



اللجنة السعودية للرقابة على المنشطات  
Saudi Arabian Anti-Doping Committee

# PROHIBITED LIST 2023



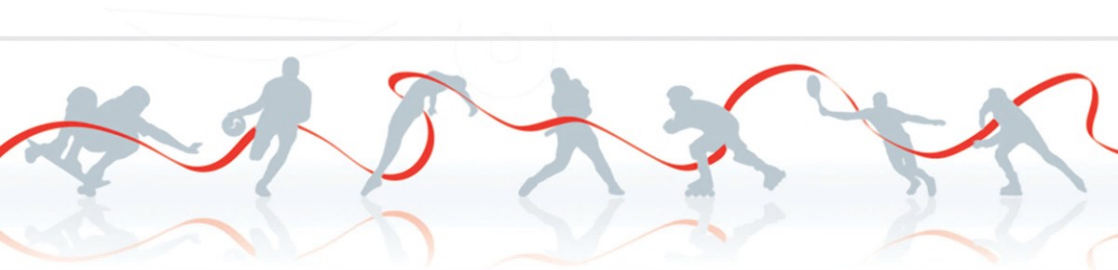
world  
anti-doping  
agency





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THE WORLD ANTI-DOPING CODE  
INTERNATIONAL  
STANDARD



**PROHIBITED LIST**

2023



This List shall come into effect on 1 January 2023.



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# PREFACE

The Saudi Arabian Anti-Doping Committee (SAADC), by translating, preparing and publishing this Prohibited List, helps providing Athlete and Athlete Support Personnel, with the required and important information about the prohibited substances and methods in sport. This kind of activity also falls within the domain of the Doping Control awareness which represents one of the main pillars of the Saudi Doping Control program.

The list of prohibited substances and methods is one of the international standards emanating from the World Anti-Doping Agency WADA.

It is very important for all staff of the sport community to be acquainted with some facts about the List in order to get the maximum benefits out of it. Such facts can be summarized as follows:

- 1- The list shall come into effect on 01/01/2023 until 31/12/2023.
- 2- All athlete and Athlete Support Personnel must refer to this list prior to using or prescribing any medications.
- 3- Names mentioned in the List refer to the scientific and chemical properties of pharmaceutical compounds which are different from the brand-names of medications in pharmacies, and dietary and food supplement-selling stores.
- 4- 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.
- 5- The translation and issuance of the 2023 WADA Prohibited List in Arabic by the Saudi Arabian Anti-Doping Committee shall enable sharing the List across countries of the region, which will enhance efforts of the WADA, the Public Authorities, and the Sport Movement to work together for the protection of clean athletes, and true play.

Our best wishes to all sport teams and clubs with success and for their contribution to a doping-free competition on a level playing field and maintaining the health of all athletes.

**Saudi Arabian Anti-Doping Committee**



## ▶ **World Anti-Doping Agency "WADA"**

The World Anti-Doping Agency is an independent international organization responsible for promoting, coordinating and monitoring the fight against doping in sport in all its aspects, pursuing doping-free sport. It was established on 10 November, 1999, based in Canada.

## ▶ **Saudi Arabian Anti-Doping Committee "SAADC"**

SAADC is a consultative, legislative and executive committee, attached to the Board of Directors of the Saudi Arabian National Olympic Committee. It is an independent distinct body with its own legal personality, in all anti-doping matters in the Kingdom of Saudi Arabia. It is the sole authority to represent Saudi Arabia in international anti-doping events. SAADC operates within the policies of Saudi Arabian National Olympic Committee under the supervision of the Ministry of Sport in Saudi Arabia. It was established in 2004.

## ▶ **WADA CODE**

The World Anti-Doping Code is the core document that harmonizes anti-doping policies, rules and regulations within sport organizations and among public authorities around the world. It works in conjunction with the other seven International Standards which aim to foster consistency among anti-doping organizations in various areas: Prohibited List, Testing and Investigation, Laboratories, Therapeutic Use Exemptions (TUEs), Protection of Privacy and Personal Information, Code Compliance by Signatories, Results Management, and Education.

To date, more than 700 sport organizations have adopted the World Anti-Doping Code. Code acceptance means that a sport organization agrees to the principles of the Code and agrees to implement and comply with the Code. The implementation of the Code is the process that an anti-doping organization goes through to amend its rules and policies so that all mandatory articles and principles of the Code are included. WADA monitors implementation of and compliance with the Code.

The Code was first published by the World Anti-Doping Agency in 2003. Prior to 2003, there was no one standardized set of rules for all sports and countries.



## ▶ **"Prohibited List" International Standard**

List of prohibited substances and methods (the Prohibited List) is one of the eight international standards that determines what are the materials and methods prohibited in both IN and OUT of competition. It also refers to the list of prohibited substances in particular sports. The prohibited substances and methods on the List are classified by different classes (e.g., steroids, stimulants, gene doping). The list is updated annually.

## ▶ **Annual List Review Process**

WADA leads an annual revision process concerning the List, beginning with an initial meeting in January and concluding with the publication of the List by 1 October. This is an extensive consultation process that includes WADA's List Expert Advisory Group gathering information including the latest scientific and medical research, trends, and intelligence gathered from law enforcement and pharmaceutical companies; circulating a draft List among stakeholders; and, taking their submissions into consideration to revise the draft, followed by review by the Agency's Health, Medical and Research (HMR) Committee. The HMR Committee then makes its recommendations to WADA's ExCo, which approves the List during its September meeting.

For a substance or method to be added to the List, it must be determined that it meets at least two of the following three criteria:

1. It has the potential to enhance or enhances sport performance
2. It represents an actual or potential health risk to the athletes
3. It violates the spirit of sport

The List is released three months ahead of it taking effect so that athletes, their entourage and other stakeholders can acquaint themselves with any modifications. Ultimately, athletes are responsible for prohibited substances found in their body and prohibited methods found to have been used. Athlete entourage are also liable for Anti-Doping Rule Violations if determined to be complicit. Consequently, if there is any doubt as to the status of a substance or method, it is important that they contact their respective Anti-Doping Organizations (International Federation or National Anti-Doping Organization) for advice.

## ▶ **The Saudi Anti-Doping Program:**

The Saudi Anti-doping program seeks to preserve what is intrinsically valuable about sport. This intrinsic value is often referred to as "the spirit of sport"; it is the essence of Olympism; it is how we play true. The spirit of sport is the celebration of the human spirit, body and mind, and is characterized by the following values:

- Ethics, fair play and honesty
- Health
- Excellence in performance
- Character and education
- Fun and joy
- Teamwork
- Dedication and commitment
- Respect for rules and laws
- Respect for self and other Participants
- Courage
- Community and solidarity

Doping is fundamentally contrary to the spirit of sport.

The Saudi Arabian National anti-doping Program is conducted according to the following main items:

- Education, Training and Research.
- Therapeutic Use Exemption.
- Testing.
- Result Management.
- Sanctions.
- Appeals.

## Scope

These Anti-Doping Rules shall apply to the following:

- Saudi Arabian Olympics Committee
- Saudi Arabian Anti-Doping Committee (SAADC)
- Saudi Arabian Sports Federations and Organizations
- All participants in programs and activities supervised by Saudi Sports Federations and Organizations.

Any Person who is not a member of a Saudi Arabian National Federation and who fulfills the requirements to be part of SAADC Registered Testing Pool, must become a member of the Person's National Federation, and shall make himself or herself available for Testing, at least twelve months before participating in International Events or Events of his or her National Federation.

Athletes and Athlete Support Personnel are also bound by SAADC anti-doping rules. Each Saudi Sports Federation shall take the necessary steps to ensure that all Athletes and Athlete Support Personnel within its authority and all affiliated associations are informed and bound by these rules.

These Anti-Doping Rules shall apply to all Doping Controls over which SAADC has jurisdiction.





## ▶ ANTI-DOPING RULE VIOLATIONS

Doping is defined as the occurrence of one or more of the anti-doping rule violations shown below (athlete and other persons should be responsible for knowing what constitutes a violation of anti-doping rules, and the prohibited substances and methods):

- 1- Presence of a Prohibited Substance or its Metabolites or Markers in an Athlete's sample.
- 2- Use or Attempted Use by an Athlete of a Prohibited Substance or a Prohibited Method.
- 3- Evading, refusing or failing to submit to Sample collection.
- 4- Whereabouts Failures by an Athlete.
- 5- Tampering or Attempted Tampering with any part of Doping Control by an Athlete or Other Person.
- 6- Possession of a Prohibited Substance or a Prohibited Method by an Athlete or Athlete Support Person.
- 7- Trafficking or Attempted Trafficking in any Prohibited Substance or Prohibited Method by an Athlete or Other Person.
- 8- Administration or Attempted Administration by an Athlete or Other Person to any Athlete In-Competition of any Prohibited Substance or Prohibited Method, or Administration or Attempted Administration to any Athlete Out-of-Competition of any Prohibited Substance or any Prohibited Method that is Prohibited Out-of-Competition.
- 9- Complicity or Attempted Complicity by an Athlete or Other Person
- 10- Prohibited Association by an Athlete or Other Person.
- 11- Acts by an Athlete or Other Person to Discourage or Retaliate Against Reporting to Authorities.

It is the Athletes' personal duty to ensure that no Prohibited Substance enters their bodies.



## ▶ Therapeutic Use exemption "TUE":

Many athletes suffer from medical issues, which require them to ingest different types of drugs. Such drugs may contain prohibited substances which, upon using prior or during the In and Out-of-competition, may lead to one of the anti-doping violations. For this purpose, a Therapeutic Use Exemption Committee "TUEC" had been established. It is a Sub-Committee of the Saudi Arabian Anti-Doping Committee, the role of which is to review applications from athletes in various sports and to allow or deny the athlete's use of such therapeutic material In and Out-of-Competitions.

## ▶ Application Submission:

TUE applications should be submitted to the Therapeutic Use Exemption Committee "TUEC", after filling up the required forms (from SAADC's website: [WWW.SAADC.COM](http://WWW.SAADC.COM)), along with an explanation of the pathological condition, indications and justifications for the request of the exemption.

- 1- By hand to SAADC's headquarters –3rd Floor, Prince Faisal bin Fahd Olympic Complex - Riyadh, or
- 2 - Email to: [tuec@saadc.org](mailto:tuec@saadc.org), or
- 3 - Fax to: **011-4831279**





# THE 2023 PROHIBITED LIST WORLD ANTI-DOPING CODE

VALID 1 JANUARY 2023



## Introduction

The Prohibited List is a mandatory International Standard as part of the World Anti-Doping Program.

The List is updated annually following an extensive consultation process facilitated by WADA. The effective date of the List is 01 January 2023.

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.

Below are some terms used in this List of Prohibited Substances and Prohibited Methods.

## Prohibited In-Competition

Subject to a different period having been approved by WADA for a given sport, the In-Competition period shall in principle be the period commencing just before midnight (at 11:59 p.m.) on the day before a Competition in which the Athlete is scheduled to participate until the end of the Competition and the Sample collection process.


## Prohibited at all times

This means that the substance or method is prohibited In- and Out-of-Competition as defined in the Code.

## Specified and non-Specified

As per Article 4.2.2 of the World Anti-Doping Code, “for purposes of the application of Article 10, all Prohibited Substances shall be Specified Substances except as identified on the Prohibited List. No Prohibited Method shall be a Specified Method unless it is specifically identified as a Specified





Method on the Prohibited List”. As per the comment to the article, “the Specified Substances and Methods identified in Article 4.2.2 should not in any way be considered less important or less dangerous than other doping substances or methods. Rather, they are simply substances and methods which are more likely to have been consumed or used by an Athlete for a purpose other than the enhancement of sport performance.”

## **Substances of Abuse**

Pursuant to Article 4.2.3 of the Code, Substances of Abuse are substances that are identified as such because they are frequently abused in society outside of the context of sport. The following are designated Substances of Abuse: cocaine, diamorphine (heroin), methylenedioxymethamphetamine (MDMA/“ecstasy”), tetrahydrocannabinol (THC).

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## **S0** NON-APPROVED SUBSTANCES

### **PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)**

All prohibited substances in this class are Specified 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.

This class covers many different substances including but not limited to BPC-157.

## **S1** ANABOLIC AGENTS

### **PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)**

All prohibited substances in this class are non-Specified Substances.

Anabolic agents are prohibited.

#### **1. ANABOLIC ANDROGENIC STEROIDS (AAS)**

When administered exogenously, including but not limited to:

- 1-Androstenediol (5 $\alpha$ -androst-1-ene-3 $\beta$ ,17 $\beta$ -diol)
- 1-Androstenedione (5 $\alpha$ -androst-1-ene-3,17-dione)
- 1-Androsterone (3 $\alpha$ -hydroxy-5 $\alpha$ -androst-1-ene-17-one)
- 1-Epiandrosterone (3 $\beta$ -hydroxy-5 $\alpha$ -androst-1-ene-17-one)
- 1-Testosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androst-1-en-3-one)
- 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
- 17 $\alpha$ -methylpithiostanol (epistane)
- 19-Norandrostenediol (estr-4-ene-3,17-diol)
- 19-Norandrostenedione (estr-4-ene-3,17-dione)
- Androst-4-ene-3,11,17-trione (11-ketoandrostenedione, andrenosterone)
- Androstanolone (5 $\alpha$ -dihydrotestosterone,17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one)
- Androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol)

- Androstenedione (androst-4-ene-3,17-dione)
- 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-17a-ol)
- Dehydrochlormethyltestosterone (4-chloro-17 $\beta$ -hydroxy-17a-methylandrosta-1,4-dien-3-one)
- Desoxymethyltestosterone (17a-methyl-5a-androst-2-en-17 $\beta$ -ol and 17a-methyl-5a-androst-3-en-17 $\beta$ -ol)
- Drostanolone
- Epiandrosterone (3 $\beta$ -hydroxy-5a-androstan-17-one)
- Epi-dihydrotestosterone (17 $\beta$ -hydroxy-5 $\beta$ -androstan-3-one)
- Epitestosterone
- Ethylestrenol (19-norpregna-4-en-17a-ol)
- Fluoxymesterone
- Formebolone
- Furazabol (17a-methyl [1,2,5]oxadiazolo[3',4':2,3]-5a-androstan-17 $\beta$ -ol)
- Gestrinone
- Mestanolone
- Mesterolone
- Metandienone (17 $\beta$ -hydroxy-17a-methylandrosta-1,4-dien-3-one)
- Metenolone
- Methandriol
- Methasterone (17 $\beta$ -hydroxy-2a,17a-dimethyl-5a-androstan-3-one)
- Methyl-1-testosterone (17 $\beta$ -hydroxy-17a-methyl-5a-androst-1-en-3-one)
- Methylclostebol
- Methyldienolone (17 $\beta$ -hydroxy-17a-methylestra-4,9-dien-3-one)
- Methylnortestosterone (17 $\beta$ -hydroxy-17a-methylestr-4-en-3-one)
- Methyltestosterone
- Metribolone (methyltrienolone, 17 $\beta$ -hydroxy-17a-methylestra-4,9,11-trien-3-one)
- Mibolerone
- Nandrolone (19-nortestosterone)
- Norboletone
- Norclostebol (4-chloro-17 $\beta$ -ol-estr-4-en-3-one)
- Norethandrolone
- Oxabolone
- Oxandrolone
- Oxymesterone
- Oxymetholone
- Prasterone (dehydroepiandrosterone, DHEA, 3 $\beta$ -hydroxyandrost-5-en-17-one)

- Prostanazol (17 $\beta$ -[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5a-androstane)
- Quinbolone
- Stanozolol
- Stenbolone
- Testosterone
- Tetrahydrogestrinone (17-hydroxy-18a-homo-19-nor-17a-pregna-4,9,11-trien-3-one)
- Tibolone
- Trenbolone (17 $\beta$ -hydroxyestr-4,9,11-trien-3-one)

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

## 2. OTHER ANABOLIC AGENTS

Including, but not limited to:

- Clenbuterol
- Osilodrostat
- Ractopamine
- Selective androgen receptor modulators (SARMs, e.g. andarine, enobosarm (ostarine), , LGD-4033 (ligandrol), and RAD140, S-23 and YK-11)
- Zeranol
- Zilpaterol

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

### PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

All prohibited substances in this class are non-Specified Substances.


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

### 1. ERYTHROPOIETINS (EPO) AND AGENTS AFFECTING ERYTHROPOIESIS

Including, but not limited to:

- 1.1 Erythropoietin-Receptor Agonists, e.g.
  - darbepoietins (dEPO)
  - erythropoietins (EPO)
  - EPO-based constructs [e.g. 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
    - daprodustat (GSK1278863)
    - IOX2
    - molidustat (BAY 85-3934)
    - roxadustat (FG-4592)
    - vadadustat (AKB-6548)
    - xenon.
  - 1.3 GATA inhibitors, e.g.
    - K-11706.
  - 1.4 Transforming growth factor beta (TGF- $\beta$ ) signalling inhibitors, e.g.
    - luspatercept; 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 in males, e.g. buserelin, deslorelin, gonadorelin, goserelin, leuprorelin, nafarelin and triptorelin.
- 2.2 Corticotrophins and their releasing factors, e.g. corticorelin.
- 2.3 Growth hormone (GH), its analogues and fragments including, but not limited to:
  - growth hormone analogues, e.g. lonapegsomatropin, somapacitan and somatrogen
  - growth hormone fragments, e.g. AOD-9604 and hGH 176-191
- 2.4 Growth hormone releasing factors, including, but not limited to:
  - growth hormone-releasing hormone (GHRH) and its analogues (e.g. CJC-1293, CJC-1295, sermorelin and tesamorelin)
  - growth hormone secretagogues (GHS) and its mimetics [e.g. lenomorelin (ghrelin), anamorelin, ipamorelin, macimorelin 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- $\beta$ 4 and its derivatives e.g. TB-500
- Vascular-endothelial growth factor (VEGF)

and other 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

#### PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

All prohibited substances in this class are Specified Substances.

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

- Arformoterol
- Fenoterol
- Formoterol
- Higenamine
- Indacaterol
- Levosalbutamol
- Olodaterol
- Procaterol
- Reproterol
- Salbutamol
- Salmeterol
- Terbutaline
- Tretioquinol (trimetoquinol)
- Tulobuterol
- Vilanterol

## EXCEPTIONS

- Inhaled salbutamol: maximum 1600 micrograms over 24 hours in divided doses not to exceed 600 micrograms over 8 hours starting from any dose;
- Inhaled formoterol: maximum delivered dose of 54 micrograms over 24 hours;
- Inhaled salmeterol: maximum 200 micrograms over 24 hours;
- Inhaled vilanterol: maximum 25 micrograms over 24 hours.

## NOTE

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 40 ng/mL is not consistent with 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 a therapeutic dose (by inhalation) up to the maximum dose indicated above.

## S4 HORMONE AND METABOLIC MODULATORS

### PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

Prohibited substances in classes S4.1 and S4.2 are Specified Substances. Those in classes S4.3 and S4.4 are non-Specified Substances

The following hormone and metabolic modulators are prohibited:

### 4.1 AROMATASE INHIBITORS

Including, but not limited to:

- 2-Androstenol (5 $\alpha$ -androst-2-en-17-ol)
- 2-Androstenone (5 $\alpha$ -androst-2-en-17-ol)
- 3-Androstenol (5 $\alpha$ -androst-3-en-17-ol)
- 3-Androstenone (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



## 4.2 ANTI-ESTROGENIC SUBSTANCES [ANTI-ESTROGENS AND SELECTIVE ESTROGEN RECEPTOR MODULATORS (SERMS)]

Including, but limited to:

- Bazedoxifene
- Clomifene
- Cyclofenil
- Fulvestrant
- Ospemifene
- Raloxifene
- Tamoxifen
- Toremifene

## 4.3 AGENTS PREVENTING ACTIVIN RECEPTOR IIB ACTIVATION

Including, but not limited to:

- Activin A-neutralizing antibodies
- Activin receptor IIB competitors such as:
  - Decoy activin receptors (e.g. ACE-031)
- Anti-activin receptor IIB antibodies (e.g. bimagrumab)
- Myostatin inhibitors such as:
  - Agents reducing or ablating myostatin expression
  - Myostatin-binding proteins (e.g. follistatin, myostatin propeptide)
  - Myostatin- or precursor-neutralizing antibodies (e.g. apitegromab, domagrozumab, landogrozumab, stamulumab).

## 4.4 METABOLIC MODULATORS

- 4.4.1 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)methylthio)phenoxy) acetic acid (GW1516, GW501516)
- 4.4.2 Insulins and insulin-mimetics
- 4.4.3 Meldonium
- 4.4.4 Trimetazidine

## S5 DIURETICS AND MASKING AGENTS

### PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

Prohibited substances in this class are Specified Substances.

All diuretics and masking agents, including all optical isomers, e.g. d- and l- where relevant, are prohibited.

Including, but not limited to:

- Desmopressin; probenecid; plasma expanders, e.g. 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; torasemide; triamterene and vaptans, e.g. tolvaptan.

and other substances with a similar chemical structure or similar biological effects.

### EXCEPTIONS

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

### NOTE

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 (**except topical ophthalmic administration of a carbonic anhydrase inhibitor or local administration of felypressin in dental anaesthesia**), will be considered as an Adverse Analytical Finding (AAF) unless the Athlete has an approved Therapeutic Use Exemption (TUE) for that substance in addition to the one granted for the diuretic or masking agent.



# PROHIBITED METHODS

## PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

All prohibited methods in this class are non-Specified except methods in M2.2. which are Specified 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); voxelator and modified haemoglobin products, e.g. haemoglobin-based blood substitutes and 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, to alter the integrity and validity of Samples collected during Doping Control. Including, but not limited to:  
Sample substitution and/or adulteration, e.g. addition of proteases to Sample.
2. Intravenous infusions and/or injections of more than a total of 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 AND CELL 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.



## S6 STIMULANTS

### PROHIBITED IN-COMPETITION

All prohibited substances in this class are Specified Substances except those in S6.A, which are non-Specified Substances.

Substances of Abuse in this section: cocaine and methylenedioxyamphetamin (MDMA /"ecstasy")

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
- Lisdexamfetamine
- Mefenorex
- Mephentermine
- Mesocarb
- Metamfetamine(d-)
- p-methylamphetamine
- Modafinil
- Norfenfluramine
- Phendimetrazine
- Phentermine
- Prenylamine
- Prolintane

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

#### B: Specified Stimulants

Including, but not limited to:

- 3-Methylhexan-2-amine (1,2-dimethylpentylamine)
- 4-fluoromethylphenidate
- 4-Methylhexan-2-amine(methylhexaneamine, 1,3-dimethylamylamine, 1,3 DMAA)
- 4-Methylpentan-2-amine(1,3-dimethylbutylamine)
- 5-Methylhexan-2-amine(1,4-dimethylpentylamine, 1,4-dimethylamylamine, 1,4-DMAA)
- Benzfetamine
- Cathine\*\*





- Cathinone and its analogues, e.g. mephedrone, methedrone, and  $\alpha$ -pyrrolidinovalerophenone
  - Dimetamfetamine (dimethylamfetamine)
  - Ephedrine\*\*\*
  - Epinephrine\*\*\*\* (adrenaline)
  - Etamivan
  - Ethylphenidate
  - Etilamfetamine
  - Etilefrine
  - Famprofazone
  - Fenbutrazate
  - Fencamfamin
  - Heptaminol
  - Hydrafinitil (fluorenol)
  - Hydroxyamfetamine (parahydroxyamfetamine)
  - Isometheptene
  - Levmetamfetamine
  - Meclofenoxate
  - Methylenedioxyamfetamine
  - Methylephedrine\*\*\*
  - Methylnaphthidate[ $((\pm)$ -methyl-2-(naphthalen-2-yl)-2-(piperidin-2-yl)acetate)]
  - Methylphenidate
  - Nikethamide
  - Norfenefrine
  - Octodrine (1,5-dimethylhexylamine)
  - Octopamine
  - Oxilofrine (methylsynephrine)
  - Pemoline
  - Pentetrazol
  - Phenethylamine and its derivatives
  - Phenmetrazine
  - Phenpromethamine
  - Propylhexedrine
  - Pseudoephedrine\*\*\*\*\*
  - Selegiline
  - Sibutramine
  - Solriamfetol
  - Strychnine
  - Tenamfetamine (methylenedioxyamfetamine)
  - Tuaminoheptane
- and other substances with a similar chemical structure or similar biological effect(s).





## EXCEPTIONS

- Clonidine
- Imidazole derivatives for dermatological, nasal or ophthalmic or otic use (e.g. brimonidine, clonazoline, fenoxazoline, indanazoline, naphazoline, oxymetazoline, tetryzoline, xylometazoline) and those stimulants included in the 2023 Monitoring Program\*.

\* Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, piperidol, and synephrine: These substances are included in the 2023 Monitoring Program, and are not considered Prohibited Substances.

\*\* Cathine (d-norpseudoephedrine) and its l-isomer: 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 IN-COMPETITION

All prohibited substances in this class are Specified Substances.

Substances of Abuse in this section: diamorphine (heroin)

The following narcotics, including all optical isomers, e.g. d- and l- where relevant, are prohibited:

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



## S8 CANNABINOIDS

### PROHIBITED IN-COMPETITION

All prohibited substances in this class are Specified Substances.  
Substances of Abuse in this section: tetrahydrocannabinol (THC)

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

### EXCEPTIONS

- Cannabidiol.

## S9 GLUCOCORTICOIDS

### PROHIBITED IN-COMPETITION

All prohibited substances in this class are Specified Substances.

All glucocorticoids are prohibited when administered by any injectable, oral [including oromucosal (e.g. buccal, gingival, sublingual)] or rectal route. Including but not limited to:

- |                 |                      |                            |
|-----------------|----------------------|----------------------------|
| • Beclometasone | • Dexamethasone      | • Mometasone               |
| • Betamethasone | • Flucortolone       | • Prednisolone             |
| • Budesonide    | • Flunisolide        | • Prednisone               |
| • Ciclesonide   | • Fluticasone        | • Triamcinolone acetoneide |
| • Cortisone     | • Hydrocortisone     |                            |
| • Deflazacort   | • Methylprednisolone |                            |

### NOTE

Other routes of administration (including inhaled, and topical: dental-intracanal, dermal, intranasal, ophthalmological, otic and perianal) are not prohibited when used within the manufacturer's licensed doses and therapeutic indications.

## P1 BETA-BLOCKERS

### PROHIBITED IN PARTICULAR SPORTS

All prohibited substances in this class are Specified Substances.

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)  |
| • Mini-Golf (WMF)   |
| • Shooting (ISSF, IPC)*   |
| • Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air |
| • Underwater sports (CMAS)* in all subdisciplines of freediving, spearfishing and target shooting     |

\* Also prohibited Out-of-Competition

Including, but not limited to:

|              |              |                |               |
|--------------|--------------|----------------|---------------|
| • Acebutolol | • Bunolol    | • Labetalol    | • Oxprenolol  |
| • Alprenolol | • Carteolol  | • Metipranolol | • Pindolol    |
| • Atenolol   | • Carvedilol | • Metoprolol   | • Propranolol |
| • Betaxolol  | • Celiprolol | • Nadolol      | • Sotalol     |
| • Bisoprolol | • Esmolol    | • Nebivolol    | • Timolol     |

[www.wada-ama.org](http://www.wada-ama.org)

# SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES

## 2023 PROHIBITED LIST

### SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

## PROHIBITED SUBSTANCES

### S1. Anabolic Agents

- Androst-4-ene-3,11,17-trione (11-ketoandrostenedione, adrenosterone) is now listed as an example. In the body, it is converted to 11-ketotestosterone and both are androgens already prohibited as metabolites of androstenedione and testosterone, respectively.
- The substance 17 $\alpha$ -methylpithiostanol (commonly referred to as epistane) is the 17-methylated analog to thiodrol (Shionogi, Japan) and converts in vivo to the prohibited anabolic agent desoxymethyltestosterone. Hence, per definition, 17 $\alpha$ -methylpithiostanol is also prohibited under S1. In order to unequivocally document the prohibited status of 17 $\alpha$ -methylpithiostanol, the substance was added as an additional example.
- Ractopamine, a beta-adrenergic agonist approved in some countries as a growth promoter for animals, was added to the list of examples under S1.2.
- S-23 and YK-11 were listed as examples of SARMs in S1.2.

### S4. Hormones and Metabolic Modulators

- S4.3 was updated to include antibodies of precursors of myostatin and as example, apitegromab was added.
- The numbering was reformatted for clarity but there was no change in classification.



## SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES



### S5. Diuretics and Masking Agents

- The introductory language of the section was revised to harmonize with other sections of the List.
- Torasemide is added as an example of a diuretic and is already named in a WADA Technical Document (TD MRPL) and a WADA Technical Letter (TL24).
- It was clarified that a Therapeutic Use Exemption is not required for topical ophthalmic administration of a carbonic anhydrase inhibitor (e.g. dorzolamide, brinzolamine) or for local administration of felypressin in dental anesthesia in conjunction with a threshold substance.

## PROHIBITED Methods

### M1. Manipulation of Blood and Blood Components

- Voxelotor was added as an example, as it alters the ability of hemoglobin to release oxygen in the body, thereby enhancing arterial oxygen saturation. As a side effect, it increases serum erythropoietin, which has been shown to result in higher hemoglobin concentration in healthy individuals.

## SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

## PROHIBITED SUBSTANCES

### S6. Stimulants

- 1,3-dimethylamylamine and 1,3 DMAA were added as alternative common names for 4-methylhexan-2-amine, while 1,4-dimethylamylamine and 1,4-DMAA were included as synonyms of 5-methylhexan-2-amine.
- Solriamfetol was included in S6-b due to its activity as a dopamine and norepinephrine reuptake inhibitor resulting in increases in brain levels of these neurotransmitters and consequent stimulant behavioral effects in preclinical species and in humans.
- Tetryzoline was added as an imidazoline derivative under Exceptions. In addition, it is clarified that otic administration of imidazoline derivatives is not prohibited.



# SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES



## S7. Narcotics

- Tramadol has been on the WADA Monitoring Program for some years. Monitoring data has indicated significant Use in sports including cycling, rugby and football. Tramadol abuse, with its dose-dependent risks of physical dependence, opiate addiction and overdoses in the general population, is of concern and has led to it being a controlled drug in many countries. Research studies funded by WADA<sup>1</sup> have confirmed the potential for tramadol to enhance physical performance in sports. Consequently, as proposed in the draft 2023 Prohibited List circulated for consultation to stakeholders in May 2022, WADA's Executive Committee approved, at its 23 September 2022 meeting, prohibiting tramadol during the In-Competition period. However, in order to thoroughly and widely communicate the rule changes and to allow sufficient time for information and education, the Executive Committee decided to introduce the prohibition of tramadol and the implementation of the new rule on 1 January 2024. A one-year delay in implementation will allow Athletes and medical personnel to better prepare for the change, Laboratories to update their procedures, and sports authorities to develop educational tools.

## S9. Glucocorticoids

- It was clarified that otic administration of glucocorticoids is not prohibited.

1- a) Holgado D, Zandonai T, Zabala M, Hopker J, Perakakis P, Luque-Casado A, Ciria L, Guerra-Hernandez E, Sanabria D. Tramadol effects on physical performance and sustained attention during a 20-min indoor cycling time-trial: A randomised controlled trial. *J Sci Med Sport*. 2018 Jul;21(7):654-660. b) Mauger L, Thomas T, Smith S, Fennell C. (2022). Is tramadol a performance enhancing drug? A randomised controlled trial. British Association of Sport and Exercise Medicine Conference, 26-27 May 2022, Brighton, UK. [https://basem.co.uk/wp-content/uploads/2022/08/Mauger\\_BASEM-Abstract.pdf](https://basem.co.uk/wp-content/uploads/2022/08/Mauger_BASEM-Abstract.pdf) <https://www.wada-ama.org/en/resources/funded-scientific-research/tramadol-performance-enhancing-drug>.



## SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES



### SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

#### P1. Beta-Blockers

- At the request of the World Mini-Golf Federation (WMF), it was agreed to include minigolf as a sport where beta-blockers are prohibited. The skills required for mini-golf are similar to others found in sports disciplines where beta-blockers are prohibited.
- At the request of the World Under Water Federation (CMAS) beta-blockers will be prohibited Out-of-competition as well as In-competition in all subdisciplines of freediving, spearfishing and target shooting.

# SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES



## MONITORING PROGRAM

- Dermorphin and its analogs were added to detect patterns of use in sport In-competition.
- GnRH analogs in females under 18 years were added to detect patterns of use in sport In- and Out-of-competition.
- Hypoxen (polyhydroxyphenylene thiosulfonate sodium) was added to evaluate misuse in sport In- and Out-of-competition.

\* For further information on previous modifications and clarifications, please consult the Prohibited List Frequently Asked Questions at <https://www.wada-ama.org/en/prohibited-list#faq-anchor>.

# SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES



## ADDENDUM

### S8 CANNABINOIDS

#### Background

- Following receipt of requests from a small number of stakeholders to remove (three national anti-doping organizations and one sports federation) or review (two anti-doping organizations) the prohibited In-competition status of cannabis from the Prohibited List, the WADA Executive Committee endorsed, during its meeting of September 2021, a recommendation of the WADA List Expert Advisory Group (LiEAG) to initiate a scientific review of the status of cannabis in 2022.
- At present, the main psychoactive component of cannabis, delta9-tetrahydrocannabinol (THC), is prohibited In-competition and is reported as an Adverse Analytical Finding (AAF) by WADA-accredited laboratories when the urinary concentration- of carboxyTHC exceeds a threshold of 150 ng/mL with a Decision Limit of 180 ng/mL. This threshold was significantly increased in 2013 from 15 ng/mL in order to minimize the number of AAFs In-competition due to potential Use of THC Out-of-competition. This means that with the current threshold, Athletes most at risk of testing positive are those who have consumed significant quantities of THC close to In-competition Doping Control or are chronic users.
- The 2021 World Anti-Doping Code (Code) incorporated the new Article 4.2.3 on Substances of Abuse for purposes of sanctioning under Code Article 10. Substances of Abuse are specifically identified on the Prohibited List because they are frequently abused in society outside of the context of sport. In this regard, the LiEAG identified THC as a Substance of Abuse for the 2021 Prohibited List, meaning that if the Athlete can establish that the THC use occurred Out-of-Competition and was unrelated to sport performance, the standard period of Ineligibility is three months, which may be reduced to one month if the Athlete satisfactorily completes an approved Substance of Abuse treatment program. While it is too early to evaluate the full impact of this new rule on sanctions for THC, preliminary data from 2021 indicates an increase in one- and threemonth sanctions, suggesting that this provision is being applied.

## SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES



- Under the World Anti-Doping Program, the approach to cannabis on the Prohibited List has therefore evolved chronologically as follows:  
2013: The urinary threshold increased from 15 ng/mL to 150 ng/mL with a Decision Limit of 180 ng/ml. This significantly affected the number of AAFs, from an average of between 400-500 per annum in the years 2009-2012 to fewer than 100 in 2021.  
2018: Cannabidiol (CBD) was removed from the Prohibited List, allowing Athletes who wish to use it to have access to the non-psychoactive component of cannabis.  
2021: The inclusion of the Substance of Abuse provision in the Code significantly reduced the length of Ineligibility sanctions from a potential two (or even four) years previously to three (or even one) month(s) today for Athletes that can establish that the THC use occurred Out-of-Competition and was unrelated to sport performance. Under Article 9 of the Code, the Athlete will still lose their medal, prize and result.

### The Review Process:

- Since September 2021, the LiEAG, which is composed of external, international experts in pharmacology, forensic toxicology, drugs of abuse, analytical science, pharmacy, sports medicine, chemistry, endocrinology, internal medicine, regulatory affairs, peptides and growth factors and hematology embarked on a full de novo review of the status of delta9-tetrahydrocannabinol (THC) in sport. This extensive review focused on the three criteria set forth by Article 4.3 of the 2021 Code, namely:
  - a. Medical or other scientific evidence, pharmacological effect or experience that the substance or method, alone or in combination with other substances or methods, has the potential to enhance or enhances sport performance;
  - b. Medical or other scientific evidence, pharmacological effects or experience that the Use of the substance or method represents an actual or potential health risk to the Athlete;
  - c. WADA's determination that the Use of the substance or method contravenes the spirit of sport described in the introduction to the Code.



## SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES

- Under Code Article 4.3, a substance or method must meet at least two of these three criteria to be considered for inclusion in the Prohibited List.
- Two subgroups of members of the LiEAG were formed, one to evaluate the effects of THC on performance enhancement (LiEAG-PE) and the other to assess the health risks (LiEAG-H). All existing scientific and medical publications related to these two topics were reviewed, as well as testimonials from Athletes who were/are cannabis users, available publicly, including in published surveys.
- This scientific literature review was subsequently discussed with four world-renowned independent, external international experts (Ad-Hoc THC Expert Group) specialized in the pharmacology, toxicology, psychiatry and behavioral properties of THC and cannabinoids, to ensure that all relevant publications had been included and that all relevant scientific and medical aspects had been appropriately evaluated. The experts confirmed that the information review had been extensive and that all relevant data and aspects of the impact of THC on health and performance enhancement had been properly examined.
- With respect to the Spirit of Sport criterion, the LiEAG Chair consulted with the WADA Ethics Expert Advisory Group (Ethics EAG). The Ethics EAG considered cannabis Use, at this time, to be against the Spirit of Sport across a cluster of areas listed in the Code, in particular:
  - Health
  - Excellence in Performance
  - Character and Education
  - Respect for rules and laws
  - Respect for self and other participants

### **They also noted that:**

- Further research should be undertaken or supported in relation to Athletes' perceptions of cannabis Use but also in relation to its potential (including placebo-induced) enhancing effects. These are areas of uncertainty owing to a lack of robust evidence.
- Levels to trigger an Anti-Doping Rule Violation In-competition are such that they would be problematic on medical grounds for a competing Athlete, or

## SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES

indicative of a chronic habitual user. The present rule is not, as sometimes perceived or represented, an excessive incursion into private lifestyles. Nevertheless, and mindful of shifting public attitudes and laws in certain countries, the weight of evidence and argument, along with broad international restrictive regulatory laws and policies, supports the continuance of cannabis on the Prohibited List at this time.

- The LiEAG Chair also consulted with the members of the WADA Athlete Committee to seek their opinions on the Use of cannabis in sport. The meeting reflected the range of opinions and views of the Athlete community.
- In total, there were 10 consultative meetings held prior to the latest meeting of the LiEAG on 25-26 April 2022:
  - three by the LiEAG-PE
  - two by the LiEAG-H
  - one between the LiEAG Chair and the Athlete Committee Chair
  - one between the LiEAG Chair and the Athlete Committee
  - one between the LiEAG Chair and the Ethics EAG
  - one between the Ad-Hoc THC Expert Group and the LiEAG-PE
  - one between the Ad-Hoc THC Expert Group and the LiEAG-H

### Conclusions:

After a thorough assessment and discussion under WADA Code Article 4.3, the LiEAG concluded that:

- a. There is compelling medical evidence that Use of THC is a risk for health, mainly neurological, that has a significant impact on the health of young individuals, a cohort which is overrepresented in Athletes.
- b. The current body of objective evidence does not support THC enhancement of physiological performance, while the potential for performance enhancement through neuropsychological effects still cannot be excluded.
- c. In consideration of the values encompassed by the Spirit of Sport as outlined by the Ethics EAG, and noting in particular that respect for self and other participants includes the safety of fellow-competitors, the Use of THC In-competition violates the Spirit of Sport.

Based on these three criteria defined by the Code, on the scientific evidence available, THC meets the criteria to be included on the List.



## SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES



### Future considerations:

- These conclusions are based on the currently available scientific literature. From the extensive review conducted, it was evident that there is a lack of robust studies evaluating the performance enhancing effects of THC at both the physical and mental level. While anecdotal, self-reported evidence is available, further clinical studies are required to rigorously determine the neuropsychological impact of THC on performance. However, it is also acknowledged that such studies may be difficult to design. For example, it would require enrolling volunteers actively consuming THC, which in most countries is illegal; it would not be a truly blinded placebo study because the subject would feel the effect of THC leading to possible positive bias (to show it has performance enhancing effects and thus should be prohibited) or negative bias (to support exclusion from the List); it would be difficult to re-create the stress of a competition; and it is very unlikely that high level Athletes could be included as volunteers. Therefore, only those using cannabis and in regions where THC use is legal could be recruited, and in an Out-of-competition setting, with a risk of positive or negative bias.
- As with all substances that are prohibited In-competition only, Athletes in regions where cannabis use is legal are advised to refrain from consuming cannabis for a number of days before the start of competition.

# THE 2023 MONITORING PROGRAM\*



The following substances are placed on the 2023 Monitoring Program:

## 1. Anabolic Agents:

In and Out-of-Competition: Ecdysterone

## 2. Peptides Hormones, Growth Factors, Related Substances, and Mimetics:

In and Out-of-Competition: Gonadotrophin-releasing hormone (GnRH) analogs in females under 18 years only.

## 3. Beta-2 Agonists:

In and Out-of-Competition: Salmeterol and vilanterol below the Minimum Reporting Level.

## 4. Hypoxen (polyhydroxyphenylene thiosulfonate sodium):

In and Out-of-Competition

## 5. Stimulants:

In-Competition only: Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol and synephrine.

## 6. Narcotics:

In-Competition only: Codeine, dermorphin (and its analogs), hydrocodone and tramadol.