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Dated.27.12.2023

Dear Sir/Madam,

I hope this letter finds you in good health and high spirits. As part of our ongoing commitment to maintaining the integrity of sports and ensuring fair competition, I am writing to inform you about the upcoming enforcement of the 2024 Prohibited List, a mandatory International Standard under the World Anti-Doping Program.

The Prohibited List represents a comprehensive compilation of substances and methods that are strictly forbidden in sports to uphold the principles of fair play, health, and safety of athletes. This list is a crucial component of the global effort to eradicate doping in sports and maintain a level playing field for all competitors.

The 2024 Prohibited List will come into force on 1 January 2024, and it is imperative that all stakeholders, including athletes, coaches, medical personnel, and relevant officials, are aware of the updates and changes introduced in this edition. The World Anti-Doping Agency (WADA) has meticulously revised the list to reflect the latest advancements in scientific knowledge and emerging trends in doping practices.

To facilitate a smooth transition and ensure compliance with the new regulations, we encourage all stakeholders to review the 2024 Prohibited List, which will be made available on the official WADA website and also on NADA India's website <https://nadaindia.yas.gov.in/>. **The 2024 Prohibited List is also attached along with this mail and the major modifications for 2024 as Annexure 1.** It is essential that everyone involved in sports takes the time to familiarize themselves with the updated list to avoid inadvertent violations and potential consequences.

We remain committed to promoting clean and ethical competition and appreciate your ongoing support in upholding the values of fair play within our sporting community. If you have any questions or require further information regarding the 2024 Prohibited List, please do not hesitate to contact us at info.nada@nic.in.

Thank you for your cooperation and dedication to maintaining the highest standards of sportsmanship.

Yours sincerely,


(Ashish Bhargava)



WORLD ANTI-DOPING CODE
INTERNATIONAL STANDARD
**PROHIBITED
LIST**
2024

This List shall come into effect on 1 January 2024.

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THE 2024 PROHIBITED LIST WORLD ANTI-DOPING CODE

VALID 1 JANUARY 2024

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 2024.

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, 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-3 β , 17 β -diol)
- 1-Androstenedione (5 α -androst-1-ene-3, 17-dione)
- 1-Androsterone (3 α -hydroxy-5 α -androst-1-ene-17-one)
- 1-Epiandrosterone (3 β -hydroxy-5 α -androst-1-ene-17-one)
- 1-Testosterone (17 β -hydroxy-5 α -androst-1-en-3-one)
- 4-Androstenediol (androst-4-ene-3 β , 17 β -diol)
- 4-Hydroxytestosterone (4,17 β -dihydroxyandrost-4-en-3-one)
- 5-Androstenedione (androst-5-ene-3,17-dione)
- 7 α -Hydroxy-DHEA
- 7 β -Hydroxy-DHEA
- 7-Keto-DHEA
- 11 β -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, 17 β -hydroxy-5 α -androstan-3-one)
- Androstenediol (androst-5-ene-3 β ,17 β -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-17 β -hydroxy-17 α -methylandrosta-1,4-dien-3-one)
- Desoxymethyltestosterone (17 α -methyl-5 α -androst-2-en-17 β -ol and 17 α -methyl-5 α -androst-3-en-17 β -ol)
- Dimethandrolone (7 α ,11 β -Dimethyl-19-nortestosterone)
- Drostanolone
- Epiandrosterone (3 β -hydroxy-5 α -androstan-17-one)
- Epi-dihydrotestosterone (17 β -hydroxy-5 β -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-17 β -ol)

S1 ANABOLIC AGENTS (continued)

S1.1. ANABOLIC ANDROGENIC STEROIDS (AAS) (continued)

- Gestrinone
- Mestanolone
- Mesterolone
- Metandienone (17 β -hydroxy-17 α -methylandrosta-1,4-dien-3-one)
- Metenolone
- Methandriol
- Methasterone (17 β -hydroxy-2 α ,17 α -dimethyl-5 α -androstan-3-one)
- Methyl-1-testosterone (17 β -hydroxy-17 α -methyl-5 α -androst-1-en-3-one)
- Methylclostebol
- Methyldienolone (17 β -hydroxy-17 α -methylestra-4,9-dien-3-one)
- Methylnortestosterone (17 β -hydroxy-17 α -methylestr-4-en-3-one)
- Methyltestosterone
- Metribolone (methyltrienolone, 17 β -hydroxy-17 α -methylestra-4,9,11-trien-3-one)
- Mibolerone
- Nandrolone (19-nortestosterone)
- Norboletone
- Norclostebol (4-chloro-17 β -ol-estr-4-en-3-one)
- Norethandrolone
- Oxabolone
- Oxandrolone
- Oxymesterone
- Oxymetholone
- Prasterone (dehydroepiandrosterone, DHEA, 3 β -hydroxyandrost-5-en-17-one)
- Prostanazol (17 β -[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5 α -androstane)
- Quinbolone
- Stanozolol
- Stenbolone
- Testosterone
- Tetrahydrogestrinone (17-hydroxy-18 α -homo-19-nor-17 α -pregna-4,9,11-trien-3-one)
- Tibolone
- Trenbolone (17 β -hydroxyestr-4,9,11-trien-3-one)
- Trestolone (7 α -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- β) signalling inhibitors, e.g. luspatercept; sotatercept.

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

S2

PEPTIDE HORMONES, GROWTH FACTORS, RELATED SUBSTANCES, AND MIMETICS (continued)

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 somatrogen
- 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- β 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
- Tretoquinol (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.

S4.1. AROMATASE INHIBITORS

Including, but not limited to:

- 2-Androst-enol (5 α -androst-2-en-17-ol)
- 2-Androst-enone (5 α -androst-2-en-17-one)
- 3-Androst-enol (5 α -androst-3-en-17-ol)
- 3-Androst-enone (5 α -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 HORMONE AND METABOLIC MODULATORS

(continued)

S4.3. 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)

S4.4. METABOLIC MODULATORS

S4.4.1 Activators of the AMP-activated protein kinase (AMPK), e.g. AICAR, peroxisome proliferator-activated receptor delta (PPAR δ) agonists, e.g. 2-(2-methyl-4-((4-methyl-2-(4-(trifluoromethyl)phenyl)thiazol-5-yl)methylthio)phenoxy) acetic acid (GW1516, GW501516) and Rev-erba 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 Methods*.

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*-methyldamfetamine
- Modafinil
- Norfenfluramine
- Phendimetrazine
- Phentermine
- Prenylamine
- Prolintane

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

S6 STIMULANTS (continued)

S6.B: SPECIFIED STIMULANTS

Including, but not limited to:

- 2-phenylpropan-1-amine (β -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
- Hydrafinit (fluorenol)
- Hydroxyamfetamine (parahydroxyamphetamine)
- Isometheptene
- Levmetamfetamine
- Meclofenoxate
- Methylenedioxyamphetamine
- 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 (methylenedioxyamphetamine)
- Tuaminoheptane

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

i EXCEPTIONS

- Clonidine;
- Imidazoline derivatives for dermatological, nasal, ophthalmic or otic use (e.g. brimonidine, clonazoline, fenoxazoline, indanazoline, naphazoline, oxymetazoline, tetrazyline, 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
- Flunisolide
- Fluocortolone
- 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 |

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Summary of Major Modifications and Explanatory Notes

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 (7 α -methyl-19-nortestosterone, MENT), dimethandrolone (7 α ,11 β -Dimethyl-19-nortestosterone) and 11 β -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 busarelin, 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. Hormone 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.

SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

PROHIBITED SUBSTANCES

S6. Stimulants

- 2-phenylpropan-1-amine (BMPEA, β -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 WADA¹ 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.

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 intratendinous)	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>



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>.