UFC

EFFECTIVE AUGUST 2019

USADA®

UFC Anti-Doping Program

PROHIBITED LIST

and Guide to the Prohibited List

UFC PROHIBITED LIST (August 31, 2019)

PART 1: Except as provided otherwise in PART 2 below, the *UFC Prohibited List* shall incorporate the most current Prohibited List published by *WADA*, as well as any *WADA* Technical Documents establishing decision limits or reporting levels, and, unless otherwise modified by the *UFC Prohibited List* or the *UFC* Anti-Doping Policy, *Prohibited Substances, Prohibited Methods, Specified* or *Non-Specified Substances* and *Specified* or *Non-Specified Methods* shall be as identified as such on the *WADA* Prohibited List or *WADA* Technical Documents.

PART 2: Notwithstanding the *WADA* Prohibited List and any otherwise applicable *WADA* Technical Documents, the following modifications shall be in full force and effect:

1. **Decision Concentration Levels.** *Adverse Analytical Findings* reported at a concentration below the following *Decision Concentration Levels* shall be managed by *USADA* as *Atypical Findings*.
    - Clomiphene: 0.1 ng/mL[1]
    - Dehydrochloromethyltestosterone (DHCMT) long-term metabolite (M3): 0.1 ng/mL
    - Hydrochlorothiazide (HCTZ) and metabolites, Torsemide: 20 ng/mL (*Out-of-Competition* only)
    - Selective Androgen Receptor Modulators (SARMs): 0.1 ng/mL[2]
    - GW-1516 (GW-501516) metabolites: 0.1 ng/mL
    - Epitrenbolone (Trenbolone metabolite): 0.2 ng/mL
    - Zeranol: 1 ng/mL
    - Zilpaterol: 1 ng/mL
2. **Higenamine:** Higenamine shall be a *Prohibited Substance* under the *UFC* Anti-Doping Policy only *In-Competition* (and not *Out-of-Competition*). The reporting limit for Higenamine shall be the reporting limit established for Higenamine by the *WADA Technical Document* TDMRPL.
3. **Intravenous (IV) infusions/injections:** The provision prohibiting the use of certain IV infusions set forth in the *WADA* Prohibited List is modified as follows: Intravenous infusions and/or injections of more than a total of 100 mL per 12-hour period are prohibited at all times, both *In-Competition* and *Out-of-Competition*, except for those legitimately received *In-Competition* or *Out-of-Competition* in the course of hospital treatments, surgical procedures, clinical diagnostic investigations, and/or those received *In-Competition* or *Out-of-Competition* that are determined to be medically-justified and within the standard of care by a licensed physician and administered by a licensed medical professional. IV infusions/injections shall be considered a *Specified Method*; provided, however, that, for IV infusions/injections, other than those permitted by the foregoing sentence, the maximum period of *Ineligibility* shall be six months, unless *USADA* can establish with *Clear and Convincing* evidence that such *Use* and/or *Attempted Use* was in conjunction with the *Use* and/or *Attempted Use* of other *Prohibited Substances* or *Prohibited Methods*, was intended to manipulate the *Athlete's* biological markers to circumvent the rules of the *UFC* Anti-Doping Policy or interfere with *Sample* analysis, or was otherwise intended to tamper or interfere with *Doping Control*, including the interpretation of the results of the *Athlete's Sample* or *Athlete Biological Passport*, in which case the *Athlete* may be sanctioned for *Tampering* and/or *Attempted Tampering* and/or the *Use* and/or *Attempted Use* of a *Prohibited Method* in accordance with the *UFC* Anti-Doping Policy.
4. **Substances of Abuse:** The following *Prohibited Substances* shall be considered *Substances of Abuse*:
    - CANNABINOIDS: Natural, e.g. cannabis, hashish and marijuana, or synthetic 9-tetrahydrocannabinol (THC); Cannabimimetics, e.g. "Spice", JWH-018, JWH-073, HU-210.
    - NARCOTICS: Buprenorphine; Dextromoramide; Diamorphine (heroine); Fentanyl and its derivatives; Hydromophone; Methadone; Morphine; Nicomorphine; Oxycodone; Oxymorphone; Pentazocine; Pethidine.
    - STIMULANTS: Cocaine, methylenedioxymethamphetamine (MDMA, "ecstasy"), dimethylamphetamine (DMA), benzylpiperazine (BZP), methamphetamine (D-), p-methylamphetamine, methylenedioxyamphetamine (MDA).

PART 3: Certified Supplements. Any supplement certified by (i)(a) NSF *Certified For Sport*, (b) Kolner Liste, (c) Informed Sport Trusted by Sport, (d) HASTA (Human and Supplement Testing Australia) or (e) Banned Substance Control Group (BSCG) or (ii) any other supplement certification organization that has been endorsed and/or approved by a NADO (National Anti-Doping Organization) and mutually agreed to by *UFC* and *USADA* and announced to the *Athletes*.

[1,2] If only clomiphene or SARM metabolite(s) are reported, in the absence of any parent compound or with the parent compound below the *Decision Concentration Level*, the report shall be managed by *USADA* as an *Atypical Finding*.

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

For purposes of the application of Article 10 of the *UFC* Anti-Doping Policy, the *UFC Prohibited List* identifies which *Prohibited Substances* are *Specified* or *Non-Specified Substances* and which *Prohibited Methods* are *Specified* or *Non-Specified Methods*. If not otherwise specifically identified on the *UFC Prohibited List*, the identification of a *Prohibited Substance* or *Prohibited Method* as a *Specified* or *Non-Specified Substance* or *Method* in the *WADA* Prohibited List or *Code* shall apply.

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, M2.1, and M3.

PROHIBITED SUBSTANCES

S0 NON-APPROVED SUBSTANCES Any pharmacological substance which is not addressed by any of the subsequent sections of the List and with no current approval by any governmental regulatory health authority for human therapeutic use (e.g. drugs under pre-clinical or clinical development or discontinued, designer drugs, substances approved only for veterinary use) is prohibited at all times.

S1 ANABOLIC AGENTS Anabolic agents are prohibited.

1. **ANABOLIC ANDROGENIC STEROIDS (AAS)**

a. Exogenous* AAS, including:

1-Androstenediol (5α-androst-1-ene-3β,17β-diol);
1-Androstenedione (5α-androst-1-ene-3,17-dione);
1-Androsterone (3α-hydroxy-5α-androst-1-ene-17-one);
1-Testosterone (17β-hydroxy-5α-androst-1-en-3-one);
Bolasterone;
Calusterone;
Clostebol;
Danazol ([1,2]oxazolo[4',5':2,3]pregna-4-en-20-yn-17α-ol);
Dehydrochlormethyltestosterone (4-chloro-17β-hydroxy17α-methylandrosta-1,4-dien-3-one);
Desoxymethyltestosterone (17α-methyl-5α-androst2-en-17β-ol and 17α-methyl-5α-androst-3-en-17β-ol);
Drostanolone;
Ethylestrenol (19-norpregna-4-en-17α-ol);
Fluoxymesterone;
Formebolone;
Furazabol (17α-methyl [1,2,5]oxadiazolo[3',4':2,3]-5αandrostan-17β-ol);
Gestrinone;
Mestanolone;
Mesterolone;
Metandienone (17β-hydroxy-17α-methylandrosta-1,4-dien3-one);
Metenolone;
Methandriol;
Methasterone (17β-hydroxy-2α,17α-dimethyl-5αandrostan-3-one);
Methyldienolone (17β-hydroxy-17α-methylestra-4,9-dien3-one);
Methyl-1-testosterone (17β-hydroxy-17α-methyl-5αandrost-1-en-3-one);
Methylnortestosterone (17β-hydroxy-17α-methylestr-4-en3-one);
Methyltestosterone;
Metribolone (methyltrienolone, 17β-hydroxy-17αmethylestra-4,9,11-trien-3-one);
Mibolerone;
Norboletone;
Norclostebol;
Norethandrolone;
Oxabolone;
Oxandrolone;
Oxymesterone;
Oxymetholone;
Prostanozol (17β-[(tetrahydropyran-2-yl)oxy]-1'Hpyrazolo[3,4:2,3]-5α-androstane);
Quinbolone;
Stanozolol;
Stenbolone;
Tetrahydrogestrinone (17-hydroxy-18a-homo-19-nor-17αpregna-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 and their Metabolites and isomers, when administered exogenously, including but not limited to:**
4-Androstenediol (androst-4-ene-3β,17β-diol);
4-Hydroxytestosterone (4,17β-dihydroxyandrost-4-en-3-one);
5-Androstenedione (androst-5-ene-3,17-dione);
7α-hydroxy-DHEA;
7β-hydroxy-DHEA;
7-keto-DHEA;
19-Norandrostenediol (estr-4-ene-3,17-diol);
19-Norandrostenedione (estr-4-ene-3,17-dione);
Androstanolone (5α-dihydrotestosterone, 17β-hydroxy-5βandrostan-3-one);
Androstenediol (androst-5-ene-3β,17β-diol);
Androstenedione (androst-4-ene-3,17-dione);
Boldenone;
Boldione (androsta-1,4-diene-3,17-dione);
Epiandrosterone (3β-hydroxy-5α-androstan-17-one);
Epi-dihydrotestosterone (17β-hydroxy-5β-androstan-3-one);
Epitestosterone;
Nandrolone (19-nortestosterone);
Prasterone (dehydroepiandrosterone, DHEA, 3β-hydroxyandrost-5-en-17-one);
Testosterone.

2. **Other Anabolic Agents**

Including, but not limited to:
Clenbuterol, selective androgen receptor modulators (SARMs, e.g. andarine, LGD-4033, enobosarm (ostarine) and RAD140), 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. Erythropoietins (EPO) and agents affecting erythropoiesis, including, but not limited to:

   1.1 Erythropoietin-Receptor Agonists, e.g.
   Darbepoetins (dEPO);
   Erythropoietins (EPO);
   EPO based constructs [e.g. EPO-Fc, methoxy polyethylene glycol-epoetin beta (CERA)];
   EPO-mimetic agents and their constructs (e.g. CNTO-530, peginesatide).

   1.2 Hypoxia-inducible factor (HIF) activating agents, e.g.
   Argon;
   Cobalt;
   Daprodustat (GSK1278863);
   Molidustat (BAY 85-3934);
   Roxadustat (FG-4592);
   Vadadustat (AKB-6548);
   Xenon.

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

   1.4 TGF-beta (TGF-β) inhibitors, e.g.
   Luspatercept;
   Sotatercept.

   1.5 Innate repair receptor agonists, e.g.
   Asialo EPO;
   Carbamylated EPO (CEPO).

2. Peptide Hormones and their Releasing Factors,

   2.1 Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors in males, e.g. Buserelin, deslorelin, gonadorelin, goserelin, leuprorelin, nafarelin and triptorelin;

   2.2 Corticotrophins and their releasing factors, e.g. Corticorelin;

   2.3 Growth Hormone (GH), its fragments and releasing factors, including, but not limited to:
   Growth Hormone fragments, e.g.
   AOD-9604 and hGH 176-191;
   Growth Hormone Releasing Hormone (GHRH) and its analogues, e.g.
   CJC-1293, CJC-1295, sermorelin and tesamorelin;
   Growth Hormone Secretagogues (GHS), e.g.
   lenomorelin (ghrelin) and its mimetics, e.g.
   anamorelin, ipamorelin, macimorelin and tabimorelin;
   GH-Releasing Peptides (GHRPs), e.g.
   alexamorelin, GHRP-1, GHRP-2 (pralmorelin), GHRP-3, GHRP-4, GHRP-5, GHRP-6, and examorelin (hexarelin).

3. Growth Factors and Growth Factor Modulators, including, but not limited to:
   Fibroblast Growth Factors (FGFs);
   Hepatocyte Growth Factor (HGF);
   Insulin-like Growth Factor-1 (IGF-1) and its analogues;
   Mechano Growth Factors (MGFs);
   Platelet-Derived Growth Factor (PDGF);
   Thymosin-β4 and its derivatives e.g. TB-500;
   Vascular-Endothelial Growth Factor (VEGF);

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

S3 BETA-2 AGONISTS

All selective and non-selective beta-2 agonists, including all optical isomers, are prohibited. Including, but not limited to:

Fenoterol;
Formoterol;
Higenamine **(prohibited in-competition only)**
Indacaterol;
Olodaterol;
Procaterol;
Reproterol;
Salbutamol;
Salmeterol;
Terbutaline;
Tretoquinol (trimetoquinol);
Tulobuterol;
Vilanterol.

Except:

- Inhaled salbutamol: maximum 1600 micrograms over 24 hours in divided doses not to exceed 800 micrograms over 12 hours starting from any dose;
- Inhaled formoterol: maximum delivered dose of 54 micrograms over 24 hours;
- Inhaled salmeterol: maximum 200 micrograms over 24 hours.

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

S4 HORMONE AND METABOLIC MODULATORS

The following hormone and metabolic modulators are prohibited:

1. Aromatase inhibitors including, but not limited to:

2-Androstenol (5α-androst-2-en-17-ol);
2-Androstenone (5α-androst-2-en-17-one);
3-Androstenol (5α-androst-3-en-17-ol);
3-Androstenone (5α-androst-3-en-17-one);
4-Androstene-3,6,17 trione (6-oxo);
Aminoglutethimide;
Anastrozole;
Androsta-1,4,6-triene-3,17-dione (androstatrienedione);
Androsta-3,5-diene-7,17-dione (arimistane);
Exemestane;
Formestane;
Letrozole;
Testolactone.

2. Selective estrogen receptor modulators (SERMs) including, but not limited to:
Raloxifene;
Tamoxifen;
Toremifene.

3. Other anti-estrogenic substances including, but not limited to:
Clomifene;
Cyclofenil;
Fulvestrant.

4. Agents preventing activin receptor IIB activation including, but not limited, to:

Activin A-neutralizing antibodies;
Activin receptor IIB competitors such as:
Decoy activin receptors (e.g. ACE-031);
Anti-activin receptor IIB antibodies (e.g. bimagrumab);
Myostatin inhibitors such as:
Agents reducing or ablating myostatin expression;
Myostatin-binding proteins (e.g. follistatin, myostatin propeptide);
Myostatin-neutralizing antibodies (e.g. domagrozumab, landogrozumab, stamulumab).

5. Metabolic modulators:

5.1 Activators of the AMP-activated protein kinase (AMPK), e.g. AICAR, SR9009; and Peroxisome Proliferator Activated Receptor δ (PPARδ) agonists, e.g. 2-(2-methyl-4-((4-methyl-2-(4-(trifluoromethyl) phenyl)thiazol-5-yl)methylthio)phenoxy) acetic acid (GW1516, GW501516);

5.2 Insulins and insulin-mimetics;

5.3 Meldonium;

5.4 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. 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. dorzolamide, 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 (AAF)* unless the *Athlete* has an approved Therapeutic Use Exemption (*TUE*) for that substance in addition to the one granted for the diuretic or masking agent.

PROHIBITED METHODS

M1 MANIPULATION OF BLOOD AND BLOOD COMPONENTS

The following are prohibited:

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

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

3. Any form of intravascular manipulation of the blood or blood components by physical or chemical means.

M2 CHEMICAL AND PHYSICAL MANIPULATION

1. *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 a total of 100 mL per 12-hour period except for those legitimately received in the course of hospital treatments, surgical procedures or clinical diagnostic investigations, and/or those received *In-Competition* or *Out-of-Competition* that are determined to be medically-justified and within the standard of care by a licensed physician and administered by a licensed medical professional.

M3 GENE AND CELL DOPING

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

1. The use of polymers of nucleic acids or nucleic acid analogues.

2. The use of gene editing agents designed to alter genome sequences and/or the transcriptional, post-transcriptional or epigenetic regulation of gene expression.

3. The use of normal or genetically modified cells.

SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the classes S0 to S5 and M1 to M3 defined above, the following classes 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;
Benfluorex;
Benzylpiperazine;
Bromantan;
Clobenzorex;
Cocaine;
Cropropamide;
Crotetamide;
Fencamine;
Fenetylline;
Fenfluramine;
Fenproporex;
Fonturacetam [4-phenylpiracetam (carphedon)];
Furfenorex;
Lisdexamfetamine;
Mefenorex;
Mephentermine;
Mesocarb;
Metamfetamine(d-);
p-methylamfetamine;
Modafinil;
Norfenfluramine;
Phendimetrazine;
Phentermine;
Prenylamine;
Prolintane.

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

b: Specified Stimulants.
Including, but not limited to:

3-Methylhexan-2-amine (1,2-dimethylpentylamine);
4-Methylhexan-2-amine (methylhexaneamine);
4-Methylpentan-2-amine (1,3-dimethylbutylamine);
5-Methylhexan-2-amine (1,4-dimethylpentylamine);
Benzfetamine;
Cathine**;
Cathinone and its analogues, e.g. mephedrone, methedrone, and α - pyrrolidinovalerophenone;
Dimetamfetamine;
Ephedrine***;
Epinephrine**** (adrenaline);
Etamivan;
Etilamfetamine;
Etilefrine;
Famprofazone;
Fenbutrazate;
Fencamfamin;
Heptaminol;
Hydroxyamfetamine (parahydroxyamphetamine);
Isometheptene;
Levmetamfetamine;
Meclofenoxate;
Methylenedioxymethamphetamine;
Methylephedrine***;
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 2019 Monitoring Program*.

* Bupropion, caffeine, nicotine, phenylephrine, phenylpropanolamine, pipradrol, and synephrine: These substances are included in the 2019 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 urineis greater than 150 micrograms per milliliter.

S7 NARCOTICS

The following narcotics are prohibited:

Buprenorphine;
Dextromoramide;
Diamorphine (heroin);
Fentanyl and its derivatives;
Hydromorphone;
Methadone;
Morphine;
Nicomorphine;
Oxycodone;
Oxymorphone;
Pentazocine;
Pethidine.

S8 CANNABINOIDS

The following cannabinoids are prohibited:
Natural cannabinoids, e.g. cannabis, hashish and marijuana,
Synthetic cannabinoids e.g. Δ9-tetrahydrocannabinol (THC) and other cannabimimetics.

Except:

- Cannabidiol.

S9 GLUCOCORTICOIDS

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

Including but not limited to:

Betamethasone;
Budesonide;
Cortisone;
Deflazacort;
Dexamethasone;
Fluticasone;
Hydrocortisone;
Methylprednisolone;
Prednisolone;
Prednisone;
Triamcinolone.