Withdrawal Time Guidance from RMTC Concerning Flunixin (Banamine)

Recently individuals in New York questioned the lack of withdrawal guidance and the threshold for flunixin. Flunixin has been regulated under a historic threshold of 20 ng/mL of plasma since prior to the creation of the RMTC. The RMTC determined that the 20 ng/mL flunixin threshold for flunixin was appropriate in light of concerns regarding efficacy of pre-race examinations at higher threshold levels. RMTC then undertook the necessary pharmacokinetic study to determine appropriate withdrawal guidance for horsemen. This was made possible through funding by the New York Thoroughbred Horsemen’s Association of administration study commissioned by the RMTC at the University of California Davis.

A 1.1 mg/kg IV dose of flunixin as flunixin meglumine brand of Banamine™ was administered to 16 horses and blood samples were collected at various times after administration. Plasma flunixin concentrations were determined by a validated liquid chromatography-mass spectrometric method. The plasma flunixin concentrations were above 20 ng/mL at 24 hours in samples from 4 of 16 horses. Plasma flunixin concentrations were below 20 ng/mL in all horses at 30 hours, the next sampling point.

Based upon that study, the RMTC provides the following guidance to horsemen and veterinarians:

No horse should be administered flunixin within 24 hours of racing by regulation. Based on application of the 95/95 tolerance interval calculation to the results of the recent study, the RMTC Scientific Advisory committee recommends administration of flunixin no closer than 32 hours prior to a race. Treatment of a horse with flunixin within 32 hours of a race or administration of any dose greater than 1.1 mg/kg or by any route other than the IV route should be based upon a careful risk assessment by the veterinarian in concert with the trainer. Treatment of a horse with flunixin within 32 hours of racing at a dose of 1.1 mg/kg or at a dose greater than 1.1 mg/kg or by any route other than the IV route carries a risk of a threshold violation.