

Letter to the Editor

Questions dosage used in equine study

I believe that the article¹ on effects of phenylbutazone and flunixin meglumine in horses contains a dosing error that negates all of the authors' conclusions.

In the study, the authors administered flunixin at 1.1 mg/kg, IV, every 12 hours. This was a massive overdosage. In the article, the authors state that "dosages used in the study reported here were reflective of those commonly used," but that is incorrect. The actual dosage on the label is 500 mg once a day in a 1,000-lb horse, and the authors administered it twice a day.

In my opinion, no conclusions in the article are valid because that one drug was overdosed. No wonder there was protein loss and gastric ulcers.

Frank K. Reilly, DVM
West Chester, Pa

1. Reed SK, Messer NT, Tessman RK, et al. Effects of phenylbutazone alone or in combination with flunixin meglumine on blood protein concentrations in horses. *Am J Vet Res* 2006;67:398-402.

The authors respond:

The work described in our article was originally performed in response to a call for research from USAEquestrian, which wanted to evaluate the effects of simultaneous administration of more than one non-steroidal anti-inflammatory drug (NSAID), an activity commonly known as "stacking," in performance horses with lameness. We completed a pilot project and an expanded study on this subject with multiple components, one of which is reflected in the *AJVR* article. The dosages of drugs used in the study were chosen on the basis of information from equine practitioners actively engaged in medication of performance horses exhibited in USAEquestrian-sanctioned events and also from

those using stacked NSAIDs in other situations. Because there are no published dosages for stacked NSAIDs, we used those recommended to us. We believe the results of our study, analysis of the data, and conclusions derived from the data are correct. There may be adverse consequences such as hypoproteinemia and gastrointestinal ulceration when administering more than one NSAID at the dosages that are allegedly administered when stacking NSAIDs in performance horses.

We acknowledge that the dosage of flunixin meglumine used in our study exceeds the current manufacturer's labeled recommendations, as Dr. Reilly points out, but we believe the dosage accurately reflects current clinical use in many performance horses and in no way negates our conclusions since our conclusions are based on what happens when horses are given NSAIDs at those dosages. The message remains the same—caution should be used when stacking NSAIDs, as the potential detrimental effects may outweigh the benefits. Both Dr. Reilly's response and our study highlight the continued need for more research into the development of selective and effective NSAIDs for horses and judicious use of the currently available drugs.

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