



RMTC Advisory on Levamisole February 2, 2017

Levamisole is commercially available as a dewormer for cattle, sheep, goats, and pigs. It also has conventional off-label uses in horses as an immunostimulant and as a medication for treatment of Equine Protozoal Myelitis (EPM).

Levamisole metabolizes in the horse to aminorex and possibly also pemoline, both of which are potent stimulants assigned a 1/A Classification in the Association of Racing Commissioners International Uniform Classification of Foreign Substances. The identification of either of these substances in a post-race sample is associated with a potential career-ending penalty.

In consideration of its conventional use in horses, the RMTC contemplated an administration study to develop guidance on the use of levamisole and surveyed practicing veterinarians on their use of levamisole. Survey results included: indications for use; route of administration (oral or injectable); dose (500 mg to 2500 mg); frequency and duration of treatment (3 days to unending). Given the prevalence of compounded levamisole products and that survey results established there is no commonly used treatment protocol, the RMTC determined an administration study would yield limited information.

Therefore, the RMTC recommends that following withdrawal of the medication levamisole treated horses be subjected to testing prior to entry to verify that levamisole and its metabolites have been eliminated from the horse. Before submitting a sample for clearance testing it is advisable to consult the regulatory authority to make sure that your sample meets the laboratory's requirements for matrix and volume.