SUNSHINE TOUR ANTI-DOPING PROGRAM
PROHIBITED LIST 2016

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

PROHIBITED SUBSTANCES

S0 Non-Approved Substances
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S2 Peptide Hormones, Growth Factors, Related Substances and Mimetics
S3 Beta$_2$Agonists
S4 Hormone and Metabolic Modulators
S5 Diuretics and other Masking Agents
S6 Stimulants
S7 Narcotics
S8 Cannabinoids
S9 Glucocorticosteroids
S10 Beta Blockers

PROHIBITED METHODS

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

WARNING - IMPORTANT NOTE –

There is no complete list of prohibited substances.

The following list (which is based on the World Anti-Doping Agency Prohibited List Standard 2015) shows examples 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.

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.

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[1] AAS, including:

1-androstendiol (5α-androst-1-ene-3β,17β-diol)**; 1-androstendione** (5α-androst-1-ene-3,17-dione)**; 1-Testosterone** (17β –hydroxy-5α-androst-1-en-3-one); **4-Hydroxytestosterone** (4,17β-dihydroxyandrost-4-en-3-one); **19-norandrostenedione** (estr-4-ene-3,17-dione); **bolandiol** (estr-4-ene-33β,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]oxadiazolol[3',4':2,3]-5α-androstan-17β-ol)**; gestrinone; 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**[1]**; norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; prostanozol** (17β-[(tetrahydropyran-2-yl)oxy]-1'*H*-pyrazolol[3,4:2,3]-5α-androstane)**; quinbolone; stanozolol; stenbolone; 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] **Exogenous** refers to a substance which is not ordinarily capable of being produced by the body

[2] **Nandrolone** and **19-nandrostenedione** are prohibited at concentrations greater than 20 nanograms per mililiter

b. Endogenous[3] AAS 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 the following metabolites and isomers including but not limited to:
3β-Hydrox-5α-androstan-17-one; 5α-androstane-3α,17α-diol; 5α-androstane-3α,17β-diol; 5α-androstane-3β,17α-diol; 5α-androstane-3β,17β-diol; 5 β-androstane-3α, 17β-diol; 7α-Hydroxy-DHEA; 7β-Hydroxy-DHEA; 4-androstenediol (androst-4-ene-3β,17β-diol)**; 5-Androstenedione** (androst-5-ene-3,17-dione); **7-keto-DHEA; 19-norandrosterone; 19-noretiocholanolone; 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; androsterone; epi-dihydrotestosterone; epitestosterone; etiocholanolone;**

[3] **Endogenous** refers to a substance which is capable of being produced by the body naturally

[1] Nandrolone and 19-norandrostenedione are prohibited at concentrations greater than 20 nanograms per millilitre.

Where an anabolic androgenic steroid is capable of being produced endogenously, a sample will be deemed to contain such *Prohibited Substance* and an *Adverse Analytical Finding* will be reported where the concentration of such *Prohibited Substance* or its metabolites or markers and/or any other relevant ratio(s) in the player's sample so deviates from the range of values normally found in humans that it is unlikely to be consistent with normal endogenous production. A sample shall not be deemed to contain a *Prohibited Substance* in any such case where a player proves that the concentration of the *Prohibited Substance* or its metabolites or markers and/or the relevant ratio(s) in the player's sample is attributable to a physiological or pathological condition.

In all cases, and at any concentration, the player's sample will be deemed to contain a *Prohibited Substance* and the laboratory will report an Adverse Analytical Finding if, based on any reliable analytical method (e.g. IRMS), the laboratory can show that the *Prohibited Substance* is of exogenous origin. In such case, no further investigation is necessary.

When a value does not so deviate from the range of values normally found in humans and any reliable analytical method (e.g. IRMS) has not determined the exogenous origin of the substance, but if there are indications, such as a comparison to endogenous reference steroid profiles, of a possible *Use* of a *Prohibited Substance,* or when a laboratory has reported a T/E ratio greater than six (6) to one (1) and any reliable analytical method (e.g. IRMS) has not determined the exogenous origin of the substance, further investigation shall be conducted by the relevant *Anti-Doping Organization* by reviewing the results of any previous test(s) or by conducting subsequent test(s).

When such further investigation is required the result shall be reported by the laboratory as atypical and not as adverse. If a laboratory reports, using an additional reliable analytical method (e.g. IRMS), that the *Prohibited Substance* is of exogenous origin, no further investigation is necessary, and the *Sample* will be deemed to contain such *Prohibited Substance*. When an additional reliable analytical method (e.g. IRMS) has not been applied, and the minimum of three previous test results are not available, a longitudinal profile of the *Player* shall be established by the Sunshine Tour by performing three no-advance notice tests on the Player in a period of three months. The result that triggered this longitudinal study shall be reported as atypical. If the longitudinal profile of the *Player* established by the subsequent tests is not physiologically normal, the result shall then be reported as an *Adverse Analytical Finding*.

In extremely rare individual cases, boldenone of endogenous origin can be consistently found at very low nanograms per milliliter (ng/mL) levels in urine. When such a very low concentration of boldenone is reported by a laboratory and the application of any reliable analytical method (e.g. IRMS) has not determined the exogenous origin of the substance, further investigation may be conducted by subsequent test(s).

For 19-norandrosterone, an *Adverse Analytical Finding* reported by a laboratory at a concentration greater than 20 nanograms per milliliter is considered to be scientific and valid proof of exogenous origin of the *Prohibited Substance.* In such case, no further investigation is necessary.

Should a Player fail to cooperate in the investigations, the Player's sample shall be deemed to contain a *Prohibited Substance.*

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

Clenbuterol, selective androgen receptor modulators (SARMs), tibolone, zeranol, zilpaterol.

S2 PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES

The following substances and their releasing factors are prohibited:

1. Erythropoietin-Receptor agonists:

- **1.1 Erythropoiesis-Stimulating Agents (ESAs) including** e.g. **erythropoietin (EPO), darbepoietin** (dEPO); **erythropoietin** (EPO); **EPO-Fc; EPO-mimetic peptides** (EMP), e.g. **CNTO 530** and **peginesatide;** and **hypoxia- inducible factor (HIF) stabilizers, methoxy polyethylene glycol-epoetin beta (CERA);**
- **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** and **FG-4592**; and **HIF activators,** e.g. **argon, xenon**

3. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors, e.g. **buserelin, gonadorelin** and **leuprorelin**, in males**;**

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

5. Growth Hormone (GH), and its releasing factors 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).

Additional prohibited growth factors:
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 fibre type switching.

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

Unless the player can demonstrate that the concentration was due to a physiological or pathological condition, a sample will be deemed to contain a *Prohibited Substance* (as listed above) where the concentration of the *Prohibited Substance* or its *Metabolites* and/or relevant ratios or *Markers* in the player's sample so exceeds the range of values normally found in humans that it is unlikely to be consistent with normal *Endogenous* production.

If a laboratory reports, using a reliable analytical method, that the *Prohibited Substance* is of exogenous origin, the sample will be deemed to contain a *Prohibited Substance* and shall be reported as an *Adverse Analytical Finding*.

The presence of other substances with a similar chemical structure or similar biological effect(s), diagnostic marker(s) or releasing factors of a hormone listed above or of any other finding which indicate(s) that the substance detected is of exogenous origin, will be deemed to reflect the use of a *Prohibited Substance* and shall be reported as an *Adverse Analytical Finding*.

S3. BETA-2 AGONISTS

All beta$_2$ agonists (including both optical isomers where relevant) are prohibited except inhaled **salbutamol** (maximum 1600 micrograms over 24 hours), inhaled **formoterol** (maximum 54 micrograms over 24 hours) and **salmeterol** when taken by inhalation in accordance with manufacturers' recommended therapeutic regime.

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

NOTE: Terbutaline when administered by inhalation, requires a Therapeutic Use Exemption application. A TUE application should be submitted and a Medical File prepared and submitted on request when a TUE is required, for example to explain an Adverse Analytical Finding.

S4. HORMONE AND METABOLIC MODULATORS

The following classes 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: Activators of the AMP-activated protein kinase (AMPK), e.g. **AICAR**; and **Peroxisome Proliferator Activated Receptor δ** (PPARδ) **agonists,** e.g. **GW 1516**; **Insulins and insulin-mimetics, Meldonium** and **Trimetazidine**

S5. DIURETICS AND OTHER MASKING AGENTS

Masking agents are prohibited. They include:

Desmopressin, probenecid, plasma expanders (e.g. **glycerol**; intravenous administration of **albumin, dextran, hydroxyethyl starch** and **mannitol),** and other substances with similar biological effect(s). Local application of felypressin in dental anaesthesia is not prohibited.

Diuretics include:

acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. **bendroflumethiazide, chlorothiazide, hydrochlorothiazide**), **triamterene**, **vaptans (**e.g. **tolvaptan);** and other substances with a similar chemical structure or similar biological effect(s); (except for drosperinone, pamabrom and topical dorzolamine and brinzolamide, local administration of felypressin in dental anaesthesia, which is not prohibited).

The use of any quantity of a substance subject to the threshold limits (i.e. formoterol, salbutamol, cathine, ephedrine, methylephedrine and pseudoephedrine) in conjunction with a diuretic or other masking agent requires the deliverance of a specific Therapeutic Use Exemption for that substance in addition to the one granted for the diuretic or other masking agent.

S6. STIMULANTS

All stimulants (including both their optical isomers where relevant) are prohibited, except imidazole derivatives for topical use and those stimulants on the SUNSHINE TOUR Monitoring List.

Stimulants include:

Adrafinil, amfepramone, amfetamine, amfetaminil, amiphenazole, benzfetamine, benfluorex, benzylpiperazine, bromantan, cathine[5], cathinone and its analogues (e.g. mephedrone, methedrone, α-pyrrolidinovalerophenone) clobenzorex, cocaine, cropropamide, crotetamide, dimethylamphetamine, ephedrine[6], epinephrine[4] (adrenaline), etamivan, etilamphetamine, etilefrine, famprofazone, fenbutrazate, fencamfamin, fencamine, fenetylline, fenfluramine, fenproporex, fonturacetam [4-phenylpiracetam (carphedon)], furfenorex, heptaminol, hydroxyamfetamine (parahydroamphetamine), isometheptene, levmetamfetamine, meclofenoxate, mefenorex, mephentermine, mesocarb, metamfetamine(*d*-), methylenedioxyamphetamine, p-methylamphetamine, methylephedrine[6], methylhexaneamine (dimethylpentylamine), methylphenidate, modafinil, nikethamide, norfenefrine, norfenfluramine, octopamine, oxilofrine (methylsynephrine), pemoline, pentetrazol, phenethylamine and its derivatives, phendimetrazine, phenmetrazine, phenpromethamine, phentermine, prenylamine, prolintane, propylhexedrine, pseudoephedrine[7], selegiline, sibutramine, strychnine, tenamfetamine

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

[4] **Adrenaline** associated with local anaesthetic or by local administration (e.g. nasal, pghthalmologic) is not prohibited

[5] **Cathine** is prohibited when its concentration in urine is greater than 5 micrograms per mililiter

[6] **Ephedrine** and **methylephedrine** are prohibited at concentrations in urine greater than 10 micrograms per mililiter

[7] **Pseudoephedrine** is prohibited when its concentration in urine is greater than 150 micrograms per millilitre.

S7. NARCOTICS

The following narcotics are prohibited:

Buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

The presence of hydrocodone, morphine/codeine ratio; tramadol will be **monitored** in order to detect patterns of misuse in golf.

S8. CANNABINOIDS

Natural (e.g. cannabis, hashish, marijuana) or synthetic delta 9-tetrahydrocannabinol (THC) and cannabimimetics (e.g."Spice", JWH018, JWH073, HU-210) are prohibited.

S9. GLUCOCORTICOSTEROIDS

All glucocorticosteroids are prohibited when administered orally, intravenously, intramuscularly or rectal routes. Their use requires a Therapeutic Use Exemption approval.

Topical preparations when used for auricular, buccal, dermatological (including iontophoresis/phonophoresis), gingival, nasal, ophthalmic and perianal disorders are **not** prohibited.

Intraarticular, periarticular, peritendinous, epidural, intradermal injections and inhalation routes are **not** prohibited.

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, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, 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, 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)**.**

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 urine substitution and/or adulteration (e.g. proteases).

2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period are prohibited, except for those legitimately received in the course of hospital admissions, surgical procedures or clinical investigations.

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 cells;

The use of agents that directly or indirectly affect functions known to influence performance by altering gene expression. For example, Peroxisome Proliferator Activated Receptor δ (PPARδ) agonists e.g. GW 1516) and PPARδ-AMP-activated protein kinase (AMPK) axis agonists (e.g. AICAR) are prohibited.