



## Request for Proposal: Bisphosphonates

There are two FDA-approved bisphosphonates for use in horses over four years of age for the treatment of navicular disease. Additionally, there are several FDA-approved human bisphosphonates, some with significantly higher levels of potency than those approved for use in the horse.

A major concern among racing regulators, veterinarians and horse owners is the potential effects of bisphosphonates on the ability of bone to withstand the rigors of racing and training. This is of concern for not only the racing population but also the effects of administration on young horses prior to auction. There is significant speculation but not much information on how these substances affect long-term health and soundness.

In addition to the potential effects on bone metabolism, questions surround why these types of medications are often used to ameliorate bone pain. The potential risks to the racing and training of horses require further investigation.

Specifically, the areas of requested research are:

- Improving existing detection methodologies including the potential use of alternative matrices (e.g., hair, biomarkers) in addition to the traditional testing matrices of urine and blood.
  - This will require the development of confirmatory methods as well as cost-effective routine screening methods.
  - The goal will include development of methods that allow for low double-digit picogram detection and confirmation in blood and/or urine.
- The effects of bisphosphonate administration on bone healing and remodeling.
  - Special consideration will be given to projects involving 2- to 3-year-old Thoroughbred horses.
  - Some type of exercise program should be included in the proposal.
- The analgesic properties of bisphosphonates in horses.

Funding may be contemplated to a dedicated professional in a training program.

Research Grant Proposals should be submitted online to the [Grayson-Jockey Club Research Foundation](#) no later than 5 p.m. Eastern Standard Time on October 1, 2019.