List of Permanently Banned Prohibited Substances to be expanded in Greyhounds Australasia Rules

Notice to trainers – Expansion of permanently banned prohibited substance list within GAR79A Out of Competition Testing

On 1 August 2018, Greyhounds Australasia will expand the list of Permanently Banned Prohibited Substances tested for in out of competition testing.

The prohibited substances as defined in GAR 79A are considered so concerning from a welfare or integrity point of view that they are deemed by experts to have no place in the sport at all – these are called permanently banned prohibited substances.

Permanently banned prohibited substances should never be in a greyhound's system (whether on race day or out-of-competition).

Because these substances are so concerning for the integrity of the sport, participants are also not permitted to possess, acquire, attempt to acquire, administer or attempt to administer any permanently banned prohibited substances at any time.

Compliance with these rules will be enforced by state controlling bodies through all available means including regular kennel inspections, inspections of medications and treatment records, working with other regulatory bodies, and regular out of competition testing, as well as through routine race day sampling. Controlling bodies may conduct out of competition testing on any greyhound at any time, regardless of whether it is named, nominated or not and may take samples of any type listed within GAR 80.

As per GAR 79A (3) any greyhound that tests positive to any permanently banned prohibited substance shall be withdrawn from any Event in which it is nominated to compete and will be ineligible to be nominated for any further Event until a sample is subsequently taken that does not contain any of the substances specified in GAR 79A (2).

The amended list within GAR 79A (2) is as follows:

"(2) The following substances are deemed to be Permanently Banned Prohibited Substances and shall include a metabolite, isomer or artefact of any of the substances specified within."

(i) *Erythropoiesis-stimulating agents, including but not limited to erythropoietin (EPO), epoetin alfa, epoetin beta, epoetin delta, epoetin omega, novel erythropoiesis stimulating protein (NESP; darbepoietin alfa), and methoxy polyethylene glycol-epoetin beta (Mircera) and other continuous erythropoietin receptor activators.*

(ii) *Gonadotropins, including luteinising hormone (LH), follicle stimulating hormone (FSH), human chorionic gonadotropin (hCG) and equine chorionic gonadotropin (eCG; pregnant mare serum gonadotropin; PMSG).*

(iii) *Gonadotropin releasing hormone (GnRH; gonadorelin).*

(iv) *Corticotropins, including adrenocorticotropic hormone (ACTH) and tetracosactrin (tetracosactide).*

(v) *Substances listed in Schedule 8 and Schedule 9 of the Standard for the Uniform Scheduling of Medicines and Poisons contained in the Australian Poisons Standard, as amended from time to time.*

(vi) *Diacetylmorphine (heroin), benzoylmethylecgonine (cocaine), cannabinoids and lysergic acid diethylamide (LSD), gammahydroxybutyric acid (GHB) and its salts and amphetamines including amphetamine, methylamphetamine and methylenedioxymethamphetamine (MDMA).*

(vii) *Insulins and insulin-like growth factor-1.*

(viii) *Growth hormones and their releasing factors.*

(ix) *Selective receptor modulators including but not limited to selective androgen receptor modulators (SARMS), selective estrogen receptor modulators (SERMS), selective opiate receptor modulars (SORMS) and selective glucocorticoid receptor agonists.*

(x) *Peroxisome proliferator activated receptor δ (PPARδ) agonists, including but not limited to GW 1516.*

(xi) *AMPK activators, including but not limited to AICAR (5-amino-1-β Dribofuranosyl-imidazole-4-carboxamide).*

(xii) *Other agents that directly or indirectly affect or manipulate gene expression.*

(xiii) *Hypoxia inducible factor (HIF) stabilisers, including but not limited to cobalt and FG-4592, and hypoxia inducible factor (HIF) activators, including but not limited to argon and xenon.*

(xiv) *Agents modifying myostatin function, including but not limited to myostatin inhibitors.*

(xv) *Oxygen carriers including but not limited to perfluorochemicals, faproxiral and modified haemoglobin products.*

(xvi) *Thymosin beta.*

(xvii) *Venoms of any species or derivatives thereof.*

(xviii) *Synthetic proteins and peptides and synthetic analogues of endogenous proteins and peptides not registered for medical or veterinary use in Australia or New Zealand.*

(xix) *Any substance capable of disguising or making undetectable the administration or presence of any Permanently Banned Prohibited Substance.*

(xx) *Anabolic androgenic steroids excluding those that are defined as an exempted substance pursuant to GAR1.*

(xxi) *Non-erythropoietic EPO-receptor agonists.*

(xxii) *Allosteric effectors of haemoglobin, including but not limited to ITPP (myo-inositol trispyrophosphate).*

(xxiii) *Haematopoietic growth factors, including but not limited to filgrastim.*

(xxiv) *Hydrocortisone (excluding registered topical preparations when administered topically).*

Description of permanently banned prohibited substances

A number of the substances within this list have been banned due to concerns regarding their integrity and/or animal welfare risks. They have the capability of affecting the behavior, condition or performance of a greyhound. Participants are advised that in accordance with GAR 79A they must never possess, acquire, attempt to acquire, administer or allow to be administered to any greyhound from birth until retirement, any substance included within this list.

(i) Erythropoiesis-stimulating agents can increase red blood cell production and prolong their life in circulation. This leads to an increased concentration of red blood cells in the racing greyhound, which leads to increased oxygen transporting capacity and reduces the effects of fatigue on the muscles. This can increase performance in the racing greyhound. These substances all have serious welfare concerns in the racing greyhounds as they have been linked to cardiac arrest, infarctions of vital organs and cerebral hemorrhage.

(ii) Gonadotropins (e.g. Chorulon) if administered will increase testosterone levels and may breach the 5β-androstane-3α, 17β-diol (βαβ) thresholds regardless of whether testing is conducted in or out of competition. Use in dogs may increase muscle mass, increase endurance and alter their behavior (aggression and chasing desire).

(iii) Gonadotropin releasing hormones (e.g. Fertagyl, Receptal, Ovuplant, Suprelorin) if administered will increase testosterone levels and may breach the 5β-androstane-3α, 17β-diol (βαβ) thresholds regardless of whether testing is conducted in or out of competition. Use in dogs may increase muscle mass, increase endurance and alter their behavior (aggression and chasing desire).

(iv) Corticotropins (e.g. Synacthen) if administered will increase the levels of naturally produced glucocorticoids which have anti-inflammatory and pain-relieving properties. Use during competition could inhibit sensation of muscle or joint pain and increase the fatigue threshold.

(v) Substances listed in Schedule 8 and Schedule 9 of the *Standard for the Uniform Scheduling of Medicines and Poisons* contained in the Australian *Poisons Standard* are defined by the Australian Government as Controlled Drugs and Prohibited Substances and is regularly updated and the latest version can be viewed at https://www.tga.gov.au/publication/poisons-standard-susmp. These substances may have a performance enhancing or decreasing effect in the racing greyhound and may cause welfare concerns if administered. Possession of these substances is illegal without appropriate authority.

(vi) Diacetylmorphine (heroin), benzoylmethylecgonine (cocaine), cannabinoids and lysergic acid diethylamide (LSD), gammahydroxybutyric acid (GHB) and its salts and amphetamines including amphetamine, methylamphetamine and methylenedioxymethamphetamine (MDMA) are all illicit substances and possession is illegal. These substances may have a performance enhancing or decreasing effect in the racing greyhound and cause welfare concerns if administered.

(vii) Insulins and insulin-like growth factor-1 can affect metabolism, growth and development of the racing greyhound. They can produce a performance enhancing effect, and have welfare concerns for greyhounds, which are treated with these substances without therapeutic cause. Appropriate therapeutic treatment of a diabetic greyhound (rarely seen aside from pregnancy induced) would include retirement from racing to better control the condition.

(viii) Growth hormones and their releasing factors have the ability to increase musculoskeletal growth and development in the racing greyhound and can have a performance enhancing effect in addition to the potential welfare concerns.

(ix) Selective receptor modulators including but not limited to selective androgen receptor modulators (SARMS), selective estrogen receptor modulators (SERMS), selective opiate receptor modulars (SORMS) and selective glucocorticoid receptor agonists have the ability to have anabolic, behavioral, anti-inflammatory, analgesic or performance effects by switching on normal endogenous production pathways.

(x) Peroxisome proliferator activated receptor δ (PPARδ) agonists, including but not limited to GW 1516 have the ability to mimic the beneficial effects of exercise on muscle and metabolic systems and can have a performance enhancing effect.

(xi) AMPK activators, including but not limited to AICAR (5-amino-1-β-D-ribofuranosyl-imidazole-4-carboxamide) have been shown to increase exercise speed and endurance in sedentary mice and thus its administration in racing greyhounds may increase performance.

(xii) Other agents that directly or indirectly affect or manipulate gene expression if administered would be considered gene doping. These substances may alter metabolic systems which can lead to increased performance and also present the potential for serious welfare risks for greyhounds.

(xiii) Hypoxia inducible factor (HIF)-1 stabilisers, including cobalt and FG-4592, and HIF activators, including xenon and argon, can increase red blood cell production and prolong their life in circulation. Increased concentration of red blood cells leads to increased oxygen transporting capacity and reduces the effects of fatigue on the muscles. In addition to the potential for increased performance these substances can have serious welfare concerns in the racing greyhound as they chemically mimic the effects of hypoxia (low oxygen).

Possession or administration of registered, appropriately obtained and labelled products containing cobalt and vitamin B12 is allowed under this rule where appropriate, but the cobalt threshold will be enforced on race day (GAR 10). All treatments must be recorded in the Treatment Record as per GAR 84A. Possession of highly concentrated cobalt salts is likely to be considered a breach of GAR 79A(7). Where an out of competition sample is significantly greater than the threshold and there is concerns a large amount of cobalt salts may have been administered, Stewards will consider the facts of the individual case, including Treatment Records, and expert evidence.

(xiv) Agents modifying myostatin function, including myostatin inhibitors can increase muscle mass and endurance which can lead to a performance enhancing effect.

(xv) Oxygen carriers including but not limited to perfluorochemicals, efaproxiral and modified hemoglobin products increase the amount of oxygen in circulation which can then feed muscles and other metabolic systems which are stressed during racing thereby reducing fatigue. They also represent welfare concerns if administered to greyhounds.

(xvi) Thymosin beta is a peptide which is capable of regulating cell migration and is able to promote blood vessel development and tissue repair after injury. It has an anti-inflammatory action by down regulation of cytokines and can promote the maturation of stem cells, healing damaged muscles. Due to these effects it would be considered a performance enhancing substance.

(xvii) Venoms of any species or derivatives thereof have a wide and varied effect on animals which are all detrimental. These effects range from neurotoxic, myotoxic and hemotoxic and can cause severe illness and death in the greyhound. Although rumoured to improve performance, they would be detrimental to performance and raise serious welfare issues if administered to a greyhound. Venom detection tests can be used to confirm where a greyhound has unfortunately been a victim of snakebite. It is not the intention of controlling bodies to enforce this rule under these circumstances.

(xviii) Synthetic proteins and peptides and synthetic analogues of endogenous proteins and peptides not registered for medical or veterinary use in Australia or New Zealand are all banned and can have a range of effects such as increasing muscle mass and efficiency of metabolism under exercise conditions. These substances would generally have a positive effect on condition or performance.

(xix) Any substance capable of disguising or making undetectable the administration or presence of any Permanently Banned Prohibited Substance i.e. masking agents. Although few are known to exist, due to their mode of action and their potential effect on the health of greyhounds, they present welfare and integrity concerns and so their use is banned.

(xx) Anabolic androgenic steroids excluding ethyloestrenol for controlling oestrus in the female are banned. Use in greyhounds leads to an unfair performance advantage through increasing muscle mass, increasing endurance and altering behavior (aggression and chasing desire). They can also cause several negative health effects in the greyhound and raise potential welfare implications if administered.

(xxi) Non-erythropoietic EPO-receptor agonists are a group of substances that can increase red blood cell production and prolong their life in circulation. This leads to an increased concentration of red blood cells in the racing greyhound, which leads to increased oxygen transporting capacity and reduces the effects of fatigue on the muscles. This can increase performance in the racing greyhound. These substances all have serious welfare concerns in the racing greyhounds as they have been linked to cardiac arrest, infarctions of vital organs and cerebral hemorrhage.

(xxii) Haematopoietic growth factors, including but not limited to filgrastim have no therapeutic indication in the greyhound and their administration can alter the synthesis of red and white blood cells. Administration in the greyhound raises serious welfare concerns due to their side effects and potential integrity risks.

(xxiii) Hydrocortisone is a substance that produces pain-relieving, anti-inflammatory effects and can also alter metabolism and increase the fatigue threshold which is likely to lead to performance enhancement in the racing greyhound. APVMA or TGA registered topical products can be prescribed by your veterinarian after having established a therapeutic need for that product and can only be administered

topically (e.g. on the skin or in the ear). The hydrocortisone threshold (GAR 83 (8)) will now be enforced both on race day and out of competition, and administration of hydrocortisone (e.g. Hysone, Solu-Cortef) will lead to a breach of the threshold. Where systemic corticosteroids are required for treatment, veterinarians can continue to prescribe veterinary products that contain other corticosteroids (e.g. prednisolone, dexamethasone, etc.)

For further information please contact your controlling body.