VISION رؤيـــة 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

اللجنة السعودية للرقابة على المنشطات
Saudi Arabian Anti-Doping Committee

The PROHIBITED List 2024

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THE WORLD ANTI-DOPING CODE

INTERNATIONAL STANDARD

THE 2024 PROHIBITED LIST WORLD ANTI-DOPING CODE

2024

world anti-doping agency

This List shall come into effect on 1 January 2024.

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PREFACE

The Saudi Arabian Anti-Doping Committee (SAADC), by translating, editing, 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 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 the staff of sport community to be acquainted with some facts about the List to get the maximum benefits out of it. Such facts can be summarized as follows:

1. The list shall come into effect on 01/01/2024 until 31/12/2024.
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 2024 WADA Prohibited List in Arabic by the Saudi Arabian Anti-Doping Committee shall enable sharing the 2024 Prohibited List across the 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 athletes, 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

PROHIBITED LIST
WORLD ANTI-DOPING CODE
VALID 1 JANUARY 2024

Introduction

List of Prohibited Substances and Methods (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 2024.

It 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.
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.

DEFINITIONS

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 at 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.

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).

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.

Major modifications for 2024

All Major Modifications for 2024 are outlined in the 2024 Summary of Major Modifications and Explanatory Notes, including the following particular information regarding tramadol:

On 23 September 2022, the ExCo endorsed the recommendation by WADA'sList Expert Advisory Group to prohibit the narcotic tramadol in competition, effective 1 January 2024.The delay in implementation was to provide an additional year to allow enough time for stakeholders to learn and adapt to this change.

Tramadol has been on WADA's Monitoring Program and data gathered through that program have indicated significant use in sports. Tramadol abuse, with its risk of physical dependence, opiate use disorder and overdoses, is of concern worldwide and has led to it being a controlled drug in many countries. Research studies funded by WADA, as referenced in the Explanatory Note, have also confirmed the potential for tramadol to enhance sports performance

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.
- ResultManagement.
- Sanctions.
- Appeals.

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 or 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), 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, or

3 - Fax to: 011-4831279

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, 2,4-Dinitrophenol (DNP) and Troponin Activators (e.g. Reldesemtiv and Tirasemtiv).

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.

S1.1. ANABOLIC ANDROGENIC STEROIDS (AAS)

When administered exogenously, including but not limited to:

- 1-Androstenediol (5*α*-androst-1-ene-3ß,17ß-diol)
- 1-Androstenedione (5*α*-androst-1-ene-3,17-dione)
- 1-Androsterone (3*α*-hydroxy-5a-androst-1-ene-17-one)
- 1-Epiandrosterone (3ß-hydroxy-5*att*-androst-1-ene-17-one)
- 1-Testosterone (17ß-hydroxy-5*α*-androst-1-en-3-one)
- 4-Androstenediol (androst-4-ene-3ß,17ß-diol)
- 4-Hydroxytestosterone (4,17ß-dihydroxyandrost-4-en-3-one)
- 5-Androstenedione (androst-5-ene-3,17-dione)
- 7*α*-Hydroxy-DHEA
- 7ß-Hydroxy-DHEA
- 7-Keto-DHEA
- 11ß-Methyl-19-nortestosterone

- 17*α*-Methylepithiostanol (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, adrenosterone)
- Androstanolone (5*α*-dihydrotestosterone,17ß-hydroxy-5*α*-androstan-3-one)
- Androstenediol (androst-5-ene-3ß,17ß-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-17*α*-ol)
- Dehydrochlormethyltestosterone (4-chloro-17ß-hydroxy-17*α*-methylandrosta-1,4-dien-3-one)
- Desoxymethyltestosterone(17*α*-methyl-5*α*-androst-2-en-17ß-ol and 17*α*-methyl-5*α*-androst-3-en-17ß-ol)
- Dimethandrolone (7*α*,11ß-Dimethyl-19-nortestosterone)
- Drostanolone
- Epiandrosterone (3ß-hydroxy-5*α*-androstan-17-one)
- Epi-dihydrotestosterone (17ß-hydroxy-5ß-androstan-3-one)
- Epitestosterone
- 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-17ß-ol)
- Gestrinone
- Mestanolone
- Mesterolone
- Metandienone (17ß-hydroxy-17*α*-methylandrosta-1,4-dien-3-one)
- Metenolone
- Methandriol
- Methasterone (17ß-hydroxy-2*α*,17*α*-dimethyl-5*α*-androstan-3-one)
- Methyl-1-testosterone (17ß-hydroxy-17*α*-methyl-5*α*-androst-1-en-3-one)
- Methylclostebol
- Methyldienolone (17ß-hydroxy-17*α*-methylestra-4,9-dien-3-one)

•Methylnortestosterone (17ß-hydroxy- 17α-methylestr-4-en-3-one)
•Methyltestosterone
•Metribolone (methyltrienolone, 17ß-hydroxy-17α-methylestra-4,9,11-trien-3-one)
•Mibolerone
•Nandrolone (19-nortestosterone)
•Norboletone
•Norclostebol (4-chloro-17ß-ol-estr-4-en-3-one)
•Norethandrolone
•Oxabolone
•Oxandrolone
•Oxymesterone
•Oxymetholone
•Prasterone (dehydroepiandrosterone, DHEA,3ß-hydroxyandrost-5-en-17-one)
•Prostanozol (17ß-[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5α-androstane)
•Quinbolone
•Stanozolol
•Stenbolone
•Testosterone
•Tetrahydrogestrinone (17-hydroxy-18a-homo-19-nor-17α-pregna-4,9,11-trien-3-one)
•Tibolone
•Trenbolone (17ß-hydroxyestr-4,9,11-trien-3-one)
•Trestolone (7α-Methyl-19-nortestosterone,MENT)

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

S1.2. Other ANABOLIC AGENTS

Including, but not limited to:

Clenbuterol, osilodrostat, ractopamine, selective androgen receptor modulators [SARMs, e.g. andarine, enobosarm (ostarine), LGD-4033 (ligandrol), RAD140, S-23 and YK-11], zeranol and 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.

S2.1. ERYTHROPOIETINS (EPO) AND AGENTS AFFECTING ERYTHROPOIESIS

Including, but not limited to:

S2.1.1 Erythropoietin receptor agonists, e.g. darbepoetins (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).

S2.1.2 Hypoxia-inducible factor (HIF) activating agents, e.g. cobalt; daprodustat (GSK1278863);IOX2; molidustat (BAY 85-3934); roxadustat (FG-4592); vadadustat (AKB-6548); xenon.

S2.1.3 GATA inhibitors, e.g. K-11706.

S2.1.4 Transforming growth factor beta (TGF-ß) signalling inhibitors, e.g. luspatercept; sotatercept.

S2.1.5 Innate repair receptor agonists, e.g. asialo EPO; carbamylated EPO (CEPO).

S2.2. PEPTIDE HORMONES AND THEIR RELEASING FACTORS

S2.2.1 Testosterone-stimulating peptides in males including, but not limited to:

- chorionic gonadotrophin (CG),
- luteinizing hormone (LH),
- gonadotrophin- releasing hormone (GnRH, gonadorelin) and its agonist analogues (e.g. buserelin, deslorelin, goserelin, histrelin, leuprorelin, nafarelin and triptorelin),
- kisspeptin and its agonist analogues

S2.2.2 Corticotrophins and their releasing factors, e.g. corticorelin and tetracosactide

S2.2.3 Growth hormone (GH), its analogues and fragments including, but not limited to:

- growth hormone analogues, e.g. lonapegsomatropin, somapacitan and somatrogon
- growth hormone fragments, e.g. AOD-9604 and hGH 176-191

S2.2.4 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 their mimetics [e.g. anamorelin, capromorelin, ibutamoren (MK-677), ipamorelin, lenomorelin (ghrelin), macimorelin and tabimorelin]
- GH-releasing peptides (GHRPs) [e.g. alexamorelin, examorelin (hexarelin), GHRP-1, GHRP-2 (pralmorelin), GHRP-3, GHRP-4, GHRP-5 and GHRP-6]

S2.3. 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, mecasermin) and its analogues
- Mechano growth factors (MGFs)
- Platelet-derived growth factor (PDGF)
- Thymosin-ß4 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
- Indacaterol
- Reproterol
- Tretoquinol (trimetoquinol)
- Fenoterol
- Levosalbutamol
- Salbutamol
- Formoterol
- Olodaterol
- Salmeterol
- Tulobuterol
- Higenamine
- Procaterol
- Terbutaline
- 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:

S4.1. AROMATASE INHIBITORS

Including, but not limited to:

- 2-Androstenol (5α-androst-2-en-17-ol)
- 2-Androstenone (5α-androst-2-en-17-one)
- 3-Androstenol (5α-androst-3-en-17-ol)
- 3-Androstenone (5α-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

S4.2. ANTI-ESTROGENIC SUBSTANCES [ANTI-ESTROGENS AND SELECTIVE ESTROGEN RECEPTOR MODULATORS (SERMS)]

Including, but not limited to:

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

S4.3. AGENTS PREVENTING ACTIVIN RECEPTOR IIB ACTIVATION

Including, but not limited

- 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)

S4.4. METABOLIC MODULATORS

S4.4.1 Activators of the AMP-activated protein kinase (AMPK), e.g. AICAR, peroxisome proliferator-activated receptor delta (PPARδ) agonists, e.g.

2-(2-methyl-4-((4-methyl-2-(4-(trifluoromethyl)phenyl)thiazol-5-yl)methylthio)phenoxy)acetic acid (GW1516, GW501516) and Rev-erbα agonists, e.g. SR9009,SR9011

S4.4.2 Insulins and insulin-mimetics

S4.4.3 Meldonium

S4.4.4 Trimetazidine

S5 DIURETICS AND MASKING AGENTS

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

All 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:

- Diuretics such as:
  Acetazolamide; amiloride; bumetanide; canrenone; chlortalidone; etacrynic acid; furosemide; indapamide; metolazone; spironolactone; thiazides, e.g. bendroflumethiazide, chlorothiazide and hydrochlorothiazide; torasemide; triamterene;
- Vaptans, e.g. conivaptan, mozavaptan, tolvaptan;
- Plasma expanders by intravenous administration such as:
  Albumin, dextran, hydroxyethyl starch, mannitol;
- Desmopressin;
- Probenecid;

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

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 Substances*.

M1. MANIPULATION OF BLOOD AND BLOOD COMPONENTS

The following are prohibited:

M1.1. 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 except donation by Athletes of plasma or plasma components by plasmapheresis performed in a registered collection center.

M1.2. Artificially enhancing the uptake, transport or delivery of oxygen.

Including, but not limited to:

Perfluorochemicals; efaproxiral (RSR13); voxelotor and modified haemoglobin products, e.g. haemoglobin-based blood substitutes and microencapsulated haemoglobin products, excluding supplemental oxygen by inhalation.

M1.3. 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:

M2.1. *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.

M2.2. 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:

M3.1. 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.

M3.2. 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 methylenedioxymethamphetamine (MDMA / "ecstasy").

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

Stimulants include:

S6.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.

S6.B: SPECIFIED STIMULANTS

Including, but not limited to:

- 2-phenylpropan-1-amine(ß-methylphenylethylamine,BMPEA)
- 3-Methylhexan-2-amine(1,2-dimethylpentylamine)
- 4-Fluoromethylphenidate
- 4-Methylhexan-2-amine(1,3-dimethylamylamine,1,3 DMAA, methylhexaneamine)
- 4-Methylpentan-2-amine(1,3-dimethylbutylamine)
- 5-Methylhexan-2-amine(1,4-dimethylamylamine,1,4-dimethylpentylamine,1,4-DMAA)
- Benzfetamine
- Cathine**
- Cathinone and its analogues,
  e.g. mephedrone, methedrone, and α-pyrrolidinovalerophenone
- Dimetamfetamine (dimethylamphetamine)
- Ephedrine***
- Epinephrine****(adrenaline)
- Etamivan
- Ethylphenidate
- Etilamfetamine
- Etilefrine
- Famprofazone
- Fenbutrazate
- Fencamfamin
- Heptaminol
- Hydrafinil (fluorenol)
- Hydroxyamfetamine(parahydroxyamphetamine)
- Isometheptene
- Levmetamfetamine
- Meclofenoxate
- Methylenedioxymethamphetamine
- Methylephedrine***
- Methylnaphthidate[(±)-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(methylenedioxyamphetamine)
- Tuaminoheptane

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

EXCEPTIONS

- Clonidine;
- Imidazoline derivatives for dermatological, nasal, ophthalmic or otic use (e.g. brimonidine, clonazoline, fenoxazoline, indanazoline, naphazoline, oxymetazoline, tetryzoline, tramazoline, xylometazoline) and those stimulants included in the 2024 Monitoring Program*.

* Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in the 2024 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 millilitre.

*** Ephedrine and methylephedrine: Prohibited when the concentration of either in urine is greater than 10 micrograms per millilitre.

**** 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 millilitre.

S7 NARCOTICS

PROHIBITED IN-COMPETITION
All prohibited substances in this class are *Specified Substances*.
Substance 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
- Tramadol

S8 CANNABINOIDS

PROHIBITED IN-COMPETITION
All prohibited substances in this class are *Specified Substances*.
Substance 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
- Betamethasone
- Budesonide
- Ciclesonide
- Cortisone
- Deflazacort
- Dexamethasone
- Flucortolone
- Flunisolide
- Fluticasone
- Hydrocortisone
- Methylprednisolone
- Mometasone
- Prednisolone
- Prednisone
- Triamcinolone acetonide

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

SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES

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2024 PROHIBITED LIST

Subclasses of sections S1, S2, S4, M1, M2, M3 and S6 of the *Prohibited List* were renumbered for better clarity throughout the document to avoid any misinterpretation of subclasses but there was no change in classification.

SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES

(IN- AND OUT-OF-COMPETITION)

PROHIBITED SUBSTANCES

S0. Non-Approved Substances

- 2,4-Dinitrophenol (DNP) and troponin activators (e.g. Reldesemtiv and Tirasemtiv) were listed as examples.

S1. Anabolic Agents

- Trestolone (7α-methyl-19-nortestosterone, MENT), dimethandrolone (7α,11ß-Dimethyl-19-nortestosterone) and 11ß-methyl-19 nortestosterone were added as examples of nandrolone (19-nortestosterone) analogues.

S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics

- S2.2.1 was reworded under the heading of "Testosterone-stimulating peptides in males" for clarity. This specifies that buserelin, deslorelin, goserelin, histrelin, leuprorelin, nafarelin and triptorelin are examples of Gonadotrophin-Releasing Hormone (GnRH) agonist analogues, with histrelin added as a new example.

  Kisspeptin and its agonist analogues, which act to stimulate GnRH secretion, and consequently testosterone, were also added.

- S2.2.2 : Tetracosactide (ACTH 1-24) was added as an example, as it is the first 24 amino acid portion of natural corticotrophin (ACTH), and possesses the full biological activity of the natural hormone.

- S2.2.4: Capromorelin and ibutamoren (MK-677) were added as examples of growth hormone secretagogues (GHS), which are mimetics of the natural hormone, ghrelin, that stimulates the production of growth hormone (GH) and, in turn, insulin-like growth factor 1 (IGF-1).
- S2.3: The INN name for recombinant human IGF-1, mecasermin, was added.

S4. Hormones and Metabolic Modulators

- S4.4.1 was updated to include Rev-Erb-α agonists and as example, SR9011 was added and SR9009 was relocated.

S5. Diuretics and Masking Agents

- Editorial changes were made to section S5 to improve clarity. Conivaptan and mozavaptan were added as further examples of vaptan drugs.

PROHIBITED METHODS

M1. Manipulation of Blood and Blood Components

- Donation by Athletes of plasma or plasma components by plasmapheresis is no longer prohibited when performed in a registered collection center.

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SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

PROHIBITED SUBSTANCES

S6. Stimulants

- 2-phenylpropan-1-amine (BMPEA, ß-methylphenethylamine) was added as an example of a specified stimulant due to its presence in dietary supplements.

- Tramazoline was added as an imidazoline derivatives under Exceptions.

S7. Narcotics

- Tramadol is prohibited *In-Competition* as of 1 January 2024 as approved by the Executive Committee on 23 September 2022. 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 use disorder 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*[1] have confirmed the potential for tramadol to enhance physical performance in sports. The recommended washout period§ will be communicated before 1 January 2024.

§ The "washout period" refers to the time from the last administered dose to the time of the start of the *In-Competition* period (i.e. beginning at 11:59 p.m. on the day before a *Competition* in which the Athlete is scheduled to participate, unless a different period was approved by *WADA* for a given sport).

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. Tramadol is a performance-enhancing drug in highly trained cyclists: a randomized controlled trial.
J Appl Physiol. 2023 Jul;135: 467–474.

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S9. Glucocorticoids

- The minimum washout periods following rectal administration of glucocorticoids are now included in the Glucocorticoid Washout Table; glucocorticoids remain prohibited *In-Competition* when administered by the rectal route. These washout periods are based on the use of these medications according to the maximum manufacturer's licensed doses:

Route	Glucocorticoid	Washout period*
Oral **	All glucocorticoids;	3 days
	Except: triamcinolone; triamcinolone acetonide	10 days
Intramuscular	Betamethasone; dexamethasone; methylprednisolone	5 days
	Prednisolone; prednisone	10 days
	Triamcinolone acetonide	60 days
Local injections (including periarticular, intra-articular, peritendinous and intraten-dinous)	All glucocorticoids;	3 days
	Except: prednisolone; prednisone; triamcinolone acetonide; triamcinolone hexacetonide	10 days
Rectal	All glucocorticoids;	3 days
	Except: triamcinolone diacetate; triamcinolone acetonide	10 days

* The "washout period" refers to the time from the last administered dose to the time of the start of the In-Competition period (i.e. beginning at 11:59 p.m. on the day before a Competition in which the Athlete is scheduled to participate, unless a different period was approved by WADA for a given sport). This is to allow elimination of the glucocorticoid to below the reporting level.

** Oral routes also include e.g. oromucosal, buccal, gingival and sublingual.

- The Washout Period Table is also found in the List FAQ https://www.wada-ama.org/en/prohibited-list#faq-anchor

SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES

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MONITORING PROGRAM

- Salmeterol and vilanterol were removed as the required prevalence data were obtained.
- Tramadol was removed as it is now prohibited under S7: Narcotics .
- Tapentadol and dihydrocodeine were added to monitor patterns of use In Competition.
- The GLP-1 analogue semaglutide was added to examine the prevalence and pattern of use in sport.

* 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.

THE 2024 MONITORING PROGRAM*

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The following substances are placed on the 2024 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. Hypoxen (polyhydroxyphenylene thiosulfonate sodium):

In and *Out-of-Competition*

4. Stimulants:

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

5.Narcotics:

In-Competition only: Codeine, dermorphin (and its analogues), dihydrocodeine, hydrocodone and tapentadol

6. Semaglutide:

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 potential patterns of misuse in sport."