

世界運動禁藥管制規範

國際標準



2016 年運動禁藥清單
PROHIBITED LIST

JANUARY 2016



本清單自 2016 年 1 月 1 日起生效

運動禁藥清單文字內容由世界運動禁藥管制組織制定，並以英文及法文出版。

英法版本如有抵觸，以英文版為準。(中文版如有疑義，以英文版為準。)

依世界運動禁藥管制規範第 4.2.2 條規定，除禁用物質 S1、S2、S4.4、S4.5、S6.a 及禁用方法 M1、M2、M3 外，所有禁用物質應視為「特定物質」。

隨時禁用的物質與方法

(賽內及賽外)

禁用物質

S0 未經核可物質

任何未列入禁用清單且未經政府衛生主管機關核准用於人體治療（例如藥物仍在臨床前實驗階段或醫學臨床研究階段或取消許可、設計師藥物、核准只得用於動物之物質）之藥物物質。

S1 同化性藥物

禁止使用同化性藥物

1. 同化性代謝雄性荷爾蒙(AAS)

a. 外生性*同化性代謝雄性荷爾蒙，包含下列：

1-Androstenediol (5 α -androst-1-ene-3 β ,17 β -diol);
1-Androstenedione (5 α -androst-1-ene-3,17-dione);
1-Testosterone (17 β -hydroxy-5 α -androst-1-en-3-one);
4-Hydroxytestosterone (4,17 β -dihydroxyandrost-4-en-3-one);
19-Norandrostenedione (estr-4-ene-3,17-dione);
Bolandiol (estr-4-ene-3 β ,17 β -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-17 α -ol);
Dehydrochlormethyltestosterone (4-chloro-17 β -hydroxy-17 α -methylandrosta-1,4-dien-3-one);
Desoxymethyltestosterone (17 α -methyl-5 α -androst-2-en-17 β -ol);
Drostanolone;
Ethylestrenol (19-norpregna-4-en-17 α -ol);
Fluoxymesterone;
Formebolone;
Furazabol (17 α -methyl [1,2,5]oxadiazolo[3',4':2,3]-5 α androstan-17 β -ol);

Gestrinone;
Mestanolone;
Mesterolone;
Metandienone (17 β -hydroxy-17 α -methylandrosta-1,4-dien-3-one);
Metenolone;
Methandriol;
Methasterone (17 β -hydroxy-2 α ,17 α -dimethyl-5 α androstan-3-one);
Methyldienolone (17 β -hydroxy-17 α -methylestra-4,9-dien-3-one);
Methyl-1-testosterone (17 β -hydroxy-17 α -methyl-5 α androst-1-en-3-one);
Methylnortestosterone (17 β -hydroxy-17 α -methylestr-4-en-3-one);
Methyltestosterone;
Metribolone (methyltrienolone, 17 β -hydroxy-17 α -methylestra-4,9,11-trien-3-one);
Mibolerone;
Nandrolone;
Norboletone;
Norclostebol;
Norethandrolone;
Oxabolone;
Oxandrolone;
Oxymesterone; Oxymetholone;
Prostanozol (17 β -[(tetrahydropyran-2-yl)oxy]-1'Hpyrazolo[3,4:2,3]-5 α -androstane);
Quinbolone;
Stanozolol;
Stenbolone;
Tetrahydrogestrinone (17-hydroxy-18 α -homo-19-nor-17 α -pregna-4,9,11-trien-3-one);
Trenbolone (17 β -hydroxyestr-4,9,11-trien-3-one);

及其他具有類似化學結構或相似生物作用的物質。

b. 由外部施用內生性**合成代謝雄性荷爾蒙：

Androstenediol (androst-5-ene-3 β ,17 β -diol);
Androstenedione (androst-4-ene-3,17-dione);
Dihydrotestosterone (17 β -hydroxy-5 α -androstan-3-one);
Prasterone (dehydroepiandrosterone, DHEA,
3 β -hydroxyandrost-5-en-17-one);
Testosterone;

及其代謝物及同分異構物，包括但不僅限於下列：

3 β -Hydroxy-5 α -androstan-17-one;
5 α -Androstane-3 α ,17 α -diol; 5 α -Androstane-3 α ,17 β -diol;
5 α -Androstane-3 β ,17 α -diol; 5 α -Androstane-3 β ,17 β -diol;
5 β -Androstane-3 α ,17 β -diol;
7 α -Hydroxy-DHEA; 7 β -Hydroxy-DHEA;
4-Androstenediol (androst-4-ene-3 β , 17 β -diol)
5-Androstenedione (androst-5-ene-3,17-dione);
7-Keto-DHEA;
19-Norandrosterone; 19-Noretiocholanolone.
Androst-4-ene-3 α ,17 α -diol; Androst-4-ene-3 α ,17 β -diol;
Androst-4-ene-3 β ,17 α -diol; Androst-5-ene-3 α ,17 α -diol;
Androst-5-ene-3 α ,17 β -diol;
Androst-5-ene-3 β ,17 α -diol;
Androsterone
Epi-dihydrotestosterone; Epitestosterone;
Etiocholanolone.

2. 其他同化性物質

包括但不僅限於下列：

Clenbuterol, 選擇性雄激素受體調節劑(SARMs, 例如 andarine 及 ostarine), tibolone, zeranol and zilpaterol.

依據本節宗旨：

* 「外生性物質」係指通常非由人體自然產生者

** 「內生性物質」係指通常由人體自然產生者

S2 胜肽荷爾蒙、生長因子、相關物質及類似物

以下禁用物質及其他具有類似化學結構或相似生物作用的物質均禁用：

1. 紅血球生成素受體致效劑：

1.1 紅血球生成劑(ESAs)包括：

長效紅血球生成素(dEPO)

紅血球生成素(EPO)

紅血球生成素 Fc 融合蛋白

紅血球生成素模擬胜肽(EMP)，例如：CNTO 530 和人工合成胜肽紅血球生成素、超長效紅血球生成素(CERA)

1.2 非紅血球生成之紅血球生成素受體致效劑，例如：

ARA-290

無唾液酸紅血球生成素

氨甲醯化紅血球生成素

2. 缺氧誘導因子(HIF)穩定劑例如鈷和 FG-4592、缺氧誘導因子活化劑例如氫氣及氫氣

3. 人類絨毛膜性腺激素(CG)及黃體化激素(LH)，及相關釋放因子，例如 buserelin、gonadorelin、柳菩林；男性禁用

4. 促腎上腺皮質素及相關釋放因子，例如：corticoirelin

5. 缺氧誘導因子(HIF)穩定劑例如鈷和 FG-4592、缺氧誘導因子活化劑例如氫氣及氫氣生長激素(GH)及相關釋放因子，包括生長素釋放素(GHRH)及其類似物例如 CJC-1295、sermorelin、tesamorelin，內生型生長荷爾蒙分泌素(GHS)例如飢餓素(生長素釋放質)及飢餓素模擬劑如 anamorelin、ipamorelin，生長激素釋放勝肽(GHRPs)例如 alexamorelin、GHRP-6、hexarelin and pralmorelin (GHRP-2)

其他禁用生長因子：

成纖維細胞生長因子(FGFs)

肝細胞生長因子(HGF)

似胰島素生長因子(IGF-1)及其類似物

機械生長因子(MGFs)

血小板衍生性生長因子(PDGF)

血管內皮生長因子(VEGF)

暨任何影響肌肉、肌腱、韌帶蛋白、合成/分解、血管形成、能量利用、再生能力或纖維改變之生長因子

S3 Beta-2 作用劑（致效劑）

所有 Beta-2 作用劑，包括所有相關光學異構物，例如右旋及左旋，均禁止使用。

下列除外：

- 吸入式 salbutamol (24 小時內最高用量限 1600 micrograms 內)
- 吸入式 formoterol (24 小時內最高使用劑量限 54 micrograms 內)
- 吸入式 salmeterol，依藥商建議療法使用

尿液中 salbutamol 濃度超過 1000 ng/mL 時或 formoterol 濃度超過 40 ng/mL 時，認定非屬治療用途，而係認為不利檢測報告(AAF)，除非經由控制藥物動力學研究結果，選手能證明是項檢測結果係因吸入前述最高使用劑量範圍內之治療劑所致。

S4 荷爾蒙及代謝調節劑

下列荷爾蒙及代謝調節劑禁用：

1. 芳香環轉化酶抑制劑，包括但不僅限於下列：

4-Androstene-3,6,17 trione (6-oxo);

Aminoglutethimide;

Anastrozole;

Androsta-1,4,6-triene-3,17-dione (androstatrienedione);

Exemestane;

Formestane;

Letrozole; Testolactone.

2. 選擇性雌激素受體調節劑(SERMs)，包括但不僅限於下列：

Raloxifene;

Tamoxifen;

Toremifene.

3. 其他抗雌激素物質，包括但不僅限於下列：

Clomiphene;

Cyclofenil;

Fulvestrant.

4. 改變肌肉生長抑制素機能，包括但不僅限於下列：肌肉生長抑制素抑制劑

5. 代謝調節劑：

5.1 腺苷單磷酸活化蛋白激酶(AMPK)活化劑，例如 AICAR，及

過氧化體增生劑活化受體 delta(PPARδ)致效劑，例如 GW 1516

5.2 胰島素及胰島素類似物

5.3 Meldonium;

5.4 Trimetazidine.

S5 利尿劑及干擾劑

下列利尿劑、干擾劑及其他具有類似化學結構或相似生物作用之物質禁用：

包括但不僅限於下列：

- Desmopressin、丙磺舒、血漿擴張劑例如：甘油及靜脈注射 albumin, dextran, hydroxyethyl starch 和甘露醇
- Acetazolamide; amiloride; bumetanide; canrenone; chlortalidone; etacrynic acid; furosemide; indapamide; metolazone; spironolactone; thiazides, 如 bendroflumethiazide, chlorothiazide 和 hydrochlorothiazide; triamterene 和 vaptans, 如 tolvaptan.

下列不在禁用之列：

- Drospirenone; pamabrom; 眼部使用碳酸酐酶抑制劑 (如 dorzolamide 和 brinzolamide).
- 牙科麻醉局部施用苯賴加壓素

運動員檢體在任何時候或賽內被驗出含有任何閾值限量內的下列禁用物質：formoterol、salbutamol、cathine、ephedrine、methylephedrine、pseudoephedrine，與利尿劑或干擾劑併用時，除非選手已取得治療用途豁免核可使用該物質且已持有治療用途豁免核可使用利尿劑或干擾劑，否則將被認定為不利檢測報告。

禁用方法

M1 操控血液及血液成分

禁用下列方法：

1. 將自體、同種異體（同源）或異體的血液，或任何來源紅血球製品，不論數量多寡，施打或再引入循環系統。
2. 以人為方式增加氧氣吸收、運輸或傳送氧氣。包括但不僅限於下列：
全氟化合物、efaproxiral (RSR13)、改造之血紅素產品例如：含血紅素之代用血液及微膠囊血紅素製劑，不包括補充氧氣。
3. 在血管內以任何物理或化學的方法操控血液或血液成分。

M2 化學及物理操作

禁用下列方法：

1. 竊改或企圖竊改，以改變運動禁藥管制作業中採樣檢體之完整性與有效性
包括但不僅限於下列：
人造假尿及/或變更尿液質性，例如：摻入蛋白酶素
2. 靜脈注射及/或 6 小時內注射量超過 50mL，惟因辦理住院、手術過程或臨床試驗所需而注射者不在此限。

M3 基因禁藥

下列可提昇運動選手潛在成績者禁止使用：

1. 轉殖核酸聚合物或核酸類似物。
2. 使用正常或基因改造細胞。

賽內禁用物質與方法

除前面規定的 S0 至 S5 及 M1 至 M3 禁用物質及方法外，下列規定物質賽內禁止使用。

禁用物質

S6 興奮劑

所有興奮劑，包括所有相關光學異構體（例如右旋及左旋），均禁止使用。

興奮劑包括：

a: 非特定興奮劑：

Adrafinil;
Amfepramone;
Amfetamine; Amfetaminil;
Amiphenazole;
Benfluorex;
Benzylpiperazine;
Bromantan;
Clobenzorex;
Cocaine;
Cropropamide;
Crotetamide;
Fencamine;
Fenetylline;
Fenfluramine;
Fenproporex;
Fonturacetam [4-phenylpiracetam (carphedon)];
Furfenorex;
Mefenorex;
Mephentermine;
Mesocarb; Metamfetamine(d-); p-
Methylamphetamine;
Modafinil;
Norfenfluramine;
Phendimetrazine;
Phentermine;
Prenylamine;
Prolintane.

不在此列之興奮劑視為特定物質。

b: 特定興奮劑

包括但不僅限於下列：

Benzfetamine;
Cathine**;
Cathinone and its analogues, e.g. mephedrone, methedrone,
and α -pyrrolidinovalerophenone;
Dimethylamphetamine;
Ephedrine***;
Epinephrine**** (adrenaline);
Etamivan;
Etilamfetamine;
Etilefrine;
Famprofazone;
Fenbutrazate;
Fencamfamin;
Heptaminol;
Hydroxyamfetamine (parahydroxyamphetamine);
Isometheptene;
Levmetamfetamine;
Meclofenoxate;
Methylenedioxyamphetamine;
Methylephedrine***;
Methylhexanamine (dimethylpentylamine);
Methylphenidate;
Nikethamide; Norfenefrine;
Octopamine;
Oxilofrine (methylsynephrine);
Pemoline;
Pentetrazol;
Phenethylamine 及其衍生物;
Phenmetrazine;
Phenpromethamine;
Propylhexedrine;
Pseudoephedrine*****;
Selegiline;

Sibutramine;
Strychnine;
Tenamfetamine (methylenedioxyamphetamine);
Tuaminoheptane;

以及其他有相似化學結構或生物作用之物質。

下列不在禁用之列：

- Clonidine
- 局部使用/眼用之 imidazole 衍生物，及 2016 年監控計畫* 所列興奮劑。
- * Bupropion, caffeine, nicotine, phenylephrine, phenylpropranolamine, pipradrol, and synephrine: 這些物質列入 2016 年監控計畫，不視為禁用物質。
- ** 去甲假麻黃鹼：如尿液中濃度高於 5 mcg/mL 視為禁用物質。
- *** 麻黃素及甲基麻黃素：如尿液中濃度高於 10 mcg/mL 則視為禁用物質。
- **** 腎上腺素：局部施用如鼻用、眼用，或腎上腺素與局部麻醉劑併用時，不在禁止之列。
- ***** 假麻黃鹼：如尿液中濃度高於 150 mcg/mL 則視為禁用物質。

S7 麻醉性止痛劑

禁用者：

Buprenorphine;
Dextromoramide;
Diamorphine (heroin);
Fentanyl 及其衍生物;
Hydromorphone;
Methadone;
Morphine;
Oxycodone;
Oxymorphone;
Pentazocine;
Pethidine.

S8 大麻鹼素類

禁用者：

- 天然的，例如：大麻、印度大麻、大麻葉，或合成四氫大麻醇 (THC)
- Cannabimimetics，例如：「合成大麻」、JWH018、JWH073、HU-210

S9 腎上腺皮質素

所有腎上腺皮質素均禁止以口服、靜脈注射、肌肉注射或經直腸方式使用。

特定運動種類禁用物質

P1 酒精

酒精（乙醇）僅在下列運動之賽內禁用。檢驗方式為吹氣檢測及/或驗血。違反運動禁藥管制規定的血液酒精濃度閾值為 0.10g/L：

- 飛行運動 (FAI)
- 汽車賽車 (FIA)
- 射箭 (WA)
- 賽艇 (UIM)

P2 乙型交感神經接受體阻斷劑

乙型交感神經接受體阻斷劑在下列運動種類賽內禁用；另有註明者，賽外亦禁用。

- 射箭 (WA)*
- 汽車賽車 (FIA)
- 撞球 (包括所有項目) (WCBS)
- 飛鏢 (WDF)
- 高爾夫 (IGF)
- 射擊 (ISSF, IPC)*
- 滑雪/滑板 (FIS) 之飛躍滑雪、自由式空中/半管滑雪、半管/空中滑板等項目
- 水中運動(CMAS)之定重屏氣潛泳（不論是否有腳蹼）、動態屏氣潛泳（不論是否有腳蹼）、自由器泳、藍跳屏氣、獵魚、靜態屏氣潛泳、水中射擊、各式負重屏氣潛泳

*賽外亦禁用

包括但不僅止於下列物質：

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

THE 2016 監控計畫*

下列物質列入 2016 年監控計畫：

1. 興奮劑： 僅限賽內：*Bupropion, caffeine, nicotine, phenylephrine, phenylpropranolamine, pipradrol* 及 *synephrine*.
2. 麻醉劑： 僅限賽內：*Mitragynine* 及 *tramadol*.
3. 腎上腺皮質素： 賽內（以口服、靜脈注射、肌肉注射、經直腸以外之方式使用）及賽外（任何方式施用）
4. **Telmisartan**： 賽內 及 賽外

*依世界運動禁藥管制規範（第 4.5 條）揭示：「世界運動禁藥管制組織應與簽署認可運動禁藥管制作業單位及政府協商監控未在運動禁藥清單之列物質以瞭解運動選手濫用藥物之情形。」

WORLD ANTI-DOPING CODE
**INTERNATIONAL
STANDARD**



PROHIBITED LIST

JANUARY 2016



**WORLD
ANTI-DOPING
AGENCY**
play true

This List shall come into effect on 1 January 2016.

The official text of the *Prohibited List* shall be maintained by WADA and shall be published in English and French.

In the event of any conflict between the English and French versions, the English version shall prevail.

SUBSTANCES & METHODS PROHIBITED AT ALL TIMES

(IN- AND OUT-OF-COMPETITION)

PROHIBITED SUBSTANCES

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 (e.g. drugs under pre-clinical or clinical development or discontinued, designer drugs, substances approved only for veterinary use) is prohibited at all times.

S1 ANABOLIC AGENTS

Anabolic agents are prohibited.

1. ANABOLIC ANDROGENIC STEROIDS (AAS)

a. Exogenous* AAS, including:

1-Androstenediol (5 α -androst-1-ene-3 β ,17 β -diol);
1-Androstenedione (5 α -androst-1-ene-3,17-dione);
1-Testosterone (17 β -hydroxy-5 α -androst-1-en-3-one);
4-Hydroxytestosterone (4,17 β -dihydroxyandrost-4-en-3-one);
19-Norandrostenedione (estr-4-ene-3,17-dione);
Bolandioli (estr-4-ene-3 β ,17 β -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-17 α -ol);
Dehydrochlormethyltestosterone (4-chloro-17 β -hydroxy-17 α -methylandrosta-1,4-dien-3-one);
Desoxymethyltestosterone (17 α -methyl-5 α -androst-2-en-17 β -ol);
Drostanolone;
Ethylestrenol (19-norpregna-4-en-17 α -ol);
Fluoxymesterone;
Formebolone;
Furazabol (17 α -methyl [1,2,5]oxadiazolo[3',4':2,3]-5 α -androst-17 β -ol);

Gestrinone;
Mestanolone;
Mesterolone;
Metandienone (17 β -hydroxy-17 α -methylandrosta-1,4-dien-3-one);
Metenolone;
Methandriol;
Methasterone (17 β -hydroxy-2 α ,17 α -dimethyl-5 α -androst-3-one);
Methyldienolone (17 β -hydroxy-17 α -methylestra-4,9-dien-3-one);
Methyl-1-testosterone (17 β -hydroxy-17 α -methyl-5 α -androst-1-en-3-one);
Methylnortestosterone (17 β -hydroxy-17 α -methylestr-4-en-3-one);
Methyltestosterone;
Metribolone (methyltrienolone, 17 β -hydroxy-17 α -methylestra-4,9,11-trien-3-one);
Mibolerone;
Nandrolone;
Norboletone;
Norclostebol;
Norethandrolone;
Oxabolone;
Oxandrolone;
Oxymesterone;
Oxymetholone;
Prostanazol (17 β -[[tetrahydropyran-2-yl]oxy]-1'H-pyrazolo[3,4:2,3]-5 α -androstane);
Quinbolone;
Stanozolol;
Stenbolone;
Tetrahydrogestrinone (17-hydroxy-18 α -homo-19-nor-17 α -pregna-4,9,11-trien-3-one);
Trenbolone (17 β -hydroxyestr-4,9,11-trien-3-one);

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

b. Endogenous** AAS when administered exogenously:

Androstenediol (androst-5-ene-3 β ,17 β -diol);
Androstenedione (androst-4-ene-3,17-dione);
Dihydrotestosterone (17 β -hydroxy-5 α -androstan-3-one);
Prasterone (dehydroepiandrosterone, DHEA,
3 β -hydroxyandrost-5-en-17-one);
Testosterone;

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

3 β -Hydroxy-5 α -androstan-17-one;
5 α -Androstane-3 α ,17 α -diol;
5 α -Androstane-3 α ,17 β -diol;
5 α -Androstane-3 β ,17 α -diol;
5 α -Androstane-3 β ,17 β -diol;
5 β -Androstane-3 α ,17 β -diol;
7 α -Hydroxy-DHEA;
7 β -Hydroxy-DHEA;
4-Androstenediol (androst-4-ene-3 β , 17 β -diol)
5-Androstenedione (androst-5-ene-3,17-dione);
7-Keto-DHEA;
19-Norandrosterone;
19-Noretiocholanolone.
Androst-4-ene-3 α ,17 α -diol;
Androst-4-ene-3 α ,17 β -diol;
Androst-4-ene-3 β ,17 α -diol;
Androst-5-ene-3 α ,17 α -diol;
Androst-5-ene-3 α ,17 β -diol;
Androst-5-ene-3 β ,17 α -diol;
Androsterone
Epi-dihydrotestosterone;
Epitestosterone;
Etiocholanolone.

2. OTHER ANABOLIC AGENTS

Including, but not limited to:

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

For purposes of this section:

* "exogenous" refers to a substance which is not ordinarily produced by the body naturally.

** "endogenous" refers to a substance which is ordinarily produced by the body naturally.

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:

1. Erythropoietin-Receptor agonists:

- 1.1** Erythropoiesis-Stimulating Agents (ESAs) including e.g. Darbepoietin (dEPO); Erythropoietins (EPO); EPO-Fc; EPO-mimetic peptides (EMP), e.g. CNTO 530 and peginesatide; methoxy polyethylene glycol-epoetin beta (CERA).

- 1.2** Non-erythropoietic EPO-Receptor agonists, e.g. ARA-290; asialo EPO; 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 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; GH-Releasing Peptides (GHRPs), e.g. alexamorelin, GHRP-6, hexarelin and pralmorelin (GHRP-2).

Additional prohibited growth factors:

- F**ibroblast Growth Factors (FGFs);
- H**epatocyte Growth Factor (HGF);
- I**nsulin-like Growth Factor-1 (IGF-1) and its analogues;
- M**echano Growth Factors (MGFs);
- P**latelet-Derived Growth Factor (PDGF);
- V**ascular-Endothelial Growth Factor (VEGF)

and any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching.

S3 BETA-2 AGONISTS

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

Except:

- Inhaled salbutamol (maximum 1600 micrograms over 24 hours);
- Inhaled formoterol (maximum delivered dose 54 micrograms over 24 hours); and
- Inhaled salmeterol in accordance with the manufacturers' recommended therapeutic regimen.

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

S4 HORMONE AND METABOLIC MODULATORS

The following hormone and metabolic modulators are prohibited:

1. Aromatase inhibitors including, but not limited to:
 - 4-A**ndrostene-3,6,17 trione (6-oxo);
 - A**minoglutethimide;
 - Anastrozole;
 - Androsta-1,4,6-triene-3,17-dione (androstatrienedione);
 - E**xemestane;
 - F**ormestane;
 - L**etrozole;
 - T**estolactone.
2. Selective estrogen receptor modulators (SERMs) including, but not limited to:
 - R**aloxifene;
 - T**amoxifen;
 - Toremifene.
3. Other anti-estrogenic substances including, but not limited to:
 - C**lomiphene;
 - Cyclofenil;
 - F**ulvestrant.
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 (PPAR δ) agonists, e.g. GW 1516;
 - 5.2** Insulins and insulin-mimetics;
 - 5.3** Meldonium;
 - 5.4** Trimetazidine.

S5 DIURETICS AND 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. glycerol and intravenous administration of albumin, dextran, hydroxyethyl starch and mannitol.
- Acetazolamide; amiloride; bumetanide; canrenone; chlortalidone; etacrynic acid; furosemide; indapamide; metolazone; spironolactone; thiazides, e.g. bendroflumethiazide, chlorothiazide and hydrochlorothiazide; triamterene and vaptans, e.g. tolvaptan.

Except:

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

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

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 and microencapsulated haemoglobin 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

The following are prohibited:

1. *Tampering*, or *Attempting to Tamper*, to alter the integrity and validity of *Samples* collected during *Doping Control*.
Including, but 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 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.

SUBSTANCES & METHODS PROHIBITED IN-COMPETITION

IN ADDITION TO THE CATEGORIES S0 TO S5 AND M1 TO M3 DEFINED ABOVE, THE FOLLOWING CATEGORIES ARE PROHIBITED *IN-COMPETITION*:

PROHIBITED SUBSTANCES

S6 STIMULANTS

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

Stimulants include:

a: Non-Specified Stimulants:

Adrafinil;
Amfepramone;
Amfetamine;
Amfetaminil;
Amiphenazole;
Benfluorex;
Benzylpiperazine;
Bromantan;
Clobenzorex;
Cocaine;
Cropropamide;
Crotetamide;
Fencamine;
Fenetylline;
Fenfluramine;
Fenproporex;
Fonturacetam [4-phenylpiracetam (carphedon)];
Furfenorex;
Mefenorex;
Mephentermine;
Mesocarb;
Metamfetamine(d-);
p-Methylamphetamine;
Modafinil;
Norfenfluramine;
Phendimetrazine;
Phentermine;
Prenylamine;
Prolintane.

b: Specified Stimulants.

Including, but not limited to:

Benzfetamine;
Cathine**;
Cathinone and its analogues, e.g. mephedrone, methedrone, and α - pyrrolidinovalerophenone;
Dimethylamphetamine;
Ephedrine***;
Epinephrine**** (adrenaline);
Etamivan;
Etilamphetamine;
Etilefrine;
Famprofazone;
Fenbutrazate;
Fencamfamin;
Heptaminol;
Hydroxyamphetamine (parahydroxyamphetamine);
Isometheptene;
Levmetamphetamine;
Meclofenoxate;
Methylenedioxymethamphetamine;
Methylephedrine***;
Methylhexaneamine (dimethylpentylamine);
Methylphenidate;
Nikethamide;
Norfenefrine;
Octopamine;
Oxilofrine (methysynephrine);
Pemoline;
Pentetrazol;
Phenethylamine and its derivatives;
Phenmetrazine;
Phenpromethamine;
Propylhexedrine;
Pseudoephedrine*****;
Selegiline;

A stimulant not expressly listed in this section is a Specified Substance.

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 stimulants included in the 2016 Monitoring Program*.

* Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in the 2016 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.

**** Epinephrine (adrenaline): Not prohibited in local administration, e.g. nasal, ophthalmologic, or co-administration with local anaesthetic agents.

***** Pseudoephedrine: Prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

S7 NARCOTICS

Prohibited:

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

S8 CANNABINOIDS

Prohibited:

- Natural, e.g. cannabis, hashish and marijuana, or synthetic Δ^9 -tetrahydrocannabinol (THC).
- Cannabimimetics, e.g. "Spice", JWH-018, JWH-073, HU-210.

S9 GLUCOCORTICOIDS

All glucocorticoids are prohibited when administered by oral, intravenous, intramuscular or rectal routes.

SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

P1 ALCOHOL

Alcohol (ethanol) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold is equivalent to a blood alcohol concentration of 0.10 g/L.

- Air Sports (FAI)
- Archery (WA)
- Automobile (FIA)
- Powerboating (UIM)

P2 BETA-BLOCKERS

Beta-blockers are prohibited *In-Competition* only, in the following sports, and also prohibited *Out-of-Competition* where indicated.

- Archery (WA)*
- Automobile (FIA)
- Billiards (all disciplines) (WCBS)
- Darts (WDF)
- Golf (IGF)
- Shooting (ISSF, IPC)*
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air
- Underwater sports (CMAS) in constant-weight apnoea with or without fins, dynamic apnoea with and without fins, free immersion apnoea, Jump Blue apnoea, spearfishing, static apnoea, target shooting and variable weight apnoea.

*Also prohibited *Out-of-Competition*

Including, but not limited to:

A cebutolol;	L abetalol;
A lprenolol;	L evobunolol;
A tenolol;	M etipranolol;
B etaxolol;	M etoprolol;
B isoprolol;	N adolol;
B unolol;	O xprenolol;
C arteolol;	P indolol;
C arvedilol;	P ropranolol;
C eliprolol;	S otalol;
E smolol;	T imolol.

THE 2016 MONITORING PROGRAM*

The following substances are placed on the 2016 Monitoring Program:

1. **Stimulants:** ***In-Competition only:*** *Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol and synephrine.*
2. **Narcotics:** ***In-Competition only:*** *Mitragynine and tramadol.*
3. **Glucocorticoids:** ***In-competition*** *(by routes of administration other than oral, intravenous, intramuscular or rectal)* and ***Out-of-Competition*** *(all routes of administration)*
4. **Telmisartan:** ***In*** and ***Out-of-Competition***

* The *World Anti-Doping Code* (Article 4.5) states: "WADA, in consultation with Signatories and governments, shall establish a monitoring program regarding substances which are not on the Prohibited List, but which WADA wishes to monitor in order to detect patterns of misuse in sport."