for which an FDA or similar exemption has been obtained.

S1. ANABOLIC AGENTS

Anabolic agents are prohibited.

1. Anabolic Androgenic Steroids (AAS)

1.1. Exogenous AAS, including:

1-androstenediol (5α-androst-1-ene-3β,17β-diol); 1-androstenedione (5α- androst-1-ene-3,17-dione); bolandiol (estr-4-ene-3β,17β-diol); bolasterone; boldenone; boldione (androsta-1,4-diene-3,17-dione); calusterone; clostebol; danazol ([1,2]oxazolo[4',5':2,3]pregna-4-en-20-yn-17α-ol);dehydrochlormethyltestosterone (4-chloro-17β-hydroxy-17α-methylandrosta- 1,4-dien-3-one); desoxymethyltestosterone (17α-methyl-5α-androst-2-en-17β-ol); drostanolone; ethylestrenol (19-norpregna-4-en-17α-ol); fluoxymesterone; formebolone; furazabol (17α-methyl[1,2,5]oxadiazolo[3',4':2,3]-5α-androstan-17β-ol); gestrinone; 4- hydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metandienone (17β-hydroxy-17α-methylandrosta-1,4-dien-3- one); metenolone; methandriol; methasterone (17β-hydroxy-2α,17α-dimethyl-5α-androstan-3-one); methyldienolone (17β-hydroxy-17α- methylestra-4,9-dien-3-one); methyl-1-testosterone (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one); methylnortestosterone (17β-hydroxy-17α-methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17β- hydroxy-17α-methylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19-norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; prostanozol (17β-[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5α-androstane); quinbolone; stanozolol; stenbolone; 1-testosterone (17β- hydroxy-5α-androst-1-en-3-one); tetrahydrogestrinone (17-hydroxy-18a- homo-19-nor-17α-pregna-4,9,11-trien-3-one); trenbolone (17β-hydroxyestr-4,9,11-trien-3-one); and other substances with a similar chemical structure or similar biological effect(s).

1.2. Endogenous AAS or their synthetic esters when administered exogenously:

androstenediol (androst-5-ene-3β,17β-diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17β-hydroxy-5α-androstan-3-one); prasterone (dehydroepiandrosterone, DHEA, 3β-hydroxyandrost-5-en-17-one); testosterone;

and their metabolites and isomers, including but not limited to:

5α-androstane-3α,17α-diol; 5α-androstane-3α,17β-diol; 5α-androstane-3β,17α-diol; 5α-androstane-3β,17β-diol; 5β-androstane-3 α, 17β-diol, androst-4-ene-3α,17α-diol; androst-4-ene-3α,17β-diol; androst-4-ene-3β,17α-diol; androst-5-ene-3α,17α-diol; androst-5-ene-3α,17β-diol; androst-5-ene-3β,17α-diol; 4-androstenediol (androst-4-ene-3β,17β-diol); 5-androstenedione (androst-5- ene-3,17-dione); androsterone (3 β-hydroxy-5 α – androstan-17-one); epi-dihydrotestosterone; epitestosterone; etiocholanolone; 7α-hydroxy-DHEA ; 7β-hydroxy-DHEA; 7-keto-DHEA;19-norandrosterone; 19-noretiocholanolone.

2. <u>Other Anabolic Agents, including but not limited to:</u>

Clenbuterol, selective androgen receptor modulators (SARMs e.g., andarine and ostarine), ractopamine, tibolone, zeranol, zilpaterol.

<u>S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES</u>

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

1. Erythropoietin-Receptor agonists:

    1.1 Erythropoiesis-Stimulating Agents (ESAs) including, e.g., darbepoetin (dEPO); erythropoietins (EPO); EPO-Fc; EPO-

mimetic peptides (EMP), e.g., CNTO 530 and peginesatide; and methoxypolyethylene glycol-epoetin beta (CERA); and

1.2 Non-erythropoietic EPO-Receptor agonists, e.g., ARA-290, asialo EPO and carbamylated EPO;

2. Hypoxia-inducible factor (HIF) stabilizers, e.g., cobalt (when found in excess of regulatory authority limits) and roxadustat (FG-4592); and HIF activators, (e.g., argon, xenon);

3. Chorionic Gonadotropin (CG) and Luteinizing Hormone (LH) and their releasing factors, in males;

4. Corticotrophins and their releasing factors;

5. Growth Hormone (GH) and its releasing factors including Growth Hormone Releasing Hormone (GHRH) and its analogues, e.g., CJC-1295, sermorelin and tesamorelin; Growth Hormone Secretagogues (GHS), e.g., ghrelin and ghrelin mimetics, e.g., anamorelin and ipamorelin; and GH-Releasing Peptides (GHRPs), e.g., alexamorelin, GHRP-6, hexarelin and pralmorelin (GHRP-2);

6. Venoms and toxins including but not limited to venoms and toxins from sources such as snails, snakes, frogs, and bees as well as their synthetic analogues such as ziconotide.

7. In addition, the following growth factors are prohibited:

Fibroblast Growth Factors (FGFs), Hepatocyte Growth Factor (HGF), Insulin-like Growth Factor-1 (IGF-1) and its analogues, Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Vascular-Endothelial Growth Factor (VEGF) and any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularization, energy utilization, regenerative capacity or fiber type switching.

S3. BETA-2 AGONISTS

All beta-2 agonists, including all optical isomers (i.e. *d*- and *l*-) where relevant, are prohibited.

S4. HORMONE AND METABOLIC MODULATORS

The following are prohibited:

1. Aromatase inhibitors, including but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone;

2. Selective estrogen receptor modulators (SERMs), including but not limited to: raloxifene, tamoxifen, toremifene;

3. Other anti-estrogenic substances, including but not limited to: clomiphene, cyclofenil, fulvestrant;

4. Agents modifying myostatin function(s), including but not limited to: myostatin inhibitors;

5. Metabolic modulators:

    5.1. Activators of the AMP-activated protein kinase (AMPK), e.g., AICAR, and Peroxisome Proliferator Activated Receptor δ (PPARδ) agonists (e.g., GW 1516);

    5.2 Insulins;

    5.3 Trimetazidine; and

    5.4. Thyroxine and thyroid modulators/hormones, including but not limited to those containing T4 (tetraiodothyronine/thyroxine), T3 (triiodothyronine), or combinations thereof.

S5. DIURETICS AND OTHER MASKING AGENTS

The following diuretics and masking agents are prohibited, as are other substances with similar chemical structure or similar biological effect(s): acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, desmorpressin, etacrynic acid, indapamide, metolazone, plasma expanders (e.g. glycerol; intravenous administration of albumin, dextran, hydroxyethyl starch and mannitol), probenecid, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), torsemide, triamterene, and vasopressin receptor antagonists or vaptans (e.g., tolvaptan).

Furosemide and trichlormethiazide may be administered only in a manner permitted by other rules of the commission.

PROHIBITED METHODS

M1. MANIPULATION OF BLOOD AND BLOOD COMPONENTS

The following are prohibited:

1. 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.

2. Artificially enhancing the uptake, transport or delivery of oxygen, including, but not limited to, perfluorochemicals, efaproxiral (RSR13) and modified hemoglobin products (e.g. hemoglobin-based blood substitutes, microencapsulated hemoglobin products), excluding supplemental oxygen.

3. Any form of intravascular manipulation of the blood or blood components by physical or chemical means.

M2. CHEMICAL AND PHYSICAL MANIPULATION

Tampering, or attempting to tamper, in order to alter the integrity and validity of samples collected by the commission, is prohibited. These methods include but are not limited to urine substitution or adulteration (e.g., proteases).

M3. GENE DOPING

The following, with the potential to enhance sport performance, are prohibited:

1. The transfer of polymers of nucleic acids or nucleic acid analogues.

2. The use of normal or genetically modified hematopoietic cells.

Annex II

Restricted Therapeutic Use Requirements

Required Conditions for Restricted Therapeutic Use							
Prohibited Substance	Report When Sampled	Pre-File Treatment Plan	Written Approval from Commission	Emergency Use (report)	Prescribed by Veterinarian	Report Treatment	Other Limitations
Adrenocorticotropic Hormone (ACTH)		x			x		
Albuterol					x		
Altrenogest					x		fillies/mares only
Autologous Conditioned Plasma (IRAP)	x				x		
Blood Replacements	x			x	x		
Boldenone		x			x	x	6 month Vet List
Clenbuterol		x			x		
Chorionic Gonadotropin		x	x-1		x	x	60 day Vet List
Furosemide	x				x		
Luteinizing Hormone		x	x-1		x	x	60 day Vet List
Mesenchymal Stem Cells	x				x	x	
Nandrolone		x			x	x	6 month Vet List
Nucleic Polymer Transfers		x	x		x	x	
Platelet Rich Plasma (PRP)	x				x		
Stanozolol		x			x	x	6 month Vet List
S0 (not FDA-approved)			x-2		x		
Testosterone		x			x	x	6 month Vet List
Thyroxine (T4)		x	x-3		x		
Trichlormethiazide	x				x		
Other Diuretics	x			x	x		

x-1: The approved treatment plan must show a specific treatment of a specific individual horse for an undescended testicle condition.

x-2: The approved treatment plan must show: (A) the substance has a generally accepted veterinary use; (B) the treatment provides a significant health benefit for the horse; (C) there is no reasonable therapeutic alternative; and (D) the use of the substance is highly unlikely to produce any additional enhancement of performance beyond what might be anticipated by a return to the horse's normal state of health, not exceeding the level of performance of the horse prior to the onset of the horse's medical condition.

x-3: The approved treatment plan must show: (A) the thyroxine is prescibed to a specific individual horse for a specific period of time; (B) the diagnosis and basis for prescribing such drug, the dosage, and the estimated last administration date ; and (C) that any container of such drug on licensed premises shall be labeled with the foregoing information and contain no more thyroxine than for the treatment of the specific individual horse, as prescribed.