

# SUMMARY OF MAJOR MODIFICATIONS AND EXPLANATORY NOTES

## 2020 PROHIBITED LIST

### Substances and methods prohibited at all times (In- and Out-of-Competition)

#### Prohibited Substances

##### S1 ANABOLIC AGENTS

###### 1 Anabolic Androgenic Steroids (AAS)

- The sub-division of anabolic androgenic steroids (AAS) into 'a. exogenous' and 'b. endogenous' was removed and all AAS were joined into one class. The prohibited substances in S1 have not changed but two additional examples (methylclostebol and 1-epiandrosterone) were included. This change was made to reflect the fact that all anabolic agents when administered exogenously are prohibited and harmonizes the presentation of S1 with other classes of the List which do not distinguish endogenous from exogenous. The determination of the substances' origin (i.e. whether they are of endogenous or exogenous nature) is, as before, regulated in the corresponding technical document TD2019IRMS or any other applicable technical document (e.g. TD2019NA) or Technical Letter.

###### 2 Other Anabolic Agents

- LGD-4033 is now also listed by another commonly used name, ligandrol.

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

- After re-evaluation, argon was removed from the Prohibited List because it is considered to no longer meet the criteria for inclusion.
- TGF- $\beta$  inhibitors: The word "signalling" was added to better reflect the predominant mechanism of action of the listed substances. It now reads "TGF- $\beta$  signalling inhibitors".

##### S4 HORMONE AND METABOLIC MODULATORS

- Bazedoxifene and ospemifene were added as additional examples of selective estrogen receptor modulators.

#### Prohibited Methods

##### M2 CHEMICAL AND PHYSICAL MANIPULATION

- The wording was changed to clarify that the context of protease prohibition refers only to the tampering of samples. Topical and systemic therapeutic use of proteases are not prohibited.

##### M3 GENE AND CELL DOPING

- Classes M3.1 and M3.2 were combined, since the effects of gene doping on gene expression can be produced by technologies other than gene editing.
- "Transcriptional, post-transcriptional or epigenetic regulation of gene expression" were changed to "gene expression by any mechanism" to encompass a wide range of mechanisms without exhaustively listing all steps at which gene expression may be altered.
- "Gene silencing" and "gene transfer" were added as further examples of gene doping methods.
- "Polymers of" was removed to reflect standard scientific terminology for nucleic acids.
- Regarding stem cells, reiterating the statement in the Prohibited List Q & A, non-transformed stem cells, used alone (with no growth factors or other hormones added) for healing injuries are not prohibited, as long as they return the function of the affected area to normal and do not enhance it.

## Substances and Methods Prohibited In-Competition

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### S6 STIMULANTS

- Octodrine (1,5-dimethylhexylamine) was added as an example of Specified Stimulants. This substance was recently found in some dietary supplements.
- It is clarified that administration of imidazole derivatives is not prohibited when used by dermatological, nasal and ophthalmological routes.

### S7 NARCOTICS

- For clarity it was stated that all optical isomers are prohibited. This clarifies the prohibited status of optical isomers such as levomethadone.

### S8 CANNABINOIDS

- The wording of S8 Cannabinoids was updated for greater clarity. The substances that are prohibited were not changed. All natural and synthetic cannabinoids are prohibited including any preparation from cannabis or any synthetic cannabinoid. Natural  $\Delta^9$ -tetrahydrocannabinol (THC) and synthetic THC (e.g. dronabinol) are prohibited. All synthetic cannabinoids that mimic the effects of THC are prohibited.
- Cannabidiol (CBD) is not prohibited. However, athletes should be aware that some CBD products extracted from cannabis plants may also contain THC that could result in a positive test for a prohibited cannabinoid.

## Monitoring Program

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- Ecdysterone was included in the Monitoring Program to assess patterns and prevalence of misuse. While other ecdysteroids exist, most data (especially concerning effects on athletic performance) and stakeholder comments centre around ecdysterone, and consequently it was added to the Monitoring Program of 2020.

\* For further information on previous modifications and clarifications please consult the Prohibited List Q & A at [www.wada-ama.org/en/questions-answers/prohibited-list-qa](http://www.wada-ama.org/en/questions-answers/prohibited-list-qa)