



Submission on the Use of NSAIDs in Competition Horses - August 2010

“The British Equine Veterinary Association (BEVA) views the recent announcement by the FEI that they are to adopt a “Progressive List” of medications that are permissible for horses in competitions to be an extremely retrograde step for equine welfare. This decision obscures the distinction between therapy and subjecting unsound horses to the stresses of competition. Furthermore, we have grave concerns that horses competing whilst under treatment with pain-relieving medicines, are at an increased risk of musculoskeletal lesions progressing to catastrophic injuries.

We see this announcement as a backward step for the development of equestrian sport that is contrary to the public aspiration of drug-free competition. We would strongly encourage a rational review of the available evidence and if necessary new research to try and formulate a more scientific basis for these regulations.”

BEVA Position Statement on Medication of Competition Horses 25.11.09

BEVA’s concerns at changes in FEI rules concerning in particular the use of NSAIDs in competition horses are succinctly put in the above position statement. While welcoming some of the recent procedural changes involving making more transparent the medication of horses at FEI competitions, and the adoption of a specific list of banned substances, the fundamental alteration from a drug free environment for competition horses to one where arbitrary levels of permitted pain-killing medication is allowed is simply wrong.

While development of the rules to allow some medication to control common ailments is welcomed, this must be on the basis of not altering the competitive ability of the horse concerned. This BEVA contend cannot be readily applied to analgesic medication as this may be used to permit the use of unsound horses, likely worsening their clinical condition and on occasion leading to catastrophic injury. Unsound animals competing on painkilling medication will also distort the selection process for breeding, potentially encouraging conformation that predisposes to lameness.

There is abundant evidence of the efficacy of NSAIDs in the relief of pain and inflammation in the horse. The routine use of NSAIDs in racehorses in the USA is well documented and in 1977 Gabel¹ et al concluded that “phenylbutazone is a safe, effective nonsteroidal anti-inflammatory drug (NSAID) with antipyretic and analgesic activity. In recommended doses, there is no evidence that it changes a horse’s innate ability to race, except to make a horse perform more nearly normal with pain due to inflammation of part of the musculoskeletal system”. Many veterinarians also agree that the use of anti-inflammatory drugs could mask unsoundness in horses being examined in a prepurchase examination (Sanford,² 1983). In a comprehensive review by Soma³ (2009) of the use of NSAIDs in racehorses in the USA, it was stated that of “many Commission Veterinarians wish to examine a horse pre-race



without the possibility of a NSAID or corticosteroid interfering with the examination and masking a possible musculo-skeletal condition. Based on scientific reports and the impression of clinical veterinarians, residual effects of PBZ remain at 24 hours. The impact of this sustained effect on the health and welfare of the horse remains problematic.” In an extensive study by Dirikulu⁴ et al in 2008 surveying Kentucky racetrack musculoskeletal injuries, 40% of which were recorded as catastrophic (ie requiring euthanasia), the role of prior administration of anti-inflammatory agents was investigated by comparing the concentrations of NSAIDs in injured horses to concentrations in control horses; the plasma concentrations of phenylbutazone and flunixin were higher in injured horses than in control horses. These studies indicate that while NSAIDs relieve pain and inflammation there is also evidence that by removing the signs of lameness and pain a proportion of horses will compete when unfit to do so and likely suffer further injury; there is also a clear effect on performance by rendering lame horses sound.

In addition to the above, there is no distinction between the various disciplines of the FEI as far as the proposed rule changes are concerned. This BEVA contend has additional dangers; the clinical and side effects of NSAID administration, both on the musculoskeletal and other body systems, for example on long distance horses perhaps under conditions of significant stress, may be significantly different from effects in dressage horses. BEVA are not aware of specific research being undertaken to address these and similar concerns, and believe that a prerequisite for such a fundamental rule change for each of the disciplines should be:

- A proper scientific evaluation of the effects of any proposed medication under conditions typical for that discipline
- A detailed risk assessment, again based on scientific data, of the potential dangers posed to both horse and rider because of the medication.

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¹ Gabel AA, Tobin T, Ray RS and Maylin GA (1977) Phenylbutazone in Horses: A Review. *J. Eq. Med. Surgery* 1:221-225.

² Sanford J (1983) Effects of drugs on performance of the Horse. In: Pharmacological Basis of Large Animal Medicine. Edited by, Bogan, J.A, Lees, P., Yoxall, A.T *Blackwell Scientific Publications, Boston, MA*: 495-510.

³ Soma LR, (2009) Phenylbutazone Review RMTSC Scientific Advisory Committee

⁴ DirikoluL, Woods WE, Boyles J, Lehner AF, Harkins JD, Fisher M, Schaeffer DJ, Tobin T (2008) Nonsteroidal anti-inflammatory agents and musculoskeletal injuries in Thoroughbred racehorses in Kentucky. *J. vet. Pharmacol Therap.* doi: 10.1111/j.1365-2885.2008.01038.x