

# 2009 Prohibited List

# Summary of Major Modifications and Clarifications

#### INTRODUCTORY PARAGRAPH

 Article 4.2.2 of the 2009 Code states: "For purposes of the application of Article 10 (Sanctions on Individuals) all *Prohibited Substances* shall be 'Specified Substances' except substances in the classes of anabolic agents and hormones and those stimulants and hormone antagonists and modulators so identified on the *Prohibited List. Prohibited Methods* shall not be Specified Substances"

To reflect these changes in the Code, the following sentence has been added: "All Prohibited Substances shall be considered as "Specified Substances" except Substances in classes S1, S2, S4.4 and S6.a, and Prohibited Methods M1, M2 and M3."

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

## S1. Anabolic Agents

#### 1- Anabolic Androgenic steroids

- The nomenclature of *prostanozol* has been changed to  $17\beta$ -hydroxy- $5\alpha$ -androstano[3,2-c] pyrazole to better follow the International Union of Pure and Applied Chemistry (IUPAC) rules.
- Epitestosterone has been moved from section S5 (Diuretics and other Masking Agents) to S1 (Anabolic Agents, Endogenous Anabolic Androgenic Agents) since it is an isomer of testosterone. This way, epitestosterone will maintain its status as a non-specified substance for sanction purposes.
- The detailed explanation on the management of atypical endogenous AAS results has been converted into a comment in accordance with the format of the World Anti-Doping Code.

#### S2. Hormones and Related Substances

- In order to reflect the heterogeneity of new EPO-like substances in development, "Erythropoietin" has been replaced by "Erythropoiesis-Stimulating Agents".
- LH, CG clearly named as the Gonadotrophins which are prohibited in males.
- The explanatory note at the end of this section has been converted into a comment in accordance with the format of the World Anti-Doping Code.

## S3. Beta-2 Agonists

- In compliance with the 2009 Code, references to Abbreviated TUEs have been removed.
- Inhaled formoterol, salbutamol, salmeterol and terbutaline require a Therapeutic Use Exemption in accordance with the new International Standard for Therapeutic Use Exemptions.
- The presence of salbutamol in urine in excess of 1000 ng/mL will be considered 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 of inhaled salbutamol. A controlled pharmacokinetic study must be conducted in a hospital environment or a reference center for the medical condition concerned, where the administered dose(s) can be rigorously monitored and the quality of the analysis documented.

## S5. Diuretics and Other masking Agents

- As explained above, epitestosterone has been moved to section S1.
- Alpha reductase inhibitors are no longer prohibited. They have been rendered ineffective as masking agents by closer consideration of steroid profiles.
- The word "intravenous administration" now precedes the examples of plasma expanders albumin, dextran, hydroxyethyl starch, to reflect that these substances are only prohibited when administered by this route; mannitol has been added as an example. Mannitol by inhalation is permitted e.g. to perform bronchial provocation testing in asthma.

• It is stated that the carbonic anhydrase inhibitors dorzolamide and brinzolamide, when administered topically in the eye, are not prohibited. The rationale behind this exception is these drugs do not have a diuretic effect when topically applied.

#### PROHIBITED METHODS

# M2. Chemical and Physical Manipulation

• Intravenous infusions are prohibited and thus require a Therapeutic Use Exemption except in the management of surgical procedures, medical emergencies or clinical investigations.

The intent of this section is to prohibit hemodilution, overhydration and the administration of prohibited substances by means of intravenous infusion. An intravenous infusion is defined as the delivery of fluids through a vein using a needle or similar device.

The legitimate medical uses of intravenous infusions that follow are not prohibited:

- 1. Emergency intervention including resuscitation;
- 2. Blood replacement as a consequence of blood loss;
- 3. Surgical procedures;
- 4. Administration of drugs and fluids when other routes of administration are not available (e.g. intractable vomiting) in accordance with good medical practice, exclusive of exercise induced dehydration.

Injections with a simple syringe are not prohibited as a method if the injected substance is not prohibited and if the volume does not exceed 50 mL.

# M3. Gene Doping

- The definition of Gene Doping has been reworded in order to reflect new technologies in this field.
- Peroxisome Proliferator Activated Receptor  $\delta$  and AMP-activated protein kinase axis agonists have been added based on recent scientific data.

#### SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

#### S6. Stimulants

- Based on the article 4.2.2 of the revised Code the List Committee addressed all stimulants named in the 2008 Prohibited List and categorized them as specified or non-specified. The ability to enhance performance in sports, the risk to health, general use in medicinal products, legitimate market availability, their illicit use, legal/controlled status, history and potential of abuse in sports, their metabolism into amphetamine and/or metamphetamine, the likelihood of approval for Therapeutic Use Exemptions, and their pharmacology were taken into consideration. All the non-specified stimulants are named in section S6.a, while a list of examples of specified stimulants are included in section S6.b.
- Before considering the reintroduction of pseudoephedrine it was found that more information is needed and a research project is initiated to that effect. As for now, pseudoephedrine remains in the Monitoring Program.

# S9. Glucocorticosteroids

- In compliance with the 2009 Code, references to Abbreviated TUEs have been removed.
- In accordance with the International Standard for Therapeutic Use Exemptions, a declaration of use must be completed by the *Athlete* for the administration of glucocorticosteroids by intraarticular, perintendinous, epidural, intradermal and inhalation routes.
- No TUE or declaration of use is required for topical administration of glucocorticosteroids

#### SUBSTANCES PROHIBITED IN PARTICULAR SPORTS

#### P1. Alcohol

- The doping violation threshold for blood and breath alcohol (ethanol) has been harmonized for all International Federations to 0.1 g/L.
- At the request of the Federation International de Quilleurs (FIQ), Ninepin Bowling is included. WADA List Committee also included Tenpin bowling since this discipline is also part of FIQ.

## P2. Beta-blockers

- At the request of the Federation International de Quilleurs (FIQ), the spelling of Ninepin Bowling is corrected. WADA List Committee also included Tenpin bowling in this category since this discipline is also part of FIQ.
- At the request of the International Golf Federation, beta-blockers are now prohibited in golf.

#### **SPECIFIED SUBSTANCES**

• This section is deleted, as the definition of Specified Substances has changed under the revised Code. The new division between Specified and Non-specified Substances is now included in the Introductory Paragraph.