Voluntary Anti-Doping Association Official Prohibited List

This document contains the Official Prohibited List (Substances and Methods) of the Voluntary Anti-Doping Association (VADA). VADA guidelines concerning these specific substances and groups are intended to closely track internationally recognized standards for substances prohibited by sport, such as the World Anti-Doping Agency (WADA) Official Prohibited List of 2021. Therefore, nomenclature for these substances, classification groups, and other uses by the WADA Prohibited List is largely preserved.

VADA Prohibited Substance List

The following classification groups and substances are **prohibited at all times** during participation in the VADA program. The following classification groups and substances listed herein are not restricted to the specifically-listed common or chemical names, nor are they restricted to the specific compounds or isomers listed below. Moreover, VADA has the right, at any time, to modify, edit, and add any substance or method according to any new laws, guidelines, VADA policies, or anti-doping ideals.

S0. NON-APPROVED SUBSTANCES

Any pharmacological substance which is not addressed by any of the subsequent sections of the List and with no current approval by any governmental regulatory health authority for human therapeutic use (e.g. drugs under pre-clinical or clinical development or discontinued, designer drugs, substances approved only for veterinary use) is prohibited at all times.

S1. ANABOLIC AGENTS

Anabolic agents are prohibited.

1. Anabolic Androgenic Steroids (AAS)

when administered exogenously, including but not limited to:

1-Androstenediol (5α-androst-1-ene-3β,17β-diol)
1-Androstenedione (5α-androst-1-ene-3,17-dione)
1-Androsterone (3α-hydroxy-5α-androst-1-ene-17-one)
1-Epiandrosterone (3β-hydroxy-5α-androst-1-ene-17-one)
1-Testosterone (17β-hydroxy-5α-androst-1 en-3-one)
4-Androstenediol (androst-4-ene-3β, 17β-diol)

4-Hydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one)
5-Androstenedione (androst-5-ene-3,17-dione)
7a-hydroxy-DHEA
7β-hydroxy-DHEA
7-Keto-DHEA
19-Norandrostenediol (estr-4-ene-3,17-diol)
19-Norandrostenedione (estr-4-ene-3,17-dione)
Androstanolone (5*a*-dihydrotestosterone, 17β-hydroxy-5*a*-androstan-3-one)
Androstenediol (androst-5-ene-3β,17β-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*a* -ol)
Dehydrochlormethyltestosterone (4-chloro-17 β -hydroxy-17a-methylandrosta-1,4-dien-3-one)
Desoxymethyltestosterone (17*a*-methyl-5*a* -androst-2-en-17 β-ol and 17 *a*-methyl-5 *a*-androst-3-en-17β-ol)
Drostanolone
Epiandrosterone (3β-hydroxy-5*a*-androst-17-one)
Epi-dihydrosterone (17β-hydroxy-5β-androstan-3-one)
Epitestosterone
Ethylestrenol (19-norpregna-4-en-17*a*-ol)
Fluoxymesterone
Formebolone
Furazabol (17*a* -methyl [1,2,5]oxadiazolo(3',4':2,3)-5*a*-androstan-17β-ol)
Gestrinone
Mestanolone
Mesterolone
Metandienone (17 β-hydroxy-17*a* -methylandrosta-1,4-dien-3-one)
Metenolone
Methandriol
Methasterone (17 β-hydroxy-2*a*,17*a*-dimethyl-5*a*-androstan-3-one)
Methyl-1-testosterone (17β-hydroxy-17a-methyl-5*a* -androst-1-en-3-one)
Methylclostebol
Methyldienolone (17 β-hydroxy-17*a*-methylestra-4,9-dien-3-one)
Methylnortestosterone (17 β-hydroxy-17*a*-methylestr-5*a* -4-en-3-one)
Methyltestosterone
Metribolone (methyltrienolone, 17β-hydroxy-17*a*-methylestra-4,9,11-trien-3-one)
Mibolerone
Nandrolone (19-nortestosterone)
Norboletone
Norclostebol (4-chloro-17β-ol-estr-4-en-3-one)
Norethandrolone
Oxabolone
Oxandrolone
0xymesterone

Oxymetholone
Prasterone (dehydroepiandrosterone, DHEA, 3β-hydroxyandrost-5-en-17-one)
Prostanozol (17β-((tetrahydropyran-2-yl)oxy)-1'H-pyrazolo(3,4:2,3)-5*a*-androstane)
Quinbolone
Stanozolol
Stenbolone
Testosterone
Tetrahydrogestrinone (17-hydroxy-18*a*-homo-19-nor-17*a*-pregna-4,9,11-trien-3-one)
Trenbolone (17 β-hydroxyestr-4,9,11-trien-3-one)

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

2. Other Anabolic Agents

Including, but not limited to:

- Clenbuterol, selective androgen receptor modulators (SARMs, e.g. andarine, LGD-4033 (ligandrol), enobosarm (ostarine) and RADA 140), tibolone, zeranol and zilpatrol

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

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

1. Erythropoietins (EPO) and agents affecting erythropoiesis, including, but not limited to:

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 and 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-β) signaling 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 fragments and releasing factors, including, but not limited to: Growth hormone fragments, e.g. ADD-9604 and hGH 176-191;
Growth hormone-releasing (GHRH) and its analogues, e.g. CJC-1293, CJC-1295, sermorelin and tesamorelin; growth hormone secretagogues
(GHS), e.g. lenomorelin (ghrelin) and its mimetics, e.g. 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- β4 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

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 800 micrograms over 12 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

The following hormone and metabolic modulators are prohibited:

1. **Aromatase inhibitors** including, but not limited to:
   2-Androstenol (5*a*-androst-2-en-17-ol)
   2-Androstenone (5*a*-androst-2-en-17-one)
   3-Androstenol (5*a*-androst-3-en-17-ol)
   3-Androstenone (5*a*-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

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

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-neutralizing antibodies (e.g. Domagrozumab, landogrozumab, stamulumab).

4. Metabolic modulators:
   4.1 Activators of the AMP-activated protein kinase (AMPK), e.g. AICAR, SR9009; and Peroxisome Proliferator Activated Receptor δ (PPARδ) agonists, e.g. 2-(2-methyl-4-((4-methyl-2-(4-(trifluoromethyl) phenyl)thiazol-5-yl)methylthio)phenoxy) acetic acid (GW 1516, GW501516);
   4.2 Insulins and insulin-mimetics
   4.3 Meldonium
   4.4 Trimetazidine

S5. DIURETICS AND OTHER MASKING AGENTS

The following diuretics and masking agents are prohibited, as are other substances with a similar chemical structure or similar biological effect(s).

Including, but not limited to:

- Desmopressin; probenecid; plasma expanders, e.g. intravenous administration of albumin, dextran, hydroxyethyl starch and mannitol;
- Acetazolamide; amiloride; bumetanide; canrenone; chlortalidone; etacrynic acid; furosemide; indapamide; metolazone; spironolactone; thiazides, e.g. Bendroflumethiazide, chlorothiazide and hydrochlorothiazide; triamterene and vaptans, e.g. tolvaptan

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, as applicable, of any quantity of the following substances subject to threshold limits: formoterol, salbutamol, cathine, ephedrine, methylephedrine and pseudoephedrine, in conjunction with a diuretic or masking agent, will be considered as an *Adverse Analytical Finding (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.

S6. STIMULANTS

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

Stimulants include, but are not limited to:

Adrafinil
Amfepramone
Amfetamine
Amfetaminil
Amiphenazole
Benfluorex
Benzylpiperazine
Bromantan
Clobenzorex
Cocaine
Cropropamide
Crotetamide
Fencamine
Fenetylline
Fenfluramine
Fenproporex
Fonturancetam (4-phenylpiracetam (carphedon))
Furfenorex
Lisdexamfetamine
Mefenorex
Mephentermine
Mesocarb
Methamphetamine (*d*-)
p-methylamphetamine
Modafinil
Norfenfluramine
Phendimetrazine
Phentermine
Prenylamine
Prolintane

3-Methylhexan-2-amine (1,2-dimethylpentylamine)
4-Methylhexan-2-amine (methylhexaneamine)
4-Methylpentan-2-amine (1,3 dimethylbutylamine)
5-Methylhexan-2-amine (1,4-dimethylpentylamine)
Benzfetamine
Cathine**
Cathinone and its analogues, e.g. mephedrone, methedrone, and α-pyrrolidinovalerophenone
Dimetamfetamine (dimethylamphetamine)
Ephedrine***

Epinephrine**** (adrenaline)
Etamivan
Etilamfetamine
Etilefrine
Famprofazone
Fenbutrazate
Fencamfamin
Heptaminol
Hydroxyamfetamine (parahydroxyaphetamine)
Isometheptene
Levmetamfetamine
Meclofenoxate
Methylenedioxymethamphetamine
Methyephedrine***
Methylphenidate
Nikethaminde
Norfenefrine
Octodrine (1,5-dimethylhexylamine)
Octopamine;
Oxilofrine (methylsynephrine)
Pemoline
Penetrazol
Phenethylamine and its derivatives
Phenmetrazine
Phenpromethamine
Propylhexedrine
Pseudoephedrine*****
Selegiline
Sibutramine
Strychnine
Tenamfetamine (methylenedioxyamphetamine)
Tuaminoheptane

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

Exceptions:

- Clonidine
- Imidazole derivatives for dermatological, nasal or ophthalmic use (e.g. brimondine, clonazoline, fenoxazoline, indanazoline, naphazoline, oxymetazoline, xylometazoline) and those stimulants included in WADA's 2021 Monitoring Program*.

*Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in WADA's 2021 Monitoring Program,, and are not considered Prohibited Substances.
**Cathine: Prohibited when its concentration in urine is greater than 5 micrograms per milliliter.
***Ephedrine and methylephedrine: Prohibited when the concentration of either in urine is greater 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

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

S9. GLUCOCORTICOIDS

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

Including but not limited to:

Beclometasone
Bethamethesone
Budesonide
Ciclesonide
Cortisone
Deflazacort
Dexamethasone
Flucortolone
Flunisolide
Fluticasone
Hydrocortisone
Methylprednisolone
Mometasone
Prednisolone
Prednisone
Triamcinolone acetonide

PROHIBITED METHODS

M1. MANIPULATION OF BLOOD AND BLOOD COMPONENTS

The following are prohibited:

1. The *Administration* or reintroduction of any quantity of autologous, allogenic (homologous) or heterologous blood, or red blood cell products of any origin into the circulatory system.

2. Artificially enhancing the uptake, transport or delivery of oxygen.
Including, but not limited to:
Perfluorochemicals; efaproxiral (RSR13) and modified haemoglobin products, e.g. haemoglobin-based blood substitutes, and microencapsulated haemoglobin products, excluding supplemental oxygen 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 Tamp*er, 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 100ml 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.