

# 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 2023. Therefore, nomenclature for these substances, classification groups and other uses by the WADA Prohibited List will be preserved, unless otherwise specified by VADA.

## **VADA Prohibited List**

#### **PROHIBITED SUBSTANCES**

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.

## SO. 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.

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

#### S1. ANABOLIC AGENTS

Anabolic agents are prohibited.

## 1. Anabolic Androgenic Steroids (AAS)

When administered exogenously, including but not limited to:

- 1-Androstenediol (5a -androst-1-ene-3 $\beta$ ,17 $\beta$ -diol)
- 1-Androstenedione (5*a* -androst-1-ene-3,17-dione)

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1-Androsterone (3a -hydroxy-5a-androst-1-ene-17-one)
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1-Epiandrosterone (3β-hydroxy-5*a*-androst-1-ene-17-one)

1-Testosterone (17 $\beta$ -hydroxy-5a-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

17a-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 (5a-dihydrotestosterone,  $17\beta$ -hydroxy-5a-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-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 17 a-methyl-5 a-androst-3-en-17 $\beta$ -ol)

Drostanolone

Epiandrosterone (3β-hydroxy-5*a*-androstan-17-one)

Epi-dihydrosterone (17β-hydroxy-5β-androstan-3-one)

Epitestosterone

Ethylestrenol (19-norpregna-4-en-17*a*-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-17 a -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 β-hydroxy-17*a*-methylestra-4,9-dien-3-one)

Methylnortestosterone (17  $\beta$ -hydroxy-17a-methylestr-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)

Ouinbolone

Stanozolol

Stenbolone

Testosterone

Tetrahydrogestrinone (17-hydroxy-18a-homo-19-nor-17a-pregna-4,9,11-trien-3-one)

Tibolone

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

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.

(CERA))

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

**1.4** Transforming growth factor beta (TGF- $\beta$ ) 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 triptoreli;
  - **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 somatrogon;

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- 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 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**

The following hormone and metabolic modulators are prohibited:

#### **4.1 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

**4.2** Anti-estrogenic substances (anti-estrogens and selective estrogen receptor modulators (SERMS)). Including, but not limited to:

Bazedoxifene Clomifene Cyclofenil Fulvestrant

Ospemifene Raloxifene Tamoxifen Toremifene

**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 (PPARδ) agonists, e.g. 2-(2-methyl-4-((4-methyl-2-(4-(trifluoromethyl) phenyl)thiazol-5-yl)methylthio)phenoxy) acetic acid (GW 1516, GW501516);
  - 4.4.2 Insulins and insulin-mimetics
  - 4.4.3 Meldonium
  - 4.4.4 Trimetazidine

## **S5. DIURETICS AND OTHER MASKING AGENTS**

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 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, 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.

#### **S6. STIMULANTS**

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:

#### A: Non-Specified Stimulants:

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

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-fluoromethyphenidate
- 4-Methylhexan-2-amine (methylhexaneamine, 1,3-dimethylamylamine, 1,3 DMAA)
- 4-Methylpentan-2-amine (1,3 dimethylbutylamine)
- 5-Methylhexan-2-amine (1,4-dimethylpentylamin, 1,4-dimethylamylamine, 1,4-DMAA)

Benzfetamine

Cathine\*\*

Cathinone and its analogues, e.g. mephedrone, methedrone, and  $\alpha$ -

pyrrolidinovalerophenone

Dimetamfetamine (dimethylamphetamine)

Ephedrine\*\*\*

Epinephrine\*\*\*\* (adrenaline)

Etamivan

Ethyphenidate

Etilamfetamine

Etilefrine

Famprofazone

Fenbutrazate

Fencamfamin

Heptaminol

Hydrafinil (fluorenol)

Hydroxyamfetamine (parahydroxyaphetamine)

Isometheptene

Levmetamfetamine

Meclofenoxate

Methylenedioxymethamphetamine

Methyephedrine\*\*\*

Methylnaphthidate (((+)-methyl-2-(naphthalen-2-yl)-2-(piperidin-2-yl)acetate)

Methylphenidate

Nikethaminde

Norfenefrine

Octodrine (1,5-dimethylhexylamine)

Octopamine;

Oxilofrine (methylsynephrine)

Pemoline

Pentetrazol

Phenethylamine and its derivatives

Phenmetrazine

Phenpromethamine

Propylhexedrine

Pseudoephedrine\*\*\*\*\*

Selegiline

Sibutramine

Solriamefetol

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 or otic use (e.g. brimonidine, clonazoline, fenoxazoline, indanazoline, naphazoline, oxymetazoline, tetryzoline, xylometazoline) and those stimulants included in WADA's 2023 Monitoring Program\*.

### **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

<sup>\*</sup>Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in WADA's 2023 Monitoring Program and are not considered *Prohibited Substances*.

<sup>\*\*</sup>Cathine (d-norpseudoephedrine and its l-isomer: Prohibited when the concentration in urine is greater than 5 micrograms per milliliter.

<sup>\*\*\*\*</sup>Ephedrine and methylephedrine: Prohibited when the concentration of either in urine is greater 10 micrograms per milliliter.

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

<sup>\*\*\*\*\*</sup>Pseudoephedrine: Prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

Oxycodone Oxymorphone Pentazocine Pethidine

## **S9. GLUCOCORTICOIDS**

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 routes.

## **Including but not limited to:**

Beclometasone

Betamethesone

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,

#### **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); voxelotor 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.