



## SUNSHINE TOUR ANTI-DOPING PROGRAM PROHIBITED LIST 2020

### SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES – IN AND OUT OF COMPETITION

#### PROHIBITED SUBSTANCES

- S0 Non-Approved Substances
- S1 Anabolic Agents
- S2 Peptide Hormones, Growth Factors, Related Substances and Mimetics
- S3 Beta<sub>2</sub>Agonists
- S4 Hormone and Metabolic Modulators
- S5 Diuretics and other Masking Agents
- S6 Stimulants
- S7 Narcotics
- S8 Cannabinoids
- S9 Glucocorticoids
- S10 Beta Blockers

#### PROHIBITED METHODS

- M1 Manipulation of Blood and Blood Components
- M2 Chemical and Physical Manipulation
- M3 Gene and Cell Doping

#### **WARNING - IMPORTANT NOTE** about using the **PROHIBITED LIST** and **SUPPLEMENTS**

**There is no complete list of prohibited substances.**

The following list (which is based on the World Anti-Doping Agency Prohibited List Standard 2020) shows examples only of the prohibited classes. Note this includes the statement: “and other substances with similar chemical structure or similar biological effects(s)”.

Do **not** rely upon this list to rule out any prohibited ingredient, particularly from a supplement. Any substance that is chemically related to the class- even if not listed as an example is also prohibited. Dietary supplements are not well regulated and may cause an adverse analytical finding or rule violation. Athletes have tested positive and been charged with a doping violation because of a supplement contaminated or containing a prohibited substance that is not clearly identified on the label. Testing of Supplements may reduce the risk but will **not guarantee** that the supplement is entirely free of unknown or unidentified contaminants. Athlete remains liable!

Therefore any product containing a dietary supplement is taken at your own risk.

**Check the status of a licensed medication using a drug information website and keep a record of the response to the enquiry.**

If you cannot find it – don't assume it's permitted

# PROHIBITED SUBSTANCES

The use of any drug should be limited to medically justified indications

## S0. NON-APPROVED SUBSTANCES

Any pharmacological substance which is not addressed by any of the subsequent sections of the List and with no current approval by any governmental regulatory health authority for human therapeutic use (i.e. drugs under pre-clinical or clinical development or discontinued, designer drugs, veterinary medicines) is prohibited at all times.

## S1. ANABOLIC AGENTS

Anabolic Agents are prohibited.

### 1. Anabolic Androgenic Steroids (AAS)

#### a. Exogenous<sup>1</sup> AAS, including:

**1-androstendiol** (5 $\alpha$ -androst-1-ene-3 $\beta$ ,17 $\beta$ -diol );  
**1-androstendione** (5 $\alpha$ -androst-1-ene-3,17-dione);  
**1-androsterone** (3 $\alpha$ -hydroxy-5 $\alpha$ -androst-1-ene-17-one);  
**1-Testosterone** (17 $\beta$  -hydroxy-5 $\alpha$ -androst-1-en-3-one);  
**bolasterone**;  
**calusterone**;  
**clostebol**;  
**danazol** ([1,2] oxazolo[4',5':2,3]pregna-4-en-20-yn-17 $\alpha$ -ol);  
**dehydrochlormethyltestosterone** (4-chloro-17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one);  
**desoxymethyltestosterone** (17 $\alpha$ -methyl-5 $\alpha$ -androst-2-en-17 $\beta$ -ol);  
**drostanolone**;  
**ethylestrenol** (19-norpregna-4-en-17 $\alpha$ -ol);  
**fluoxymesterone**;  
**formebolone**;  
**furazabol** (17 $\alpha$ -methyl[1.2.5]oxadiazolol[3',4':2,3]-5 $\alpha$ -androstan-17 $\beta$ -ol);  
**gestrinone**;  
**mestanolone**;  
**mesterolone**;  
**metandienone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one);  
**metenolone**;  
**methandriol**;  
**methasterone** (17 $\beta$ -hydroxy-2 $\alpha$ , 17 $\alpha$ -dimethyl-5 $\alpha$ -androstan-3-one);  
**methyldienolone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylestra-4,9-dien-3-one);  
**methyl-1-testosterone** (17 $\beta$ -hydroxy-17 $\alpha$ -methyl-5 $\alpha$ -androst-1-en-3-one);  
**methylnortestosterone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylestr-4-en-3-one);  
**methyltestosterone**;  
**metribolone** (methyltrienolone, 17 $\beta$ -hydroxy -17 $\alpha$ -methylestra-4,9,11-trien-3-one);  
**mibolerone**;  
**norboletone**;  
**norclostebol**;  
**norethandrolone**;  
**oxabolone**;  
**oxandrolone**;  
**oxymesterone**;  
**oxymetholone**;  
**prostanazol** (17 $\beta$ -[(tetrahydropyran-2-yl)oxy]-1'*H*-pyrazolol[3,4:2,3]-5 $\alpha$ -androstane);  
**quinbolone**;  
**stanozolol**;  
**stenbolone**;  
**tetrahydrogestrinone** (17-hydroxy-18 $\alpha$ -homo-19-nor-17 $\alpha$ -pregna-4,9,11-trien-3-one);  
**trenbolone** (17 $\beta$ -hydroxyestr-4,9,11-trien-3-one) and other substances with a similar chemical structure or similar biological effect(s).

<sup>1</sup> **Exogenous** refers to a substance which is not ordinarily capable of being produced by the body

**b. Endogenous<sup>2</sup> AAS and their metabolites and isomers when administered exogenously:**

4-androstenediol (androst-4-ene-3 $\beta$ ,17 $\beta$ -diol);  
4-Hydroxytestosterone (4,17 $\beta$ -dihydroxyandrost-4-en-3-one);  
5-Androstenedione (androst-5-ene-3,17-dione);  
7 $\alpha$ -Hydroxy-DHEA;  
7 $\beta$ -Hydroxy-DHEA;  
7-keto-DHEA;  
19-norandrostenediol (estr-4-ene-3,17-diol);  
19-norandrostenedione (estr-4-ene-3,17-dione);  
androstanolone (5 $\alpha$ -dihydrotestosterone, 17 $\beta$ -hydroxy-5 $\alpha$ -androst-3-one);  
androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol);  
androstenedione (androst-4-ene-3,17-dione);  
boldenone;  
boldione (androsta-1,4-diene-3,17-dione);  
Epiandrosterone (3 $\beta$ -hydroxy-5 $\alpha$ -androst-17-one);  
epi-dihydrotestosterone (17 $\beta$ -hydroxy-5 $\beta$ -androst-3-one);  
epitestosterone;  
nandrolone<sup>3</sup> (19-norandrostenedione);  
prasterone (dehydroepiandrosterone, DHEA, 3 $\beta$ -hydroxyandrost-5-en-17-one);  
testosterone.

<sup>2</sup> **Endogenous** refers to a substance which is capable of being produced by the body naturally

<sup>3</sup> **Nandrolone** and **19-nandrostenedione** are prohibited at concentrations greater than 2.5 nanograms per milliliter

**2. Other Anabolic Agents, including but not limited to:**

**Clenbuterol, selective androgen receptor modulators (SARMs, e.g. andarine, LGD-4033, enobosarm (ostarine), and RAD140), tibolone, zeranol and zilpaterol.**

**S2 PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES AND MIMETICS**

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

**1. Erythropoietin (EPO) and agents affecting erythropoiesis, including, but not limited to:**

**1.1 Erythropoietin-Receptor agonists e.g.**

Darbepoietin (dEPO);  
Erythropoietins (EPO);  
EPO based constructs (EPO-Fc, methoxy polyethylene glycol-epoetin beta (CERA));  
EPO-mimetic agents and their constructs (e.g. CNTO-530, peginesatide).

**1.2 Hypoxia- inducible factor (HIF) activating agents, e.g.**

Cobalt **It is reiterated that vitamin B12, which contains cobalt, is not prohibited;**  
Daprodustat (GSK1278863);  
Molidustat (BAY 85-3934);  
Roxadustat (FG-4592);  
Vadadustat (AKB-6548);  
Xenon.

**1.3 GATA inhibitors, e.g.**

K-11706

**1.4 TGF-beta (TGF-β) inhibitors, e.g.**

**Luspatrcept;  
Sotatercept.**

**1.5 Innate repair receptor agonists, e.g.**

**Asialo EPO;  
Carbamylated EPO (CEPO).**

**2. Peptide Hormones and their Releasing Factors;**

**2.1 Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors, e.g. Buserelin, Deslorelin, gonadorelin, goserelin, leuprorelin, nafarelin and triptorelin, in males;**

**2.2 Corticotrophins and their releasing factors, e.g. corticorelin;**

**2.3 Growth Hormone (GH) and its fragments and releasing factors, including but not limited to:**

**Growth Hormone Fragments, e.g.**

**AOD-9604, hGH 176-191;**

**Growth Hormone Releasing Hormone (GHRH) and its analogues, e.g.**

**CJC-1293, CJC-1295, sermorelin and tesamorelin;**

**Growth Hormone Secretagogues (GHS), e.g.**

**Lenomorelin [ghrelin] and its mimetics e.g. anamorelin, macimorelin, ipamorelin and tabimorelin;**

**GH-Releasing Peptides (GHRPs), e.g.**

**alexamorelin, GHRP-1, GHRP-2 (pralmorelin), GHRP-3, GHRP-4, GHRP-5, GHRP-6 and examorelin [hexarelin].**

**3. Growth Factors and Growth Factor Modulators, including, but not limited to:**

**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);**

**Thymosin-β4 and its derivatives (TB-500);**

**Vascular-Endothelial Growth Factor (VEGF).**

**Additional growth factors or growth factor modulators affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching..**

### **S3. BETA-2 AGONISTS**

All selective and non-selective **beta-2 agonists** including all **optical isomers** are prohibited, including but not limited to:

Fenoterol;

Formoterol;

Higenamine\*;

Indacaterol;

Olodaterol;

Procaterol;

Except:

Reproterol;

Salbutamol;

Terbutaline;

Tretoquinol (trimetoquinol);

Tulobuterol;

Vilanterol.

- inhaled **salbutamol**: maximum 1600 micrograms over 24 hours in divided doses not to exceed 800 micrograms every 12 hours starting from any dose;

- inhaled **formoterol**: maximum delivered dose of 54 micrograms over 24 hours;
- inhaled **salmeterol**: maximum 200 micrograms over 24 hours.

The presence of salbutamol in urine in excess of 1000ng/ml or formoterol in excess of 40ng/mL is not consistent with therapeutic use of the substance and will be considered as an Adverse Analytical Finding (AAF) unless the Player proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of a therapeutic dose (by inhalation) up to the maximum dose indicated above.

\***Higenamine** is documented to be a constituent of the plant *Tinospora crispa*, which can be found in some dietary supplements and is a non-selective beta-2-agonist.

#### **S4. HORMONE AND METABOLIC MODULATORS**

The following **hormones** and **metabolic modulators** are prohibited:

**1. Aromatase inhibitors** including, but not limited to:

**2-Androst-enol (5 $\alpha$ -androst-2-en-17-ol);**  
**2-Androst-enone (5 $\alpha$ -androst-2-ene-17-one);**  
**3-Androst-enol (5 $\alpha$ -androst-3-en-17-ol);**  
**3-Androst-enone (5 $\alpha$ -androst-3-en-17-one);**  
**4-androstene-3,6,17 trione (6-oxo);**  
**Aminoglutethimide;**  
**Anastrozole;**  
**Androsta-1,4,6-triene-3, 17-dione (androstatrienedione);**  
**Androsta 3,5-diene-7,17-dione (arimistane);**  
**Exemestane;**  
**Formestane;**  
**Letrozole;**  
**Testolactone.**

**2. Selective Estrogen Receptor Modulators (SERMs)** including, but not limited to:

**Bazedoxifene,**  
**Ospemifene,**  
**Raloxifene;**  
**Tamoxifen;**  
**Toremifene.**

**3. Other anti-estrogenic substances** including, but not limited to:

**Clomiphene;**  
**Cyclofenil;**  
**Fulvestrant.**

**4. Agents preventing Activin receptor IIB activation** including but not limited to:

Activin A-neutralizing antibodies;  
 Activin receptor IIB competitors such as:  
**decoy activating receptors (e.g. ACE-031);**  
**Anti-activin receptor IIB antibodies (e.g. bimagrumb);**  
 Myostatin inhibitors such as:  
**agents reducing or ablating myostatin expression,**  
**Myostatin-binding proteins (e.g. follistatin, myostatin propeptide),**  
**Myostatin-neutralising antibodies (e.g. domagrozumab, landogrozumab,**  
**stamulumab).**

## 5. Metabolic modulators:

**Activators of the AMP-activated protein kinase (AMPK)**, e.g. **AICAR**; SR9009 and **Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists**, e.g.

2-(2-methyl-4-((4-methyl-2-(4-(trifluoromethyl) phenyl)thiazol-5-yl) methyl-thio)phenoxy) acetic acid (**GW 1516, GW501516**);

**Insulins and insulin-mimetics;**

**Meldonium;**

**Trimetazidine.**

## S5. DIURETICS AND OTHER MASKING AGENTS

The following diuretics and masking agents are prohibited, as are other substances with a similar chemical structure or similar biological effect(s), including but not limited to:

- **Desmopressin, probenecid, plasma expanders** e.g. intravenous administration of **albumin, dextran, hydroxyethyl starch** and **mannitol**.
- **acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides** e.g. **bendroflumethiazide, chlorothiazide, hydrochlorothiazide, triamterene** and **vaptans** e.g. **tolvaptan**;

except for

- Drosiprenone; pamabrom; and ophthalmic use of carbonic anhydrase inhibitors (e.g. dorzolamide, brinzolamide);
- Local administration of felypressin in dental anaesthesia.

The detection in an Player's Sample at all times or *In-Competition*, as applicable, of any quantity of the following substances subject to threshold limits; i.e. formoterol, salbutamol, cathine, ephedrine, methylephedrine and pseudoephedrine, in conjunction with a diuretic or masking agent, will be considered as an *Adverse Analytical Finding (AAF)* unless the Player has an approved *Therapeutic Use Exemption (TUE)* for that substance in addition to the one granted for the diuretic or masking agent.

## S6. STIMULANTS

All stimulants, including all optical isomers e.g. *d*- and *l*- where relevant are prohibited.

Stimulants include but not limited to:

**1,3 -Dimethylbutylamine;**

**3-Methylhexan-2-amine(1,2-dimethylpentylamine);**

**4-Methylhexan-2-amine (methylhexaneamine);**

**5-Methylhexan-2-amine (1,4-dimethylpentylamine);**

**Adrafinil;**

**Amfepramone;**

**Amfetamine;**

**Amfetaminil;**

**Amiphenazole,**

**Benzfetamine**

**Benfluorex;**

**Benzylpiperazine;**

**Bromantan;**

**Cathine;**

**cathinone and its analogues (e.g. mephedrone, methedrone,  $\alpha$ -pyrrolidinovalerophenone)**

**Clobenzorex;**

**Cocaine;**

**Cropropamide;**

**Crotetamide;**

**Dimetamfetamine (dimethylamphetamine);  
Ephedrine<sup>2</sup>,  
Epinephrine<sup>3</sup> (adrenaline),  
Etamivan,  
Etilamphetamine,  
Etilefrine,  
Famprofazone,  
Fenbutrazate,  
Fencamfamin,  
Fencamine,  
Fenetylline;  
Fenfluramine;  
Fenproporex;  
Fonturacetam [4-phenylpiracetam (carphedon)];  
Furfenorex;  
Heptaminol,  
Hydroxyamfetamine (parahydroamphetamine),  
Isometheptene,  
Levmetamfetamine,  
Lisdexamfetamine  
Meclofenoxate;  
Mefenorex;  
Methylenedioxyamphetamine  
Methylephedrine<sup>3</sup>,  
Methylhexaneamine (dimethylpentylamine),  
Methylphenidate,  
Mephentermine;  
Mesocarb;  
Metamfetamine(*d*-)  
*p*-methylamphetamine;  
Modafinil;  
Nikethamide,  
Norfenefrine,  
Norfenfluramine;  
Octopamine,  
Oxilofrine (methylsynephrine),  
Pemoline,  
Pentetrazol,  
Phenethylamine and its derivatives\*\*,  
Phendimetrazine;  
Phenmetrazine,  
Phenpromethamine,  
Pentermine;  
Prenylamine;  
Prolintane;  
Propylhexedrine,  
Pseudoephedrine<sup>4</sup>,  
Selegiline,  
Sibutramine,  
Strychnine,  
Tenamfetamine (methylenedioxyamphetamine),  
Tuaminoheptane**

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

**Except:**

- **Clonidine;**
- **Imidazole derivatives for topical/ophthalmic use and those substances included in the 2020 Monitoring Program\*.**

- \* Bupropion, caffeine nicotine, phenylephrine, phenylpropanolamine, pipradol and synephrine: These substances are included in the 2020 Monitoring Program, and are not considered Prohibited Substances.
- \*\* Cathine: Prohibited when its concentration in urine is greater than 5 micrograms per milliliter.
- \*\*\* Ephedrine and methylephedrine: Prohibited when the concentration of either in urine is greater than 10 micrograms per milliliter.
- \*\*\*\* Ephinephrine (adrenaline): Not prohibited in local administration, e.g. nasal, ophthalmologic, or coadministration with local anesthetic agents.
- \*\*\*\*\* Pseudoephedrine: Prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

## **S7. NARCOTICS**

The following narcotics are prohibited:

**Buprenorphine;**  
**Dextromoramide;**  
**Diamorphine (heroin);**  
**Fentanyl and its derivatives;**  
**Hydromorphone;**  
**Methadone;**  
**Morphine;**  
**Nicomorphine;**  
**Oxycodone;**  
**Oxymorphone;**  
**Pentazocine;**  
**Pethidine.**

## **S8. CANNABINOIDS**

**All natural and synthetic cannabinoids are prohibited, e.g.**

- In cannabis (hashish, marijuana) and cannabis products
- Natural and synthetic tetrahydrocannabinols (THCs)
- Synthetic cannabinoids that mimic the effects of THC.

Except:

- Cannabidiol  
 Cannabidiol (CBD) is not prohibited. However, be aware that some CBD products extracted from cannabis plants may also contain THC that could result in a positive test for a prohibited cannabinoid.

## **S9. GLUCOCORTICOSTEROIDS**

All glucocorticoids are prohibited when administered orally, intravenously, intramuscularly or rectal routes.

**Including but not limited to:**

**Betamethasone;**  
**Budesonide;**  
**Cortisone;**  
**Deflazacort;**  
**Dexamethasone;**  
**Fluticasone;**  
**Hydrocortisone;**  
**Methylprednisolone;**  
**Prednisolone;**  
**Prednisone;**  
**Triamcinolone.**



## **S10. BETA BLOCKERS**

The entire class of **Beta Blockers** is prohibited, including but not limited to the following:

**Acebutolol;**  
**Alprenolol;**  
**Atenolol;**  
**Betaxolol;**  
**Bisoprolol;**  
**Bunolol;**  
**Carteolol;**  
**Carvedilol;**  
**Celiprolol;**  
**Esmolol;**  
**Labetalol;**  
**Metipranolol;**  
**Metoprolol;**  
**Nadolol;**  
**Oxprenolol;**  
**Pindolo;**  
**Propranolol;**  
**Sotalol;**  
**Timolol.**

## **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 haemoglobin products (e.g. haemoglobin-based blood substitutes, microencapsulated haemoglobin products, excluding supplemental oxygen by inhalation).
3. Any form of intravascular manipulation of the blood or blood components by physical or chemical means.

### **M2. CHEMICAL AND PHYSICAL MANIPULATION**

The following are prohibited:

1. *Tampering, or Attempting to tamper*, in order to alter the integrity and validity of *Samples* collected during *Doping Control* is prohibited. These include but are not limited to sample substitution and/or adulteration e.g. addition of proteases to Sample (*Topical and systemic therapeutic use of proteases are not prohibited*)

2. Intravenous infusions and/or injections of more than 100 mL per 12 hour period, except for those legitimately received in the course of hospital treatments, surgical procedures or clinical diagnostic investigations.

### **M3. GENE DOPING**

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

1. 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;
2. The use of normal or genetically modified cells.

### **THE 2020 MONITORING PROGRAM**

The following substances are placed on the 2020 Monitoring Program:

1. Anabolic agents: ecdysterone (*new addition in 2020*)
2. Beta-2-agonists: any combination of beta-2-agonists.
3. Glucocorticoids: (by routes of administration other than oral, intravenous, intramuscular or rectal).
4. Narcotics: Codeine, hydrocodone, and tramadol.
5. Stimulants: Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol and synephrine.
6. 2-ethylsulfanyl-1H-benzimidazole (bemitil).