

# The World Anti-Doping Code

# THE 2010 PROHIBITED LIST INTERNATIONAL STANDARD

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.

This List shall come into effect on 1 January 2010

# THE 2010 PROHIBITED LIST WORLD ANTI-DOPING CODE

# Valid 1 January 2010

All *Prohibited Substances* shall be considered as "Specified Substances" except Substances in classes S1, S2.1 to S2.5, S.4.4 and S6.a, and *Prohibited Methods* M1, M2 and M3.

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

# PROHIBITED SUBSTANCES

# **S1. ANABOLIC AGENTS**

Anabolic agents are prohibited.

# 1. Anabolic Androgenic Steroids (AAS)

<u>a</u>. Exogenous\* AAS, including:

1-androstendiol (5α-androst-1-ene-3β,17β-diol); 1-androstendione (5αandrost-1-ene-3,17-dione); bolandiol (19-norandrostenediol); bolasterone; boldenone; boldione (androsta-1,4-diene-3,17-dione); calusterone; clostebol; danazol (17a-ethynyl-17β-hydroxyandrost-4-eno[2,3-d]isoxazole); dehydrochlormethyltestosterone (4-chloro-17β-hydroxy-17a-methylandrosta-1,4-dien-3-one); desoxymethyltestosterone (17a-methyl-5a-androst-2-en-17β-ol); drostanolone; ethylestrenol (19-nor-17α-pregn-4-en-17-ol); fluoxymesterone; formebolone; furazabol (17β-hydroxy-17a-methyl-5aandrostano[2,3-c]-furazan); gestrinone; 4-hydroxytestosterone (4,17βdihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metenolone; methandienone (17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); methandriol; methasterone (2a, 17a-dimethyl-5a-androstane-3-one-17β-ol); methyldienolone (17β-hydroxy-17a-methylestra-4,9-dien-3-one); methyl-1testosterone (17β-hydroxy-17a-methyl-5a-androst-1-en-3-one); methylnortestosterone (17β-hydroxy-17a-methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17β-hydroxy-17amethylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; prostanozol (17β-hydroxy-5a-androstano[3,2-c] pyrazole); quinbolone;

stanozolol; stenbolone; 1-testosterone ( $17\beta$ -hydroxy-5a-androst-1-en-3-one); tetrahydrogestrinone (18a-homo-pregna-4,9,11-trien- $17\beta$ -ol-3-one); trenbolone and other substances with a similar chemical structure or similar biological effect(s).

b. Endogenous\*\* AAS when administered exogenously:

androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one); prasterone (dehydroepiandrosterone, DHEA); testosterone and the following metabolites and isomers:

5α-androstane-3α,17α-diol; 5α-androstane-3α,17β-diol; 5α-androstane-3β,17α-diol; 5α-androstane-3β,17α-diol; androst-4-ene-3α,17α-diol; androst-4-ene-3α,17α-diol; androst-5-ene-3α,17α-diol; androst-5-ene-3α,17α-diol; androst-5-ene-3α,17β-diol; androst-5-ene-3β,17α-diol; 4-androstenediol (androst-4-ene-3β,17β-diol); 5-androstenedione (androst-5-ene-3,17-dione); epi-dihydrotestosterone; epitestosterone; 3α-hydroxy-5α-androstan-17-one; 3β-hydroxy-5α-androstan-17-one; 19-norandrosterone; 19-noretiocholanolone.

# 2. Other Anabolic Agents, including but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs), tibolone, zeranol, zilpaterol.

For purposes of this section:

\* "exogenous" refers to a substance which is not ordinarily capable of being produced by the body naturally.

\*\* "endogenous" refers to a substance which is capable of being produced by the body naturally.

# S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES

The following substances and their releasing factors are prohibited:

- 1. Erythropoiesis-Stimulating Agents [e.g. erythropoietin (EPO), darbepoetin (dEPO), methoxy polyethylene glycol-epoetin beta (CERA), hematide];
- 2. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) in males:
- 3. Insulins;
- 4. Corticotrophins;

- 5. Growth Hormone (GH), Insulin-like Growth Factor-1 (IGF-1), Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Fibroblast Growth Factors (FGFs), Vascular-Endothelial Growth Factor (VEGF) and Hepatocyte Growth Factor (HGF) as well as any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching;
- **6. Platelet-derived preparations (e.g. Platelet Rich Plasma, "blood spinning")** administered by intramuscular route. Other routes of administration require a declaration of *Use* in accordance with the International Standard for Therapeutic Use Exemptions.

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

# S3. BETA-2 AGONISTS

All beta-2 agonists (including both optical isomers where relevant) are prohibited except salbutamol (maximum 1600 micrograms over 24 hours) and salmeterol by inhalation which require a declaration of *Use* in accordance with the International Standard for Therapeutic Use Exemptions.

The presence of salbutamol in urine in excess of 1000 ng/mL is presumed not to be an intended therapeutic use of the substance and will be considered as an *Adverse Analytical Finding* unless the *Athlete* proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of a therapeutic dose (maximum 1600 micrograms over 24 hours) of inhaled salbutamol.

# **S4. HORMONE ANTAGONISTS AND MODULATORS**

The following classes are prohibited:

- 1. Aromatase inhibitors including, but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone.
- 2. Selective estrogen receptor modulators (SERMs) including, but not limited to: raloxifene, tamoxifen, toremifene.
- 3. Other anti-estrogenic substances including, but not limited to: clomiphene, cyclofenil, fulvestrant.

**4. Agents modifying myostatin function(s)** including but not limited to: myostatin inhibitors.

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

Masking agents are prohibited. They include:

**Diuretics, probenecid, plasma expanders (e.g. glycerol**; intravenous administration of **albumin, dextran, hydroxyethyl starch** and **mannitol)** and other substances with similar biological effect(s).

### Diuretics include:

Acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), triamterene, and other substances with a similar chemical structure or similar biological effect(s) (except drosperinone, pamabrom and topical dorzolamide and brinzolamide, which are not prohibited).

A Therapeutic Use Exemption for diuretics and masking agents is not valid if an *Athlete's* urine contains such substance(s) in association with threshold or subthreshold levels of an exogenous *Prohibited Substance*(s).

# PROHIBITED METHODS

# **M1. ENHANCEMENT OF OXYGEN TRANSFER**

The following are prohibited:

- 1. Blood doping, including the use of autologous, homologous or heterologous blood or red blood cell products of any origin.
- 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, microencapsulated haemoglobin products), excluding supplemental oxygen.

# M2. CHEMICAL AND PHYSICAL MANIPULATION

- 1. Tampering, or attempting to tamper, in order to alter the integrity and validity of Samples collected during Doping Controls is prohibited. These include but are not limited to catheterisation, urine substitution and/or adulteration (e.g. proteases).
- 2. Intravenous infusions are prohibited except for those legitimately received in the course of hospital admissions or clinical investigations.

# **M3. GENE DOPING**

The following, with the potential to enhance athletic performance, are prohibited:

- 1- The transfer of cells or genetic elements (e.g. DNA, RNA);
- 2- The use of pharmacological or biological agents that alter gene expression.

Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists (e.g. GW 1516) and PPAR $\delta$ -AMP-activated protein kinase (AMPK) axis agonists (e.g. AICAR) are prohibited.

# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S1 to S5 and M1 to M3 defined above, the following categories are prohibited in competition:

# PROHIBITED SUBSTANCES

# **S6. STIMULANTS**

All stimulants (including both optical isomers where relevant) are prohibited, except imidazole derivatives for topical use and those stimulants included in the 2010 Monitoring Program\*.

Stimulants include:

a: Non-Specified Stimulants:

Adrafinil; amfepramone; amiphenazole; amphetamine; amphetaminil; benfluorex; benzphetamine; benzylpiperazine; bromantan; clobenzorex; cocaine; cropropamide; crotetamide; dimethylamphetamine; etilamphetamine; famprofazone; fencamine; fenetylline; fenfluramine; fenproporex; furfenorex; mefenorex; mephentermine; mesocarb; methamphetamine(d-); p-methylamphetamine; methylenedioxyamphetamine; methylenedioxymethamphetamine; methylhexaneamine (dimethylpentylamine); modafinil; norfenfluramine; phendimetrazine; phenmetrazine; phentermine; 4-phenylpiracetam (carphedon); prenylamine; prolintane.

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

b: Specified Stimulants (examples):

Adrenaline\*\*; cathine\*\*\*; ephedrine\*\*\*\*; etamivan; etilefrine; fenbutrazate; fencamfamin; heptaminol; isometheptene; levmetamphetamine; meclofenoxate; methylephedrine\*\*\*\*; methylphenidate; nikethamide; norfenefrine; octopamine; oxilofrine; parahydroxyamphetamine; pemoline; pentetrazol; phenpromethamine; propylhexedrine; pseudoephedrine\*\*\*\*\*; selegiline; sibutramine; strychnine; tuaminoheptane and other substances with a similar chemical structure or similar biological effect(s).

\* The following substances included in the 2010 Monitoring Program (bupropion, caffeine, phenylephrine, phenylpropanolamine, pipradol, synephrine) are not considered as *Prohibited Substances*.

\*\* **Adrenaline** associated with local anaesthetic agents or by local administration (e.g. nasal, ophthalmologic) is not prohibited.

\*\*\* Cathine is prohibited when its concentration in urine is greater than 5 micrograms per milliliter.

\*\*\*\* Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.

\*\*\*\*\*\* **Pseudoephedrine** is prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

# **S7. NARCOTICS**

The following narcotics are prohibited:

Buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

# **S8. CANNABINOIDS**

Natural or synthetic  $\Delta 9$ -tetrahydrocannabinol (THC) and THC-like cannabinoids (e.g. hashish, marijuana, HU-210) are prohibited.

## S9. GLUCOCORTICOSTEROIDS

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

In accordance with the International Standard for Therapeutic Use Exemptions, a declaration of *Use* must be completed by the *Athlete* for glucocorticosteroids administered by intraarticular, periarticular, peritendinous, epidural, intradermal and inhalation routes, except as noted below.

Topical preparations when used for auricular, buccal, dermatological (including iontophoresis/phonophoresis), gingival, nasal, ophthalmic and perianal disorders are not prohibited and require neither a Therapeutic Use Exemption nor a declaration of *Use*.

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

# P1. ALCOHOL

Alcohol (ethanol) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold (haematological values) is 0.10 g/L.

- Aeronautic (FAI)
- Archery (FITA)
- Automobile (FIA)
- Karate (WKF)

- Modern Pentathlon (UIPM) for disciplines involving shooting
- Motorcycling (FIM)
- Ninepin and Tenpin Bowling (FIQ)
- Powerboating (UIM)

# P2. BETA-BLOCKERS

Unless otherwise specified, beta-blockers are prohibited *In-Competition* only, in the following sports.

- Aeronautic (FAI)
- Archery (FITA) (also prohibited Out-of-Competition)
- Automobile (FIA)
- Billiards and Snooker (WCBS)
- Bobsleigh (FIBT)
- Boules (CMSB)
- Bridge (FMB)
- Curling (WCF)
- Golf (IGF)
- Gymnastics (FIG)
- Motorcycling (FIM)

- Modern Pentathlon (UIPM) for disciplines involving shooting
- Ninepin and Tenpin Bowling (FIQ)
- Powerboating (UIM)
- Sailing (ISAF) for match race helms only
- Shooting (ISSF, IPC) (also prohibited Out-of-Competition)
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air
- Wrestling (FILA)

Beta-blockers include, but are not limited to, the following:

Acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.





# The World Anti-Doping Code

# THE 2011 PROHIBITED LIST INTERNATIONAL STANDARD

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.

This List shall come into effect on 1 January 2011

# THE 2011 PROHIBITED LIST WORLD ANTI-DOPING CODE

# Valid 1 January 2011

All *Prohibited Substances* shall be considered as "Specified Substances" except Substances in classes S1, S2.1 to S2.5, S.4.4 and S6.a, and *Prohibited Methods* M1, M2 and M3.

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

# **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 (i.e. drugs under pre-clinical or clinical development or discontinued) is prohibited at all times.

## PROHIBITED SUBSTANCES

# **\$1. ANABOLIC AGENTS**

Anabolic agents are prohibited.

# 1. Anabolic Androgenic Steroids (AAS)

<u>a</u>. Exogenous\* AAS, including:

1-androstenediol (5α-androst-1-ene-3β,17β-diol); 1-androstenedione (5α-androst-1-ene-3,17-dione); bolandiol (19-norandrostenediol); bolasterone; boldenone; boldione (androsta-1,4-diene-3,17-dione); calusterone; clostebol; danazol (17α-ethynyl-17β-hydroxyandrost-4-eno[2,3-d]isoxazole); dehydrochlormethyltestosterone (4-chloro-17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); desoxymethyltestosterone (17α-methyl-5α-androst-2-en-17β-ol); drostanolone; ethylestrenol (19-nor-17α-pregn-4-en-17-ol); fluoxymesterone; formebolone; furazabol (17β-hydroxy-17α-methyl-5α-

androstano[2,3-c]-furazan); gestrinone; 4-hydroxytestosterone (4,17βdihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metenolone; **methandienone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one); methandriol; methasterone (2 $\alpha$ , 17 $\alpha$ -dimethyl-5 $\alpha$ -androstane-3-one-17 $\beta$ -ol); methyldienolone (17β-hydroxy-17α-methylestra-4,9-dien-3-one); methyl-1**testosterone** (17 $\beta$ -hydroxy-17 $\alpha$ -methyl-5 $\alpha$ -androst-1-en-3-one); **methylnortestosterone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17β-hydroxy-17αmethylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; **prostanozol** (17 $\beta$ -hydroxy-5 $\alpha$ -androstano[3,2-c] pyrazole); **quinbolone**; stanozolol; stenbolone; 1-testosterone (17β-hydroxy-5α-androst-1-en-3one); tetrahydrogestrinone (18a-homo-pregna-4,9,11-trien-17β-ol-3-one); trenbolone; and other substances with a similar chemical structure or similar biological effect(s).

b. Endogenous\*\* AAS when administered exogenously:

androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one); prasterone (dehydroepiandrosterone, DHEA); testosterone and the following metabolites and isomers:

 $5\alpha$ -androstane- $3\alpha$ , $17\alpha$ -diol;  $5\alpha$ -androstane- $3\alpha$ , $17\beta$ -diol;  $5\alpha$ -androstane- $3\beta$ , $17\alpha$ -diol;  $5\alpha$ -androstane- $3\beta$ , $17\alpha$ -diol; androst-4-ene- $3\alpha$ , $17\alpha$ -diol; androst-5-ene- $3\alpha$ , $17\alpha$ -diol; androst-6-ene- $3\alpha$ , $17\alpha$ -diol; androst-6-ene-6-androstenediol (androst-6-ene-6-androstenediol (androst-6-ene-6-androstenedione (androst-6-ene-6-androstenedione); epi-dihydrotestosterone; epitestosterone;  $6\alpha$ -hydroxy- $6\alpha$ -androstan- $6\alpha$ -androstene;  $6\alpha$ -hydroxy- $6\alpha$ -hydroxy-

# 2. Other Anabolic Agents, including but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs), tibolone, zeranol, zilpaterol.

For purposes of this section:

<sup>\* &</sup>quot;exogenous" refers to a substance which is not ordinarily capable of being produced by the body naturally.

<sup>\*\* &</sup>quot;endogenous" refers to a substance which is capable of being produced by the body naturally.

# S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES

The following substances and their releasing factors are prohibited:

- Erythropoiesis-Stimulating Agents [e.g. erythropoietin (EPO), darbepoetin (dEPO), hypoxia-inducible factor (HIF) stabilizers, methoxy polyethylene glycol-epoetin beta (CERA), peginesatide (Hematide)];
- 2. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) in males;
- 3. Insulins;
- 4. Corticotrophins;
- 5. Growth Hormone (GH), Insulin-like Growth Factor-1 (IGF-1), Fibroblast Growth Factors (FGFs), Hepatocyte Growth Factor (HGF), Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Vascular-Endothelial Growth Factor (VEGF) as well as any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching;

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

# S3. BETA-2 AGONISTS

All beta-2 agonists (including both optical isomers where relevant) are prohibited except salbutamol (maximum 1600 micrograms over 24 hours) and salmeterol when taken by inhalation in accordance with the manufacturers' recommended therapeutic regime.

The presence of salbutamol in urine in excess of 1000 ng/mL is presumed not to be an intended therapeutic use of the substance and will be considered as an *Adverse Analytical Finding* unless the *Athlete* proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of a therapeutic dose (maximum 1600 micrograms over 24 hours) of inhaled salbutamol.

# **S4. HORMONE ANTAGONISTS AND MODULATORS**

The following classes are prohibited:

- 1. Aromatase inhibitors including, but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone.
- 2. Selective estrogen receptor modulators (SERMs) including, but not limited to: raloxifene, tamoxifen, toremifene.
- 3. Other anti-estrogenic substances including, but not limited to: clomiphene, cyclofenil, fulvestrant.
- **4. Agents modifying myostatin function(s)** including, but not limited, to: myostatin inhibitors.

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

Masking agents are prohibited. They include:

**Diuretics, desmopressin, plasma expanders (e.g. glycerol; intravenous administration of albumin, dextran, hydroxyethyl starch and mannitol), probenecid; and other substances with similar biological effect(s).** 

### Diuretics include:

Acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), triamterene; and other substances with a similar chemical structure or similar biological effect(s) (except drosperinone, pamabrom and topical dorzolamide and brinzolamide, which are not prohibited).

The use *In-* and *Out-of-Competition*, as applicable, of any quantity of a substance subject to threshold limits (i.e. salbutamol, morphine, cathine, ephedrine, methylephedrine and pseudoephedrine) in conjunction with a diuretic or other masking agent requires the deliverance of a specific Therapeutic Use Exemption for that substance in addition to the one granted for the diuretic or other masking agent.

# PROHIBITED METHODS

# M1. ENHANCEMENT OF OXYGEN TRANSFER

The following are prohibited:

- 1. Blood doping, including the use of autologous, homologous or heterologous blood or red blood cell products of any origin.
- 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, microencapsulated haemoglobin products), excluding supplemental oxygen.

# M2. CHEMICAL AND PHYSICAL MANIPULATION

The following is prohibited:

- 1. Tampering, or attempting to tamper, in order to alter the integrity and validity of Samples collected during Doping Control is prohibited. These include but are not limited to catheterisation, urine substitution and/or adulteration (e.g. proteases).
- 2. Intravenous infusions are prohibited except for those legitimately received in the course of hospital admissions or clinical investigations.
- 3. Sequential withdrawal, manipulation and reinfusion of whole blood into the circulatory system is prohibited.

## M3. GENE DOPING

The following, with the potential to enhance sport performance, are prohibited:

- 1. The transfer of nucleic acids or nucleic acid sequences;
- 2. The use of normal or genetically modified cells;
- 3. The use of agents that directly or indirectly affect functions known to influence performance by altering gene expression. For example, Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists (e.g. GW 1516) and PPAR $\delta$ -AMP-activated protein kinase (AMPK) axis agonists (e.g. AICAR) are prohibited.

# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S0 to S5 and M1 to M3 defined above, the following categories are prohibited *In-Competition*:

# **PROHIBITED SUBSTANCES**

# **S6. STIMULANTS**

All stimulants (including both optical isomers where relevant) are prohibited, except imidazole derivatives for topical use and those stimulants included in the  $2011 \text{ Monitoring Program}^*$ .

Stimulants include:

a: Non-Specified Stimulants:

Adrafinil; amfepramone; amiphenazole; amphetamine; amphetaminil; benfluorex; benzphetamine; benzylpiperazine; bromantan; clobenzorex; cocaine; cropropamide; crotetamide; dimethylamphetamine; etilamphetamine; famprofazone; fencamine; fenetylline; fenfluramine; fenproporex; furfenorex; mefenorex; mephentermine; mesocarb; methamphetamine(d-); p-methylamphetamine; methylenedioxyamphetamine; methylenedioxymethamphetamine; modafinil; norfenfluramine; phendimetrazine; phenmetrazine; phentermine; 4-phenylpiracetam (carphedon); prenylamine; prolintane. A stimulant not expressly listed in this section is a Specified Substance.

b: Specified Stimulants (examples):

Adrenaline\*\*; cathine\*\*\*; ephedrine\*\*\*\*; etamivan; etilefrine; fenbutrazate; fencamfamin; heptaminol; isometheptene; levmetamfetamine; meclofenoxate; methylephedrine\*\*\*\*; methylhexaneamine (dimethylpentylamine); methylphenidate; nikethamide; norfenefrine; octopamine; oxilofrine; parahydroxyamphetamine; pemoline; pentetrazol; phenpromethamine; propylhexedrine; pseudoephedrine\*\*\*\*\*; selegiline; sibutramine; strychnine; tuaminoheptane; and other substances with a similar chemical structure or similar biological effect(s).

\* The following substances included in the 2011 Monitoring Program (bupropion, caffeine, phenylephrine, phenylpropanolamine, pipradol, synephrine) are not considered as *Prohibited Substances*.

\*\* Adrenaline associated with local anaesthetic agents or by local administration

(e.g. nasal, ophthalmologic) is not prohibited.

\*\*\* Cathine is prohibited when its concentration in urine is greater than 5 micrograms per milliliter.

\*\*\* Each of **ephedrine** and **methylephedrine** is prohibited when its

concentration in urine is greater than 10 micrograms per milliliter.

\*\*\*\*\*\* **Pseudoephedrine** is prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

# **S7. NARCOTICS**

The following are prohibited:

Buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

# **S8. CANNABINOIDS**

Natural (e.g. cannabis, hashish, marijuana) or synthetic delta 9-tetrahydrocannabinol (THC) and cannabimimetics [e.g. "Spice" (containing JWH018, JWH073), HU-210] are prohibited.

### S9. GLUCOCORTICOSTEROIDS

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

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

# P1. ALCOHOL

Alcohol (ethanol) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold (haematological values) is 0.10 g/L.

- Aeronautic (FAI)
- Archery (FITA)
- Automobile (FIA)
- Karate (WKF)

- Motorcycling (FIM)
- Ninepin and Tenpin Bowling (FIQ)
- Powerboating (UIM)

# P2. BETA-BLOCKERS

Unless otherwise specified, beta-blockers are prohibited *In-Competition* only, in the following sports.

- Aeronautic (FAI)
- Archery (FITA) (also prohibited Out-of-Competition)
- Automobile (FIA)
- Billiards and Snooker (WCBS)
- Bobsleigh and Skeleton (FIBT)
- Boules (CMSB)
- Bridge (FMB)
- Curling (WCF)
- Darts (WDF)
- Golf (IGF)
- Motorcycling (FIM)

- Modern Pentathlon (UIPM) for disciplines involving shooting
- Ninepin and Tenpin Bowling (FIQ)
- Powerboating (UIM)
- Sailing (ISAF) for match race helms only
- Shooting (ISSF, IPC) (also prohibited Out-of-Competition)
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air
- Wrestling (FILA)

Beta-blockers include, but are not limited to, the following:

Acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.





# The World Anti-Doping Code

# THE 2012 PROHIBITED LIST INTERNATIONAL STANDARD

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.

This List shall come into effect on 1 January 2012

# THE 2012 PROHIBITED LIST WORLD ANTI-DOPING CODE

Valid 1 January 2012

In accordance with Article 4.2.2 of the World Anti-Doping Code, all *Prohibited Substances* shall be considered as "Specified Substances" except Substances in classes S1, S2, S4.4, S4.5, S6.a, and *Prohibited Methods* M1, M2 and M3.

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

# PROHIBITED SUBSTANCES

# 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, veterinary medicines) is prohibited at all times.

## **S1. ANABOLIC AGENTS**

Anabolic agents are prohibited.

# 1. Anabolic Androgenic Steroids (AAS)

a. Exogenous\* AAS, including:

1-androstenediol ( $5\alpha$ -androst-1-ene- $3\beta$ , $17\beta$ -diol ); 1-androstenedione ( $5\alpha$ -androst-1-ene-3,17-dione); bolandiol (estr-4-ene- $3\beta$ , $17\beta$ -diol ); bolasterone; boldenone; boldione (androsta-1,4-diene-3,17-dione); calusterone; clostebol; danazol ( $17\alpha$ -ethynyl- $17\beta$ -hydroxyandrost-4-eno[2,3-d]isoxazole); dehydrochlormethyltestosterone (4-chloro- $17\beta$ -hydroxy- $17\alpha$ -methylandrosta-

1,4-dien-3-one); desoxymethyltestosterone (17α-methyl-5α-androst-2-en-17β-ol); drostanolone; ethylestrenol (19-nor-17α-pregn-4-en-17-ol); fluoxymesterone; formebolone; furazabol (17β-hydroxy-17α-methyl-5αandrostano[2,3-c]-furazan); gestrinone; 4-hydroxytestosterone (4,17βdihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metenolone; **methandienone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one); methandriol; methasterone ( $2\alpha$ ,  $17\alpha$ -dimethyl- $5\alpha$ -androstane-3-one- $17\beta$ -ol); methyldienolone (17β-hydroxy-17α-methylestra-4,9-dien-3-one); methyl-1**testosterone** (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one); **methylnortestosterone** (17 $\beta$ -hydroxy-17 $\alpha$ -methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17β-hydroxy-17αmethylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; **prostanozol** (17β-hydroxy-5α-androstano[3,2-c] pyrazole); **quinbolone**; stanozolol; stenbolone; 1-testosterone (17β-hydroxy-5α-androst-1-en-3one); tetrahydrogestrinone (18a-homo-pregna-4,9,11-trien-17β-ol-3-one); trenbolone; and other substances with a similar chemical structure or similar biological effect(s).

<u>b</u>. Endogenous\*\* AAS when administered exogenously:

androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one); prasterone (dehydroepiandrosterone, DHEA); testosterone and their metabolites and isomers, including but not limited to:

 $5\alpha$ -androstane- $3\alpha$ , $17\alpha$ -diol;  $5\alpha$ -androstane- $3\alpha$ , $17\beta$ -diol;  $5\alpha$ -androstane- $3\beta$ , $17\alpha$ -diol;  $5\alpha$ -androstane- $3\beta$ , $17\alpha$ -diol; androst-4-ene- $3\alpha$ , $17\alpha$ -diol; androst-5-ene- $3\alpha$ , $17\alpha$ -diol; androst-6-ene- $3\alpha$ , $17\alpha$ -diol; androst-6-ene-6-androstenediol (androst-6-ene-6-androstenediol (androst-6-ene-6-androstenedione (androst-6-ene-6-androstenedione); epi-dihydrotestosterone; epitestosterone;  $6\alpha$ -hydroxy- $6\alpha$ -androstan- $6\alpha$ -hydroxy- $6\alpha$ -androstan- $6\alpha$ -hydroxy- $6\alpha$ -androstan- $6\alpha$ -hydroxy- $6\alpha$ -h

# 2. Other Anabolic Agents, including but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs), tibolone, zeranol, zilpaterol.

For purposes of this section:

<sup>\* &</sup>quot;exogenous" refers to a substance which is not ordinarily capable of being produced by the body naturally.

\*\* "endogenous" refers to a substance which is capable of being produced by the body naturally.

# S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES

The following substances and their releasing factors are prohibited:

- Erythropoiesis-Stimulating Agents [e.g. erythropoietin (EPO), darbepoetin (dEPO), hypoxia-inducible factor (HIF) stabilizers, methoxy polyethylene glycol-epoetin beta (CERA), peginesatide (Hematide)];
- 2. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) in males;
- 3. Insulins;
- 4. Corticotrophins;
- 5. Growth Hormone (GH), Insulin-like Growth Factor-1 (IGF-1), Fibroblast Growth Factors (FGFs), Hepatocyte Growth Factor (HGF), Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Vascular-Endothelial Growth Factor (VEGF) as well as any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching;

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

# **S3. BETA-2 AGONISTS**

All beta-2 agonists (including both optical isomers where relevant) are prohibited except salbutamol (maximum 1600 micrograms over 24 hours), formoterol (maximum 36 micrograms over 24 hours) and salmeterol when taken by inhalation in accordance with the manufacturers' recommended therapeutic regime.

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 30 ng/mL is presumed not to be an intended therapeutic use of the substance and will be considered as an *Adverse Analytical Finding* unless the *Athlete* proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of the therapeutic inhaled dose up to the maximum indicated above.

# **S4. HORMONE AND METABOLIC MODULATORS**

The following are prohibited:

- 1. Aromatase inhibitors including, but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone.
- 2. Selective estrogen receptor modulators (SERMs) including, but not limited to: raloxifene, tamoxifen, toremifene.
- 3. Other anti-estrogenic substances including, but not limited to: clomiphene, cyclofenil, fulvestrant.
- **4. Agents modifying myostatin function(s)** including, but not limited, to: myostatin inhibitors.
- 5. Metabolic modulators: Peroxisome Proliferator Activated Receptor δ (PPARδ) agonists (e.g. GW 1516), PPARδ-AMP-activated protein kinase (AMPK) axis agonists (e.g. AICAR)

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

Masking agents are prohibited. They include:

**Diuretics, desmopressin, plasma expanders (e.g. glycerol;** intravenous administration of **albumin, dextran, hydroxyethyl starch** and **mannitol), probenecid;** and other substances with similar biological effect(s). Local application of felypressin in dental anaesthesia is not prohibited.

### Diuretics include:

Acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), triamterene; and other substances with a similar chemical structure or similar biological effect(s) (except drospirenone, pamabrom and topical dorzolamide and brinzolamide, which are not prohibited).

The use *In-* and *Out-of-Competition*, as applicable, of any quantity of a substance subject to threshold limits (i.e. formoterol, salbutamol, morphine, cathine, ephedrine, methylephedrine and pseudoephedrine) in conjunction with a diuretic or other masking agent requires the deliverance of a specific Therapeutic Use Exemption for that substance in addition to the one granted for the diuretic or other masking agent.

# PROHIBITED METHODS

# **M1. ENHANCEMENT OF OXYGEN TRANSFER**

The following are prohibited:

- 1. Blood doping, including the use of autologous, homologous or heterologous blood or red blood cell products of any origin.
- 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, microencapsulated haemoglobin products), excluding supplemental oxygen.

# M2. CHEMICAL AND PHYSICAL MANIPULATION

The following are prohibited:

- 1. Tampering, or attempting to tamper, in order to alter the integrity and validity of Samples collected during Doping Control is prohibited. These include but are not limited to urine substitution and/or adulteration (e.g. proteases).
- 2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period are prohibited except for those legitimately received in the course of hospital admissions or clinical investigations.
- 3. Sequential withdrawal, manipulation and reintroduction of any quantity of whole blood into the circulatory system.

# **M3. GENE DOPING**

The following, with the potential to enhance sport performance, are prohibited:

- 1. The transfer of nucleic acids or nucleic acid sequences;
- 2. The use of normal or genetically modified cells.

# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S0 to S5 and M1 to M3 defined above, the following categories are prohibited *In-Competition*:

# PROHIBITED SUBSTANCES

# **S6. STIMULANTS**

All stimulants (including both optical isomers where relevant) are prohibited, except imidazole derivatives for topical use and those stimulants included in the 2012 Monitoring Program\*.

Stimulants include:

a: Non-Specified Stimulants:

Adrafinil; amfepramone; amiphenazole; amphetamine; amphetaminil; benfluorex; benzphetamine; benzylpiperazine; bromantan; clobenzorex; cocaine; cropropamide; crotetamide; dimethylamphetamine; etilamphetamine; famprofazone; fencamine; fenetylline; fenfluramine; fenproporex; furfenorex; mefenorex; mephentermine; mesocarb; methamphetamine(d-); p-methylamphetamine; methylenedioxyamphetamine; methylenedioxymethamphetamine; modafinil; norfenfluramine; phendimetrazine; phenmetrazine; phentermine; 4-phenylpiracetam (carphedon); prenylamine; prolintane. A stimulant not expressly listed in this section is a Specified Substance.

b: Specified Stimulants (examples):

Adrenaline\*\*; cathine\*\*\*; ephedrine\*\*\*\*; etamivan; etilefrine; fenbutrazate; fencamfamin; heptaminol; isometheptene; levmetamfetamine; meclofenoxate; methylephedrine\*\*\*\*; methylhexaneamine (dimethylpentylamine); methylphenidate; nikethamide; norfenefrine; octopamine; oxilofrine; parahydroxyamphetamine; pemoline; pentetrazol; phenpromethamine; propylhexedrine; pseudoephedrine\*\*\*\*; selegiline; sibutramine; strychnine; tuaminoheptane; and other substances with a similar chemical structure or similar biological effect(s).

- \* The following substances included in the 2012 Monitoring Program (bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradol, synephrine) are not considered as *Prohibited Substances*.
- \*\* Local administration (e.g. nasal, ophthalmologic) of **Adrenaline** or coadministration with local anaesthetic agents is not prohibited.
- \*\*\* **Cathine** is prohibited when its concentration in urine is greater than 5 micrograms per milliliter.
- \*\*\*\* Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.
- \*\*\*\*\* **Pseudoephedrine** is prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

# **S7. NARCOTICS**

The following are prohibited:

Buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

# **S8. CANNABINOIDS**

Natural (e.g. cannabis, hashish, marijuana) or synthetic delta 9-tetrahydrocannabinol (THC) and cannabimimetics [e.g. "Spice" (containing JWH018, JWH073), HU-210] are prohibited.

# **S9. GLUCOCORTICOSTEROIDS**

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

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

# P1. ALCOHOL

Alcohol (ethanol) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold (haematological values) is 0.10 g/L.

- Aeronautic (FAI)
- Archery (FITA)
- Automobile (FIA)

- Karate (WKF)
- Motorcycling (FIM)
- Powerboating (UIM)

# P2. BETA-BLOCKERS

Unless otherwise specified, beta-blockers are prohibited *In-Competition* only, in the following sports.

- Aeronautic (FAI)
- Archery (FITA) (also prohibited Out-of-Competition)
- Automobile (FIA)
- Billiards (all disciplines) (WCBS)
- Boules (CMSB)
- Bridge (FMB)
- Darts (WDF)
- Golf (IGF)
- Ninepin and Tenpin Bowling (FIQ)
- Powerboating (UIM)
- Shooting (ISSF, IPC) (also prohibited *Out-of-Competition*)
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air

Beta-blockers include, but are not limited to, the following:

Acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.





# The World Anti-Doping Code

# THE 2013 PROHIBITED LIST INTERNATIONAL STANDARD

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.

This List shall come into effect on 1 January 2013-

# THE 2013 PROHIBITED LIST WORLD ANTI-DOPING CODE

# Valid 1 January 2013

In accordance with Article 4.2.2 of the World Anti-Doping Code, all *Prohibited Substances* shall be considered as "Specified Substances" except Substances in classes S1, S2, S4.4, S4.5, S6.a, and *Prohibited Methods* M1, M2 and M3.

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

# PROHIBITED SUBSTANCES

# 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.

# **S1. ANABOLIC AGENTS**

Anabolic agents are prohibited.

# 1. Anabolic Androgenic Steroids (AAS)

<u>a</u>. Exogenous\* AAS, including:

1-androstenediol ( $5\alpha$ -androst-1-ene- $3\beta$ , $17\beta$ -diol ); 1-androstenedione ( $5\alpha$ -androst-1-ene-3,17-dione); bolandiol (estr-4-ene- $3\beta$ , $17\beta$ -diol ); 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- $17\alpha$ -ol);

dehydrochlormethyltestosterone (4-chloro-17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); **desoxymethyltestosterone** (17α-methyl-5α-androst-2-en-17β-oi); drostanolone; ethylestrenol (19-norpregna-4-en-17α-ol); fluoxymesterone; formebolone; furazabol (17αmethyl[1,2,5]oxadiazolo[3',4':2,3]- $5\alpha$ -androstan- $17\beta$ -ol); **gestrinone**; **4**hydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metenolone; methandienone (17β-hydroxy-17αmethylandrosta-1,4-dien-3-one); methandriol; methasterone (17β-hydroxy- $2\alpha$ ,  $17\alpha$ -dimethyl- $5\alpha$ -androstan-3-one); **methyldienolone** ( $17\beta$ -hydroxy- $17\alpha$ methylestra-4,9-dien-3-one); methyl-1-testosterone (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one); **methylnortestosterone** (17β-hydroxy-17α-methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 176hydroxy-17\(\alpha\)-methylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; **prostanozol** (17 $\beta$ -[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5 $\alpha$ androstane); quinbolone; stanozolol; stenbolone; 1-testosterone (178hydroxy-5α-androst-1-en-3-one); tetrahydrogestrinone (17-hydroxy-18ahomo-19-nor-17α-pregna-4,9,11-trien-3-one); trenbolone (17β-hydroxyestr-4,9,11-trien-3-one); and other substances with a similar chemical structure or similar biological effect(s).

b. Endogenous\*\* AAS when administered exogenously:

androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one); prasterone (dehydroepiandrosterone, DHEA, 3 $\beta$ -hydroxyandrost-5-en-17-one); testosterone;

and their metabolites and isomers, including but not limited to:

 $5\alpha$ -androstane- $3\alpha$ ,  $17\alpha$ -diol;  $5\alpha$ -androstane- $3\alpha$ ,  $17\beta$ -diol;  $5\alpha$ -androstane- $3\beta$ ,  $17\alpha$ -diol;  $5\alpha$ -androstane- $3\beta$ ,  $17\alpha$ -diol; androst-4-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-5-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-6-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-6-ene-6-androstenediol (androst-6-ene-6-androstenediol (androst-6-ene-6-androstenedione (androst-6-ene-6-androstenedione; 6-ene-6-androstenedione; 6-ene-6-androstenedione; 6-hydroxy-6-androstan-6-andr

# 2. Other Anabolic Agents, including but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs), tibolone, zeranol, zilpaterol.

For purposes of this section:

- \* "exogenous" refers to a substance which is not ordinarily capable of being produced by the body naturally.
- \*\* "endogenous" refers to a substance which is capable of being produced by the body naturally.

# <u>S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED</u> SUBSTANCES

The following substances and their releasing factors are prohibited:

- Erythropoiesis-Stimulating Agents [e.g. erythropoietin (EPO), darbepoetin (dEPO), hypoxia-inducible factor (HIF) stabilizers, methoxy polyethylene glycol-epoetin beta (CERA), peginesatide (Hematide)];
- 2. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) in males;
- 3. Corticotrophins;
- 4. Growth Hormone (GH), Insulin-like Growth Factor-1 (IGF-1), Fibroblast Growth Factors (FGFs), Hepatocyte Growth Factor (HGF), Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Vascular-Endothelial Growth Factor (VEGF) as well as any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching;

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

### S3. BETA-2 AGONISTS

All beta-2 agonists, including all optical isomers (e.g. d- and l-) where relevant, are prohibited except inhaled salbutamol (maximum 1600 micrograms over 24 hours), inhaled formoterol (maximum delivered dose 54 micrograms over 24 hours) and salmeterol when taken by inhalation in accordance with the manufacturers' recommended therapeutic regimen.

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 40 ng/mL is presumed not to be an intended therapeutic use of the substance and will be considered as an *Adverse Analytical Finding* unless the *Athlete* proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of the therapeutic inhaled dose up to the maximum indicated above.

# **S4. HORMONE AND METABOLIC MODULATORS**

The following are prohibited:

- 1. Aromatase inhibitors including, but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone.
- 2. Selective estrogen receptor modulators (SERMs) including, but not limited to: raloxifene, tamoxifen, toremifene.
- 3. Other anti-estrogenic substances including, but not limited to: clomiphene, cyclofenil, fulvestrant.
- **4. Agents modifying myostatin function(s)** including, but not limited, to: myostatin inhibitors.
- 5. Metabolic modulators:
  - a) Insulins
  - b) Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists (e.g. GW 1516), PPAR $\delta$ -AMP-activated protein kinase (AMPK) axis agonists (e.g. AICAR)

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

Masking agents are prohibited. They include:

**Diuretics, desmopressin, plasma expanders (e.g. glycerol;** intravenous administration of **albumin, dextran, hydroxyethyl starch** and **mannitol), probenecid;** and other substances with similar biological effect(s). Local administration of felypressin in dental anaesthesia is not prohibited.

### Diuretics include:

Acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), triamterene; and other substances with a similar chemical structure or similar biological effect(s) (except drospirenone, pamabrom and topical dorzolamide and brinzolamide, which are not prohibited).

The use *In-* and *Out-of-Competition*, as applicable, of any quantity of a substance subject to threshold limits (i.e. formoterol, salbutamol, cathine, ephedrine, methylephedrine and pseudoephedrine) in conjunction with a diuretic or other masking agent requires the deliverance of a specific Therapeutic Use Exemption for that substance in addition to the one granted for the diuretic or other masking agent.

# PROHIBITED METHODS

# M1. MANIPULATION OF BLOOD AND BLOOD COMPONENTS

The following are prohibited:

- 1. The administration or reintroduction of any quantity of autologous, 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, microencapsulated haemoglobin products), excluding supplemental oxygen.
- 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:

- Tampering, or attempting to tamper, in order to alter the integrity and validity of Samples collected during Doping Control. These include but are not limited to urine substitution and/or adulteration (e.g. proteases).
- 2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period except for those legitimately received in the course of hospital admissions or clinical investigations.

### M3, GENE DOPING

The following, with the potential to enhance sport performance, are prohibited:

- 1. The transfer of polymers of nucleic acids or nucleic acid analogues;
- 2. The use of normal or genetically modified cells.

# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S0 to S5 and M1 to M3 defined above, the following categories are prohibited *In-Competition*:

### PROHIBITED SUBSTANCES

### **S6. STIMULANTS**

All stimulants, including all optical isomers (e.g. d- and l-) where relevant, are prohibited, except imidazole derivatives for topical use and those stimulants included in the 2013 Monitoring Program $^*$ .

Stimulants include:

a: Non-Specified Stimulants:

Adrafinil; amfepramone; amiphenazole; amphetamine; amphetaminil; benfluorex; benzphetamine; benzylpiperazine; bromantan; clobenzorex; cocaine; cropropamide; crotetamide; dimethylamphetamine; etilamphetamine; famprofazone; fencamine; fenetylline; fenfluramine; fenproporex; furfenorex; mefenorex; mephentermine; mesocarb; methamphetamine(d-); p-methylamphetamine; methylenedioxyamphetamine; methylenedioxymethamphetamine; modafinil; norfenfluramine; phendimetrazine; phenmetrazine; phentermine; 4-phenylpiracetam (carphedon); prenylamine; prolintane. A stimulant not expressly listed in this section is a Specified Substance.

b: Specified Stimulants (examples):

Adrenaline\*\*; cathine\*\*\*; ephedrine\*\*\*\*; etamivan; etilefrine; fenbutrazate; fencamfamin; heptaminol; isometheptene; levmetamfetamine; meclofenoxate; methylephedrine\*\*\*\*; methylhexaneamine (dimethylpentylamine); methylphenidate; nikethamide; norfenefrine; octopamine; oxilofrine (methylsynephrine); parahydroxyamphetamine; pemoline; pentetrazol; phenpromethamine; propylhexedrine; pseudoephedrine\*\*\*\*\*; selegiline; sibutramine; strychnine; tuaminoheptane; and other substances with a similar chemical structure or similar biological effect(s).

- \* The following substances included in the 2013 Monitoring Program (bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradol, synephrine) are not considered as *Prohibited Substances*.
- \*\* Local administration (e.g. nasal, ophthalmologic) of **Adrenaline** or coadministration with local anaesthetic agents is not prohibited.
- \*\*\* **Cathine** is prohibited when its concentration in urine is greater than 5 micrograms per milliliter.
- Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.
- \*\*\*\*\*\* **Pseudoephedrine** is prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

### **S7. NARCOTICS**

The following are prohibited:

Buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

### **S8. CANNABINOIDS**

Natural (e.g. cannabis, hashish, marijuana) or synthetic delta 9-tetrahydrocannabinol (THC) and cannabimimetics (e.g. "Spice", JWH018, JWH073, HU-210) are prohibited.

### **S9. GLUCOCORTICOSTEROIDS**

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

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

### P1. ALCOHOL

Alcohol (ethanol) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold (haematological values) is 0.10 g/L.

- Aeronautic (FAI)
- Archery (FITA)
- Automobile (FIA)

- Karate (WKF)
- Motorcycling (FIM)
- Powerboating (UIM)

### **P2. BETA-BLOCKERS**

Unless otherwise specified, beta-blockers are prohibited *In-Competition* only, in the following sports.

- Archery (FITA) (also prohibited Out-of-Competition)
- Automobile (FIA)
- Billiards (all disciplines) (WCBS)
- Darts (WDF)
- Golf (IGF)
- Shooting (ISSF, IPC) (also prohibited *Out-of-Competition*)
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air

Beta-blockers include, but are not limited to, the following:

Acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.





# The World Anti-Doping Code

# THE 2014 PROHIBITED LIST INTERNATIONAL STANDARD

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.

This List shall come into effect on 1 January 2014

# THE 2014 PROHIBITED LIST WORLD ANTI-DOPING CODE

### Valid 1 January 2014

In accordance with Article 4.2.2 of the World Anti-Doping Code, all *Prohibited Substances* shall be considered as "Specified Substances" except Substances in classes S1, S2, S4.4, S4.5, S6.a, and *Prohibited Methods* M1, M2 and M3.

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

### PROHIBITED SUBSTANCES

### 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.

### **S1. ANABOLIC AGENTS**

Anabolic agents are prohibited.

### 1. Anabolic Androgenic Steroids (AAS)

a. Exogenous\* AAS, including:

1-androstenediol ( $5\alpha$ -androst-1-ene- $3\beta$ , $17\beta$ -diol ); 1-androstenedione ( $5\alpha$ -androst-1-ene-3,17-dione); bolandiol (estr-4-ene- $3\beta$ , $17\beta$ -diol ); 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- $17\alpha$ -ol);

dehydrochlormethyltestosterone (4-chloro-17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); desoxymethyltestosterone (17α-methyl-5α-androst-2-en-17β-ol); drostanolone; ethylestrenol (19-norpregna-4-en-17α-ol); fluoxymesterone; formebolone; furazabol (17αmethyl[1,2,5]oxadiazolo[3',4':2,3]- $5\alpha$ -androstan- $17\beta$ -ol); **gestrinone**; **4**hydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one); mestanolone; **mesterolone**; **metandienone** (17β-hydroxy-17α-methylandrosta-1,4-dien-3one); metenolone; methandriol; methasterone (17β-hydroxy-2α,17αdimethyl- $5\alpha$ -androstan-3-one); **methyldienolone** (17 $\beta$ -hydroxy-17 $\alpha$ methylestra-4,9-dien-3-one); **methyl-1-testosterone** (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one); methylnortestosterone (17β-hydroxy-17α-methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17βhydroxy-17α-methylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; **prostanozol** (17β-[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5αandrostane); quinbolone; stanozolol; stenbolone; 1-testosterone (17βhydroxy-5α-androst-1-en-3-one); **tetrahydrogestrinone** (17-hydroxy-18ahomo-19-nor-17α-pregna-4,9,11-trien-3-one); **trenbolone** (17β-hydroxyestr-4,9,11-trien-3-one); and other substances with a similar chemical structure or similar biological effect(s).

<u>b</u>. Endogenous\*\* AAS when administered exogenously:

androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one); prasterone (dehydroepiandrosterone, DHEA, 3 $\beta$ -hydroxyandrost-5-en-17-one); testosterone;

and their metabolites and isomers, including but not limited to:

 $5\alpha$ -androstane- $3\alpha$ ,  $17\alpha$ -diol;  $5\alpha$ -androstane- $3\alpha$ ,  $17\beta$ -diol;  $5\alpha$ -androstane- $3\beta$ ,  $17\alpha$ -diol;  $5\alpha$ -androstane- $3\beta$ ,  $17\alpha$ -diol;  $5\alpha$ -androstane- $3\alpha$ ,  $17\alpha$ -diol; androst-4-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-5-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-6-ene- $6\alpha$ ,  $17\alpha$ -diol; androst-6-ene- $6\alpha$ ,  $17\alpha$ -diol; androst-6-ene- $6\alpha$ ,  $17\alpha$ -diol); 6-androstenediol (androst-6-ene- $6\alpha$ ,  $17\alpha$ -diole); 6-androstenedione (androst-6-ene- $6\alpha$ , 17-dione);  $17\alpha$ -dione);  $17\alpha$ -dione;  $17\alpha$ -dione;  $17\alpha$ -hydroxy- $17\alpha$ -androstan- $17\alpha$ -one;  $17\alpha$ -hydroxy- $17\alpha$ -hydrox

### 2. Other Anabolic Agents, including but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs), tibolone, zeranol, zilpaterol.

For purposes of this section:

- \* "exogenous" refers to a substance which is not ordinarily produced by the body naturally.
- \*\* "endogenous" refers to a substance which is ordinarily produced by the body naturally.

# S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES

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

- Erythropoiesis-Stimulating Agents [e.g. erythropoietin (EPO), darbepoetin (dEPO), hypoxia-inducible factor (HIF) stabilizers, methoxy polyethylene glycol-epoetin beta (CERA), peginesatide (Hematide)];
- 2. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors, in males;
- Corticotrophins and their releasing factors;
- 4. Growth Hormone (GH) and its releasing factors and Insulin-like Growth Factor-1 (IGF-1).

In addition, the following growth factors are prohibited

Fibroblast Growth Factors (FGFs), Hepatocyte Growth Factor (HGF), Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Vascular-Endothelial Growth Factor (VEGF) as well as any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching;

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

### S3. BETA-2 AGONISTS

All beta-2 agonists, including all optical isomers (e.g. *d*- and *l*-) where relevant, are prohibited except inhaled salbutamol (maximum 1600 micrograms over 24 hours), inhaled formoterol (maximum delivered dose 54 micrograms over 24 hours) and salmeterol when taken by inhalation in accordance with the manufacturers' recommended therapeutic regimen.

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 40 ng/mL is presumed not to be an intended therapeutic use of the substance and will be considered as an *Adverse Analytical Finding* unless the *Athlete* proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of the therapeutic inhaled dose up to the maximum indicated above.

### **S4. HORMONE AND METABOLIC MODULATORS**

The following are prohibited:

- 1. Aromatase inhibitors including, but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone.
- 2. Selective estrogen receptor modulators (SERMs) including, but not limited to: raloxifene, tamoxifen, toremifene.
- **3. Other anti-estrogenic substances** including, but not limited to: clomiphene, cyclofenil, fulvestrant.
- **4. Agents modifying myostatin function(s)** including, but not limited, to: myostatin inhibitors.
- 5. Metabolic modulators:
  - a) Insulins
  - b) Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists (e.g. GW 1516), PPAR $\delta$ -AMP-activated protein kinase (AMPK) axis agonists (e.g. AICAR)

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

Masking agents are prohibited. They include:

**Diuretics, desmopressin, plasma expanders (e.g. glycerol; intravenous administration of albumin, dextran, hydroxyethyl starch and mannitol), probenecid;** and other substances with similar biological effect(s). Local administration of felypressin in dental anaesthesia is not prohibited.

### Diuretics include:

Acetazolamide, amiloride, bumetanide, canrenone, chlortalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), triamterene, vaptans (e.g. tolvaptan); and other substances with a similar

chemical structure or similar biological effect(s) (except drospirenone, pamabrom and topical dorzolamide and brinzolamide, which are not prohibited).

The use *In-* and *Out-of-Competition*, as applicable, of any quantity of a substance subject to threshold limits (i.e. formoterol, salbutamol, cathine, ephedrine, methylephedrine and pseudoephedrine) in conjunction with a diuretic or other masking agent requires the deliverance of a specific Therapeutic Use Exemption for that substance in addition to the one granted for the diuretic or other masking agent.

### **PROHIBITED METHODS**

### M1. MANIPULATION OF BLOOD AND BLOOD COMPONENTS

The following are prohibited:

- 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.
- 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, microencapsulated haemoglobin products), excluding supplemental oxygen.
- 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, in order to alter the integrity and validity of *Samples* collected during *Doping Control*. These include but are not limited to urine substitution and/or adulteration (e.g. proteases).
- 2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period except for those legitimately received in the course of hospital admissions or clinical investigations.

### M3. GENE DOPING

The following, with the potential to enhance sport performance, are prohibited:

- 1. The transfer of polymers of nucleic acids or nucleic acid analogues;
- The use of normal or genetically modified cells.

# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S0 to S5 and M1 to M3 defined above, the following categories are prohibited *In-Competition*:

### **PROHIBITED SUBSTANCES**

### **S6. STIMULANTS**

All stimulants, including all optical isomers (e.g. *d*- and *l*-) where relevant, are prohibited, except imidazole derivatives for topical use and those stimulants included in the 2014 Monitoring Program\*.

Stimulants include:

a: Non-Specified Stimulants:

Adrafinil; amfepramone; amfetamine; amfetaminil; amiphenazole; benfluorex; benzylpiperazine; bromantan; clobenzorex; cocaine; cropropamide; crotetamide; fencamine; fenetylline; fenfluramine; fenproporex; fonturacetam [4-phenylpiracetam (carphedon)]; furfenorex; mefenorex; mephentermine; mesocarb; metamfetamine(d-); p-methylamphetamine; modafinil; norfenfluramine; phendimetrazine; phenmetrazine; phentermine; prenylamine; prolintane.

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

b: Specified Stimulants (examples):

Benzfetamine; cathine\*\*; cathinone and its analogues (e.g. mephedrone, methedrone, a pyrrolidinovalerophenone); dimethylamphetamine; ephedrine\*\*\*; epinephrine\*\*\*\* (adrenaline); etamivan; etilamfetamine; etilefrine; famprofazone; fenbutrazate; fencamfamin; heptaminol; hydroxyamfetamine (parahydroxyamphetamine); isometheptene; levmetamfetamine; meclofenoxate; methylenedioxymethamphetamine; methylephedrine\*\*\*; methylhexaneamine (dimethylpentylamine); methylphenidate; nikethamide; norfenefrine; octopamine; oxilofrine (methylsynephrine); pemoline; pentetrazol; phenpromethamine; propylhexedrine; pseudoephedrine\*\*\*\*\*; selegiline; sibutramine; strychnine; tenamfetamine (methylenedioxyamphetamine); trimetazidine; tuaminoheptane; and other substances with a similar chemical structure or similar biological effect(s).

\*\* **Cathine** is prohibited when its concentration in urine is greater than 5 micrograms per milliliter.

\*\*\* Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.

Local administration (e.g. nasal, ophthalmologic) of **epinephrine** (**adrenaline**) or co-administration with local anaesthetic agents is not prohibited.

\*\*\*\*\*\* **Pseudoephedrine** is prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

### **S7. NARCOTICS**

The following are prohibited:

Buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

### **S8. CANNABINOIDS**

Natural (e.g. cannabis, hashish, marijuana) or synthetic delta 9-tetrahydrocannabinol (THC) and cannabimimetics (e.g. "Spice", JWH018, JWH073, HU-210) are prohibited.

### **S9. GLUCOCORTICOSTEROIDS**

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

<sup>\*</sup> The following substances included in the 2014 Monitoring Program (bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, synephrine) are not considered as *Prohibited Substances*.

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

### P1. ALCOHOL

Alcohol (**ethanol**) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold is equivalent to a blood alcohol concentration of 0.10 g/L.

- Air Sports (FAI)
- Archery (WA)
- Automobile (FIA)

- Karate (WKF)
- Motorcycling (FIM)
- Powerboating (UIM)

### P2. BETA-BLOCKERS

Unless otherwise specified, beta-blockers are prohibited *In-Competition* only, in the following sports.

- Archery (WA) (also prohibited Out-of-Competition)
- Automobile (FIA)
- Billiards (all disciplines) (WCBS)
- Darts (WDF)
- Golf (IGF)
- Shooting (ISSF, IPC) (also prohibited Out-of-Competition)
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air

Beta-blockers include, but are not limited to, the following:

Acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.



# The World Anti-Doping Code

# THE 2014 PROHIBITED LIST

# INTERNATIONAL STANDARD

Version 2.0 (revised 2014 version)

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.

This List shall come into effect on 1 September 2014

# THE 2014 PROHIBITED LIST WORLD ANTI-DOPING CODE

### Valid 1 September 2014

In accordance with Article 4.2.2 of the World Anti-Doping Code, all *Prohibited Substances* shall be considered as "Specified Substances" except Substances in classes S1, S2, S4.4, S4.5, S6.a, and *Prohibited Methods* M1, M2 and M3.

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

### PROHIBITED SUBSTANCES

### 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.

### **S1. ANABOLIC AGENTS**

Anabolic agents are prohibited.

### 1. Anabolic Androgenic Steroids (AAS)

a. Exogenous\* AAS, including:

1-androstenedio! ( $5\alpha$ -androst-1-ene- $3\beta$ , $17\beta$ -dio!); 1-androstenedione ( $5\alpha$ -androst-1-ene-3,17-dione); bolandio! (estr-4-ene- $3\beta$ , $17\beta$ -dio!); bolasterone; boldenone; boldione (androsta-1,4-diene-3,17-dione); calusterone; clostebol; danazo! ([1,2]oxazolo[4',5':2,3]pregna-4-en-20-yn- $17\alpha$ -ol);

**dehydrochlormethyltestosterone** (4-chloro-17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); desoxymethyltestosterone (17α-methyl-5α-androst-2-en-17β-ol); drostanolone; ethylestrenol (19-norpregna-4-en-17α-ol); fluoxymesterone; formebolone; furazabol (17αmethyl[1,2,5]oxadiazolo[3',4':2,3]- $5\alpha$ -androstan- $17\beta$ -ol); **gestrinone**; **4**hydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one); mestanolone; mesterolone; metandienone (17β-hydroxy-17α-methylandrosta-1,4-dien-3one); metenolone; methandriol; methasterone (17β-hydroxy-2α,17αdimethyl-5α-androstan-3-one); methyldienolone (17β-hydroxy-17αmethylestra-4,9-dien-3-one); **methyl-1-testosterone** (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one); methylnortestosterone (17β-hydroxy-17α-methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17βhydroxy-17α-methylestra-4,9,11-trien-3-one); mibolerone; nandrolone; 19norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; **prostanozol** (17β-[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5αandrostane); quinbolone; stanozolol; stenbolone; 1-testosterone (17βhydroxy-5a-androst-1-en-3-one); tetrahydrogestrinone (17-hydroxy-18ahomo-19-nor-17α-pregna-4,9,11-trien-3-one); trenbolone (17β-hydroxyestr-4,9,11-trien-3-one); and other substances with a similar chemical structure or similar biological effect(s).

<u>b</u>. Endogenous\*\* AAS when administered exogenously:

androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one); prasterone (dehydroepiandrosterone, DHEA, 3 $\beta$ -hydroxyandrost-5-en-17-one); testosterone;

and their metabolites and isomers, including but not limited to:

 $5\alpha$ -androstane- $3\alpha$ ,  $17\alpha$ -diol;  $5\alpha$ -androstane- $3\alpha$ ,  $17\beta$ -diol;  $5\alpha$ -androstane- $3\beta$ ,  $17\alpha$ -diol;  $5\alpha$ -androstane- $3\beta$ ,  $17\alpha$ -diol; androst-4-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-5-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-6-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-6-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-6-ene- $3\alpha$ ,  $17\alpha$ -diol; androst-6-ene-6-diol; 6-androstenediol (androst-6-ene-6-diol); 6-androstenedione (androst-6-ene-6-diol); 6-androstenedione; 6-ene-6-diol); 6-androstenedione; 6

### 2. Other Anabolic Agents, including but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs), tibolone, zeranol, zilpaterol.

For purposes of this section:

- \* "exogenous" refers to a substance which is not ordinarily produced by the body naturally.
- \*\* "endogenous" refers to a substance which is ordinarily produced by the body naturally.

# S2. PEPTIDE HORMONES, GROWTH FACTORS AND RELATED SUBSTANCES

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

- 1. Erythropoiesis-Stimulating Agents [e.g. erythropoietin (EPO), darbepoetin (dEPO), hypoxia-inducible factor (HIF) stabilizers and activators (e.g. xenon, argon), methoxy polyethylene glycol-epoetin beta (CERA), peginesatide (Hematide)];
- 2. Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors, in males;
- Corticotrophins and their releasing factors;
- 4. Growth Hormone (GH) and its releasing factors and Insulin-like Growth Factor-1 (IGF-1).

In addition, the following growth factors are prohibited

Fibroblast Growth Factors (FGFs), Hepatocyte Growth Factor (HGF), Mechano Growth Factors (MGFs), Platelet-Derived Growth Factor (PDGF), Vascular-Endothelial Growth Factor (VEGF) as well as any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching,

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

### **S3. BETA-2 AGONISTS**

All beta-2 agonists, including all optical isomers (e.g. d- and l-) where relevant, are prohibited except inhaled salbutamol (maximum 1600 micrograms over 24 hours), inhaled formoterol (maximum delivered dose 54 micrograms over 24 hours) and salmeterol when taken by inhalation in accordance with the manufacturers' recommended therapeutic regimen.

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 40 ng/mL is presumed not to be an intended therapeutic use of the substance and will be considered as an *Adverse Analytical Finding* unless the *Athlete* proves, through a controlled pharmacokinetic study, that the abnormal result was the consequence of the use of the therapeutic inhaled dose up to the maximum indicated above.

### **S4. HORMONE AND METABOLIC MODULATORS**

The following are prohibited:

- 1. Aromatase inhibitors including, but not limited to: aminoglutethimide, anastrozole, androsta-1,4,6-triene-3,17-dione (androstatrienedione), 4-androstene-3,6,17 trione (6-oxo), exemestane, formestane, letrozole, testolactone.
- 2. Selective estrogen receptor modulators (SERMs) including, but not limited to: raloxifene, tamoxifen, toremifene.
- 3. Other anti-estrogenic substances including, but not limited to: clomiphene, cyclofenil, fulvestrant.
- **4. Agents modifying myostatin function(s)** including, but not limited, to: myostatin inhibitors.
- 5. Metabolic modulators:
  - a) Insulins
  - b) Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists (e.g. GW 1516), PPAR $\delta$ -AMP-activated protein kinase (AMPK) axis agonists (e.g. AICAR)

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

Masking agents are prohibited. They include:

**Diuretics, desmopressin, plasma expanders (e.g. glycerol**; intravenous administration of **albumin, dextran, hydroxyethyl starch** and **mannitol), probenecid**; and other substances with similar biological effect(s). Local administration of felypressin in dental anaesthesia is not prohibited.

### Diuretics include:

Acetazolamide, amiloride, bumetanide, canrenone, chlortalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. bendroflumethiazide, chlorothiazide, hydrochlorothiazide), triamterene, vaptans (e.g. tolvaptan); and other substances with a similar

chemical structure or similar biological effect(s) (except drospirenone, pamabrom and topical dorzolamide and brinzolamide, which are not prohibited).

The use *In-* and *Out-of-Competition*, as applicable, of any quantity of a substance subject to threshold limits (i.e. formoterol, salbutamol, cathine, ephedrine, methylephedrine and pseudoephedrine) in conjunction with a diuretic or other masking agent requires the deliverance of a specific Therapeutic Use Exemption for that substance in addition to the one granted for the diuretic or other masking agent.

### **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, microencapsulated haemoglobin products), excluding supplemental oxygen.
- 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, in order to alter the integrity and validity of *Samples* collected during *Doping Control*. These include but are not limited to urine substitution and/or adulteration (e.g. proteases).
- 2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period except for those legitimately received in the course of hospital admissions or clinical investigations.

### **M3. GENE DOPING**

The following, with the potential to enhance sport performance, are prohibited:

- 1. The transfer of polymers of nucleic acids or nucleic acid analogues;
- 2. The use of normal or genetically modified cells.

# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S0 to S5 and M1 to M3 defined above, the following categories are prohibited *In-Competition*:

### PROHIBITED SUBSTANCES

### **S6. STIMULANTS**

All stimulants, including all optical isomers (e.g. d- and l-) where relevant, are prohibited, except imidazole derivatives for topical use and those stimulants included in the 2014 Monitoring Program $^*$ .

Stimulants include:

a: Non-Specified Stimulants:

Adrafinil; amfepramone; amfetamine; amfetaminil; amiphenazole; benfluorex; benzylpiperazine; bromantan; clobenzorex; cocaine; cropropamide; crotetamide; fencamine; fenetylline; fenfluramine; fenproporex; fonturacetam [4-phenylpiracetam (carphedon)]; furfenorex; mefenorex; mephentermine; mesocarb; metamfetamine(d-); p-methylamphetamine; modafinil; norfenfluramine; phendimetrazine; phenmetrazine; phentermine; prenylamine; prolintane.

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

b: Specified Stimulants (examples):

Benzfetamine; cathine\*\*; cathinone and its analogues (e.g. mephedrone, methedrone, a pyrrolidinovalerophenone); dimethylamphetamine; ephedrine\*\*\*; epinephrine\*\*\*\* (adrenaline); etamivan; etilamfetamine; etilefrine; famprofazone; fenbutrazate; fencamfamin; heptaminol; hydroxyamfetamine (parahydroxyamphetamine); isometheptene; levmetamfetamine; meclofenoxate; methylenedioxymethamphetamine; methylephedrine\*\*\*; methylhexaneamine (dimethylpentylamine); methylphenidate; nikethamide; norfenefrine; octopamine; oxilofrine (methylsynephrine); pemoline; pentetrazol; phenpromethamine; propylhexedrine; pseudoephedrine\*\*\*\*\*; selegiline; sibutramine; strychnine; tenamfetamine (methylenedioxyamphetamine); trimetazidine; tuaminoheptane; and other substances with a similar chemical structure or similar biological effect(s).

\*\* Cathine is prohibited when its concentration in urine is greater than 5

micrograms per milliliter.

\*\*\* Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.

\*\*\*\* Local administration (e.g. nasal, ophthalmologic) of **epinephrine** (**adrenaline**) or co-administration with local anaesthetic agents is not prohibited.

\*\*\*\*\*\* **Pseudoephedrine** is prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

### **S7. NARCOTICS**

The following are prohibited:

Buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

### **S8. CANNABINOIDS**

Natural (e.g. cannabis, hashish, marijuana) or synthetic delta 9-tetrahydrocannabinol (THC) and cannabimimetics (e.g. "Spice", JWH018, JWH073, HU-210) are prohibited.

### S9. GLUCOCORTICOSTEROIDS

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

<sup>\*</sup> The following substances included in the 2014 Monitoring Program (bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, synephrine) are not considered as *Prohibited Substances*.

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

### P1, ALCOHOL

Alcohol (**ethanol**) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold is equivalent to a blood alcohol concentration of  $0.10~\rm g/L$ .

- Air Sports (FAI)
- Archery (WA)
- Automobile (FIA)

- Karate (WKF)
- Motorcycling (FIM)
- Powerboating (UIM)

### **P2. BETA-BLOCKERS**

Unless otherwise specified, beta-blockers are prohibited *In-Competition* only, in the following sports.

- Archery (WA) (also prohibited Out-of-Competition)
- Automobile (FIA)
- Billiards (all disciplines) (WCBS)
- Darts (WDF)
- Golf (IGF)
- Shooting (ISSF, IPC) (also prohibited Out-of-Competition)
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air

Beta-blockers include, but are not limited to, the following:

Acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.



# The World Anti-Doping Code

# THE 2015 PROHIBITED LIST INTERNATIONAL STANDARD

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.

This List shall come into effect on 1 January 2015

# THE 2015 PROHIBITED LIST WORLD ANTI-DOPING CODE

### Valid 1 January 2015

In accordance with Article 4.2.2 of the World Anti-Doping Code, all *Prohibited Substances* shall be considered as "Specified Substances" except Substances in classes S1, S2, S4.4, S4.5, S6.a, and *Prohibited Methods* M1, M2 and M3.

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

### **PROHIBITED SUBSTANCES**

### 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.

### **S1. ANABOLIC AGENTS**

Anabolic agents are prohibited.

- 1. Anabolic Androgenic Steroids (AAS)
- <u>a</u>. **Exogenous**\* **AAS**, including:

**1-androstenediol** ( $5\alpha$ -androst-1-ene- $3\beta$ , $17\beta$ -diol ); **1-androstenedione** ( $5\alpha$ -androst-1-ene-3,17-dione); **bolandiol** (estr-4-ene- $3\beta$ , $17\beta$ -diol ); **bolasterone**; **boldenone**; **boldione** (androsta-1,4-diene-3,17-dione); **calusterone**;

([1,2]oxazolo[4',5':2,3]pregna-4-en-20-yn-17 $\alpha$ -ol); clostebol; danazol dehydrochlormethyltestosterone (4-chloro-17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); **desoxymethyltestosterone** (17 $\alpha$ -methyl-5 $\alpha$ -androst-2-endrostanolone; ethylestrenol (19-norpregna-4-en-17 $\alpha$ -ol); fluoxymesterone; formebolone; furazabol (17α-methyl [1,2,5]oxadiazolo[3',4':2,3]- $5\alpha$ -androstan- $17\beta$ -ol); gestrinone; **hydroxytestosterone** (4,17β-dihydroxyandrost-4-en-3-one); mestanolone: mesterolone; **metandienone** (17β-hydroxy-17α-methylandrosta-1,4-dien-3metenolone; methandriol; methasterone  $(17\beta-hydroxy-2\alpha,17\alpha$ dimethyl- $5\alpha$ -androstan-3-one); methyldienolone  $(17\beta-hydroxy-17\alpha$ methylestra-4,9-dien-3-one); methyl-1-testosterone  $(17\beta-hydroxy-17\alpha$ methyl-5α-androst-1-en-3-one); **methylnortestosterone**  $(17\beta-hydroxy-17\alpha$ methylestr-4-en-3-one); methyltestosterone; metribolone (methyltrienolone, 17β-hydroxy-17α-methylestra-4,9,11-trien-3-one); **mibolerone**; **nandrolone**; 19-norandrostenedione (estr-4-ene-3,17-dione); norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; prostanozol (17β-[(tetrahydropyran-2-yl)oxy]-1'Hpyrazolo[3,4:2,3]-5α-androstane); quinbolone; stanozolol; stenbolone; 1testosterone (17β-hydroxy-5α-androst-1-en-3-one); tetrahydrogestrinone  $(17-hydroxy-18a-homo-19-nor-17\alpha-pregna-4,9,11-trien-3-one);$ (17β-hydroxyestr-4,9,11-trien-3-one); and other substances with a similar chemical structure or similar biological effect(s).

### <u>b</u>. **Endogenous**\*\* **AAS** when administered exogenously:

Androstenediol (androst-5-ene-3 $\beta$ ,17 $\beta$ -diol); androstenedione (androst-4-ene-3,17-dione); dihydrotestosterone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one); prasterone (dehydroepiandrosterone, DHEA, 3 $\beta$ -hydroxyandrost-5-en-17-one); testosterone; and their metabolites and isomers, including but not limited to:

5α-androstane-3α,17α-diol; 5α-androstane-3α,17β-diol; 5α-androstane-3β,17α-diol; 5α-androstane-3β,17β-diol; 5β-androstane-3α,17β-diol; androst-4-ene-3α,17α-diol; androst-4-ene-3α,17β-diol; androst-5-ene-3α,17α-diol; androst-5-ene-3α,17α-diol; androst-5-ene-3α,17α-diol; androst-6-ene-3β,17α-diol; androst-6-ene-3β,17α-diol; androst-6-ene-3β,17β-diol); 5-androstenedione (androst-5-ene-3,17-dione); androsterone (3β-hydroxy-5α-androstan-17-one); epi-dihydrotestosterone; epitestosterone; etiocholanolone; 7α-hydroxy-DHEA; 7β-hydroxy-DHEA; 7-keto-DHEA; 19-norandrosterone; 19-noretiocholanolone.

### 2. Other Anabolic Agents

Including, but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs, e.g. andarine and ostarine), tibolone, zeranol and zilpaterol.

For purposes of this section:

- \* "exogenous" refers to a substance which is not ordinarily produced by the body naturally.
- \*\* "endogenous" refers to a substance which is ordinarily produced by the body naturally.

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

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

- 1. Erythropoietin-Receptor agonists:
  - 1.1 Erythropoiesis-Stimulating Agents (ESAs) including e.g. darbepoietin (dEPO); erythropoietins (EPO); EPO-Fc; EPO-mimetic peptides (EMP), e.g. CNTO 530 and peginesatide; and methoxy polyethylene glycol-epoetin beta (CERA);
  - 1.2 Non-erythropoietic EPO-Receptor agonists, e.g. ARA-290, asialo EPO and carbamylated EPO;
- 2. Hypoxia-inducible factor (HIF) stabilizers, e.g. cobalt and FG-4592; and HIF activators, e.g. argon, xenon;
- **3.** Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors, e.g. buserelin, gonadorelin and triptorelin, in males;
- 4. Corticotrophins and their releasing factors, e.g corticorelin;
- 5. Growth Hormone (GH) and its releasing factors including Growth Hormone Releasing Hormone (GHRH) and its analogues, e.g. CJC-1295, sermorelin and tesamorelin; Growth Hormone Secretagogues (GHS), e.g. ghrelin and ghrelin mimetics, e.g. anamorelin and ipamorelin; and GH-Releasing Peptides (GHRPs), e.g. alexamorelin, GHRP-6, hexarelin and pralmorelin (GHRP-2).

Additional prohibited growth factors:

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); Vascular-Endothelial Growth Factor (VEGF) and any other growth factor

affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching.

### **S3. BETA-2 AGONISTS**

All **beta-2 agonists**, including all **optical isomers**, e.g. **d-** and **l-** where relevant, are prohibited.

### Except:

- Inhaled **salbutamol** (maximum 1600 micrograms over 24 hours);
- Inhaled **formoterol** (maximum delivered dose 54 micrograms over 24 hours); and
- Inhaled **salmeterol** in accordance with the manufacturers' recommended therapeutic regimen.

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 40 ng/mL is presumed not to be an intended 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 the use of the therapeutic inhaled dose up to the maximum indicated above.

### S4. HORMONE AND METABOLIC MODULATORS

The following **hormones** and **metabolic modulators** are prohibited:

- 1. Aromatase inhibitors including, but not limited to: aminoglutethimide; anastrozole; androsta-1,4,6-triene-3,17-dione (androstatrienedione); 4-androstene-3,6,17 trione (6-oxo); exemestane; formestane; letrozole and testolactone.
- **2. Selective estrogen receptor modulators** (SERMs) including, but not limited to: **raloxifene**; **tamoxifen** and **toremifene**.
- **3.** Other **anti-estrogenic substances** including, but not limited to: **clomiphene**; **cyclofenil** and **fulvestrant**.
- **4. Agents modifying myostatin function(s)** including, but not limited, to: myostatin inhibitors.

### 5. Metabolic modulators:

- 5.1 Activators of the AMP-activated protein kinase (AMPK), e.g. AICAR; and Peroxisome Proliferator Activated Receptor  $\delta$  (PPAR $\delta$ ) agonists, e.g. GW 1516;
- 5.2 **Insulins**;
- 5.3 Trimetazidine.

### **S5. DIURETICS AND 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. glycerol and 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.

### Except:

- Drospirenone; pamabrom; and topical dorzolamide and brinzolamide.
- Local administration of felypressin in dental anaesthesia.

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, will be considered as an Adverse Analytical Finding unless the Athlete has an approved TUE for that substance in addition to the one granted for the diuretic or masking agent.

### 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.
- 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.
- **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:

- Tampering, or Attempting to Tamper, to alter the integrity and validity of Samples collected during Doping Control.
   Including, but not limited to: Urine substitution and/or adulteration, e.g. proteases.
- 2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period except for those legitimately received in the course of hospital admissions, surgical procedures or clinical investigations.

### M3. GENE DOPING

The following, with the potential to enhance sport performance, are prohibited:

- 1. The transfer of polymers of nucleic acids or nucleic acid analogues;
- 2. The use of normal or genetically modified cells.

# SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S0 to S5 and M1 to M3 defined above, the following categories are prohibited *In-Competition*:

### PROHIBITED SUBSTANCES

### **S6. STIMULANTS**

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; benzylpiperazine; benfluorex; bromantan; clobenzorex; crotetamide; fencamine; fenetylline; fenfluramine; cropropamide; fenproporex; fonturacetam [4-phenylpiracetam (carphedon)]; furfenorex; mesocarb; metamfetamine(d-); mefenorex; mephentermine; modafinil; norfenfluramine; phendimetrazine; methylamphetamine; phentermine; prenylamine and prolintane.

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

b: Specified Stimulants.

Including, but not limited to:

Benzfetamine; cathine\*\*; cathinone and its analogues, e.g. mephedrone, methedrone, and a pyrrolidinovalerophenone; dimethylamphetamine; ephedrine\*\*\*; epinephrine\*\*\*\* (adrenaline); etamivan; etilamfetamine; etilefrine; famprofazone; fenbutrazate; fencamfamin; heptaminol; (parahydroxyamphetamine); isometheptene; hydroxyamfetamine levmetamfetamine; meclofenoxate; methylenedioxymethamphetamine; methylhexaneamine methylephedrine\*\*\* (dimethylpentylamine); methylphenidate; nikethamide; norfenefrine; octopamine; oxilofrine (methylsynephrine); pemoline; pentetrazol; phenethylamine and phenpromethamine; propylhexedrine; phenmetrazine; derivatives; pseudoephedrine\*\*\*\*\*; selegiline; strychnine; sibutramine; tenamfetamine (methylenedioxyamphetamine), tuaminoheptane;

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

### Except:

Imidazole derivatives for topical/ophthalmic use and those stimulants included in the 2015 Monitoring Program\*.

- Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in the 2015 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 than 10 micrograms per milliliter.
- Epinephrine (adrenaline): Not prohibited in local administration, e.g. nasal, ophthalmologic, or co-administration with local anaesthetic agents.
- Pseudoephedrine: Prohibited when its concentration in urine is greater than 150 micrograms per milliliter.

### **S7. NARCOTICS**

### Prohibited:

Buprenorphine; dextromoramide; diamorphine (heroin); fentanyl and its derivatives; hydromorphone; methadone; morphine; oxycodone; oxymorphone; pentazocine and pethidine.

### **S8. CANNABINOIDS**

### Prohibited:

- Natural, e.g. cannabis, hashish and marijuana, or synthetic \$\Delta\$-tetrahydrocannabinol (THC).
- Cannabimimetics, e.g. "Spice", JWH-018, JWH-073, HU-210.

### **S9. GLUCOCORTICOIDS**

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

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

### P1. ALCOHOL

Alcohol (**ethanol**) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold is equivalent to a blood alcohol concentration of  $0.10~\rm g/L$ .

- Air Sports (FAI)
- Archery (WA)
- Automobile (FIA)

- Motorcycling (FIM)
- Powerboating (UIM)

### P2. BETA-BLOCKERS

**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)
- Shooting (ISSF, IPC)\*
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air
- Underwater sports (CMAS) in constant-weight apnoea with or without fins, dynamic apnoea with and without fins, free immersion apnoea, Jump Blue apnoea, spearfishing, static apnoea, target shooting and variable weight apnoea.

Including, but not limited to:

Acebutolol; alprenolol; atenolol; betaxolol; bisoprolol; bunolol; carteolol; carvedilol; celiprolol; esmolol; labetalol; levobunolol; metipranolol; metoprolol; nadolol; oxprenolol; pindolol; propranolol; sotalol and timolol.

<sup>\*</sup>Also prohibited Out-of-Competition

# WORLD ANTI-DOPING CODE INTERNATIONAL STANDARD



# PROHIBITED LIST

JANUARY 2016



This List shall come into effect on 1 January 2016.

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.

IN ACCORDANCE WITH ARTICLE 4.2.2 OF THE WORLD ANTI-DOPING CODE, ALL *PROHIBITED SUBSTANCES* SHALL BE CONSIDERED AS "SPECIFIED SUBSTANCES" EXCEPT SUBSTANCES IN CLASSES S1, S2, S4.4, S4.5, S6.a, AND *PROHIBITED METHODS* M1, M2 AND M3.

# SUBSTANCES & METHODS PROHIBITED AT ALL TIMES

(IN- AND OUT-OF-COMPETITION)

### PROHIBITED 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.

**NON-APPROVED SUBSTANCES** 



### **ANABOLIC AGENTS**

Anabolic agents are prohibited.

### 1. ANABOLIC ANDROGENIC STEROIDS (AAS)

- a. Exogenous\* AAS, including:
- **1-A**ndrostenediol (5α-androst-1-ene-3β,17β-diol);
- 1-Androstenedione (5α-androst-1-ene-3,17-dione);
- 1-Testosterone (17β-hydroxy-5α-androst-1-en-3-one);
- **4-H**ydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one);
- 19-Norandrostenedione (estr-4-ene-3,17-dione);

Bolandiol (estr-4-ene-3β,17β-diol );

Bolasterone:

Bolderione;

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-17β-hydroxy-17a-methylandrosta-1,4-dien-3-one);

Desoxymethyltestosterone (17α-methyl-5αandrost-2-en-17β-ol);

Drostanolone:

Ethylestrenol (19-norpregna-4-en-17 $\alpha$ -ol);

Fluoxymesterone;

Formebolone;

Furazabol (17 $\alpha$ -methyl [1,2,5]oxadiazolo[3',4':2,3]-5 $\alpha$ -androstan-17 $\beta$ -ol);

Gestrinone;

Mestanolone;

Mesterolone:

Metandienone (17 $\beta$ -hydroxy-17 $\alpha$ -methylandrosta-1,4-dien-3-one);

Metenolone:

Methandriol;

Methasterone (17β-hydroxy-2α,17α-dimethyl-5αandrostan-3-one);

Methyldienolone (17 $\beta$ -hydroxy-17 $\alpha$ -methylestra-4,9-dien-3-one);

Methyl-1-testosterone (17β-hydroxy-17α-methyl-5αandrost-1-en-3-one);

Methylnortestosterone (17 $\beta$ -hydroxy-17 $\alpha$ -methylestr-4-en-3-one);

Methyltestosterone;

Metribolone (methyltrienolone, 17β-hydroxy-17α-methylestra-4,9,11-trien-3-one);

Mibolerone,

Nandrolone;

Norboletone;

Norclostebol;

Norethandrolone;

Oxabolone;

Oxandrolone;

Oxymesterone;

Oxymetholone;

Prostanozol (17 $\beta$ -[(tetrahydropyran-2-yl)oxy]-1'H-pyrazolo[3,4:2,3]-5 $\alpha$ -androstane];

Quinbolone:

Stanozolol;

Stenbolone:

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

Trenbolone (17β-hydroxyestr-4,9,11-trien-3-one);

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

### b. Endogenous\*\* AAS when administered exogenously:

Androstenediol (androst-5-ene-3β,17β-diol);
Androstenedione (androst-4-ene-3,17-dione);
Dihydrotestosterone (17β-hydroxy-5α-androstan-3-one);
Prasterone (dehydroepiandrosterone, DHEA, 3β-hydroxyandrost-5-en-17-one);
Testosterone;

and their metabolites and isomers, including but not limited to:

**3β-H**ydroxy-5α-androstan-17-one; **5α-A**ndrostane-3α,17α-diol; 5α-Androstane-3α,17β-diol; 5α-Androstane-3β,17α-diol; 5α-Androstane-3β,17β-diol;

**5β-A**ndrostane-3α, 17β-diol;

**7α-H**ydroxy-DHEA;

**7β-**Hydroxy-DHEA;

**4-A**ndrostenediol (androst-4-ene-3 $\beta$ , 17 $\beta$ -diol)

**5-A**ndrostenedione (androst-5-ene-3,17-dione);

7-Keto-DHEA:

19-Norandrosterone;

19-Noretiocholanolone.

Androst-4-ene-3a,17a-diol;

Androst-4-ene-3a,178-diol;

Androst-4-ene-3β,17a-diol;

Androst-5-ene-3a,17a-diol;

Androst-5-ene-3α,17β-diol;

Androst-5-ene-3β,17α-diol;

Androsterone

Epi-dihydrotestosterone;

Epitestosterone;

Etiocholanolone.

### 2. OTHER ANABOLIC AGENTS

### Including, but not limited to:

Clenbuterol, selective androgen receptor modulators (SARMs, e.g. andarine and ostarine), tibolone, zeranol and zilpaterol.

### For purposes of this section:

- "exogenous" refers to a substance which is not ordinarily produced by the body naturally.
- \*\* "endogenous" refers to a substance which is ordinarily produced by the body naturally.

# PEPTIDE HORMONES, GROWTH FACTORS, RELATED SUBSTANCES AND MIMETICS

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

- 1. Erythropoietin-Receptor agonists:
  - **1.1** Erythropoiesis-Stimulating Agents (ESAs) including e.g. Darbepoietin (dEPO);

Erythropoietins (EPO);

EPO-Fc;

EPO-mimetic peptides (EMP), e.g. CNTO 530 and peginesatide; methoxy polyethylene glycol-epoetin beta (CERA).

- 1.2 Non-erythropoietic EPO-Receptor agonists, e.g. ARA-290; asialo EPO; carbamylated EPO.
- **2.** Hypoxia-inducible factor (HIF) stabilizers, e.g. cobalt and FG-4592; and HIF activators, e.g. argon, xenon;
- Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors, e.g. buserelin, gonadorelin and leuprorelin, in males;
- **4.** Corticotrophins and their releasing factors, e.g. corticorelin;

5. Growth Hormone (GH) and its releasing factors including: Growth Hormone Releasing Hormone (GHRH) and its analogues, e.g. CJC-1295, sermorelin and tesamorelin; Growth Hormone Secretagogues (GHS), e.g. ghrelin and ghrelin mimetics, e.g. anamorelin and ipamorelin; GH-Releasing Peptides (GHRPs), e.g. alexamorelin, GHRP-6, hexarelin and pralmorelin (GHRP-2).

Additional prohibited growth factors:

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);

**V**ascular-Endothelial Growth Factor (VEGF)

and any other growth factor affecting muscle, tendon or ligament protein synthesis/degradation, vascularisation, energy utilization, regenerative capacity or fibre type switching.



### **BETA-2 AGONISTS**

All beta-2 agonists, including all optical isomers, e.g. d- and l- where relevant, are prohibited.

### Except:

- Inhaled salbutamol (maximum 1600 micrograms over 24 hours)
- Inhaled formoterol (maximum delivered dose 54 micrograms over 24 hours); and
- Inhaled salmeterol in accordance with the manufacturers' recommended therapeutic regimen.

The presence in urine of salbutamol in excess of 1000 ng/mL or formoterol in excess of 40 ng/mL is presumed not to be an intended 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 the use of the therapeutic inhaled dose up to the maximum indicated above.

### S4

## HORMONE AND METABOLIC MODULATORS

The following hormone and metabolic modulators are prohibited:

- 1. Aromatase inhibitors including, but not limited to:
  - **4-A**ndrostene-3,6,17 trione (6-oxo);

Aminoglutethimide;

Anastrozole;

Androsta-1.4.6-triene-3.17-dione (androstatrienedione);

Exemestane:

Formestane;

Letrozole;

Testolactone.

**2.** Selective estrogen receptor modulators (SERMs) including, but not limited to:

Raloxifene;

Tamoxifen;

Toremifene.

**3.** Other anti-estrogenic substances including, but not limited to:

Clomiphene;

Cyclofenil;

Fulvestrant.

- **4.** Agents modifying myostatin function(s) including, but not limited, to: myostatin inhibitors.
- 5. Metabolic modulators:
  - **5.1** Activators of the AMP-activated protein kinase (AMPK), e.g. AICAR; and Peroxisome Proliferator Activated Receptor δ (PPARδ) agonists, e.g. GW 1516;
  - 5.2 Insulins and insulin-mimetics;
  - 5.3 Meldonium:
  - **5.4** Trimetazidine.

### DIURETICS AND 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. glycerol and 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.

### Except:

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

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, will be considered as an Adverse Analytical Finding unless the Athlete has an approved TUE for that substance in addition to the one granted for the diuretic or masking agent.

### 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.
- 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:

- Tampering, or Attempting to Tamper, to alter the integrity and validity of Samples collected during Doping Control.
  - Including, but not limited to:
    Urine substitution and/or adulteration, e.g. proteases.
- 2. Intravenous infusions and/or injections of more than 50 mL per 6 hour period except for those legitimately received in the course of hospital admissions, surgical procedures or clinical investigations.

### М3

### **GENE DOPING**

The following, with the potential to enhance sport performance, are prohibited:

- **1.** The transfer of polymers of nucleic acids or nucleic acid analogues;
- 2. The use of normal or genetically modified cells.

### SUBSTANCES & METHODS PROHIBITED IN-COMPETITION

IN ADDITION TO THE CATEGORIES SO TO S5 AND M1 TO M3 DEFINED ABOVE, THE FOLLOWING CATEGORIES ARE PROHIBITED IN-COMPETITION:

### PROHIBITED SUBSTANCES



### **STIMULANTS**

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

### Stimulants include:

### a: Non-Specified Stimulants:

Adrafinil;

Amfepramone;

Amfetamine;

Amfetaminil;

Amiphenazole;

Benfluorex;

Benzylpiperazine;

Bromantan;

Clobenzorex;

Cocaine;

Cropropamide;

Crotetamide;

Fencamine;

Fenetylline;

Fenfluramine;

Fenproporex;

Fonturacetam [4-phenylpiracetam (carphedon)];

Furfenorex:

Mefenorex;

Mephentermine;

Mesocarb;

Metamfetamine(d-);

p-Methylamphetamine;

Modafinil;

Norfenfluramine:

Phendimetrazine;

Phentermine;

Prenylamine;

Prolintane.

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

### b: Specified Stimulants.

Including, but not limited to:

Benzfetamine;

Cathine\*\*;

Cathinone and its analogues, e.g. mephedrone, methedrone, and α- pyrrolidinovalerophenone;

Dimethylamphetamine;

Ephedrine\*\*\*;

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

Etamivan:

Etilamfetamine;

Etilefrine:

Famprofazone;

Fenbutrazate;

Fencamfamin;

Heptaminol:

Hydroxyamfetamine (parahydroxyamphetamine);

Isometheptene;

Levmetamfetamine;

Meclofenoxate;

Methylenedioxymethamphetamine;

Methylephedrine\*\*\*;

Methylhexaneamine (dimethylpentylamine);

Methylphenidate;

Nikethamide;

Norfenefrine;

Octopamine;

Oxilofrine (methylsynephrine);

Pemoline;

Pentetrazol;

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).

### Except:

- Clonidine
- Imidazole derivatives for topical/ophthalmic use and those stimulants included in the 2016 Monitoring Program\*.
- Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in the 2016 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 than 10 micrograms per milliliter.

\*\*\*\* Epinephrine (adrenatine): Not prohibited in local administration, e.g. nasal, ophthalmologic, or co-administration with local anaesthetic agents.

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

### **S7**

### NARCOTICS

### Prohibited:

Buprenorphine;

Dextromoramide;

Diamorphine (heroin);

Fentanyl and its derivatives;

Hydromorphone;

Methadone;

Morphine,

Oxycodone;

Oxymorphone;

Pentazocine;

Pethidine.

### S8

### **CANNABINOIDS**

### Prohibited:

- Natural, e.g. cannabis, hashish and marijuana, or synthetic Δ9-tetrahydrocannabinol (THC).
- Cannabimimetics, e.g. "Spice", JWH-018, JWH-073, HU-210.

### 59

### **GLUCOCORTICOIDS**

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

# SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

**ALCOHOL** 

Alcohol (ethanol) is prohibited *In-Competition* only, in the following sports. Detection will be conducted by analysis of breath and/or blood. The doping violation threshold is equivalent to a blood alcohol concentration of 0.10 g/L.

- Air Sports (FAI)
- Automobile (FIA)
- Archery [WA]
- Powerboating (UIM)

### BETA-BLOCKERS

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)
- Shooting (ISSF, IPC)\*
- Skiing/Snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air
- Underwater sports (CMAS) in constant-weight apnoea
  with or without fins, dynamic apnoea with and without
  fins, free immersion apnoea, Jump Blue apnoea,
  spearfishing, static apnoea, target shooting and variable
  weight apnoea.

Including, but not limited to:

Acebutolol; Labetalol; Levobunolol; Alprenolol; Metipranolol; Atenolol; Betaxolol; Metoprolol; Nadolol; Bisoprolol; Bunolol; Oxprenolol; Carteolol: Pindolol; Propranolol; Carvedilol; Sotalol: Celiprolol; Esmolol; Timolol.

<sup>\*</sup>Also prohibited Out-of-Competition

www.wada-ama.org

