

## **Chasing Artie**

### **Stewards Summary**

Review of race:

Chasing Artie (Luis Saez) trailed the field and was eased. While returning to the unsaddling area, the horse began to stagger and he collapsed. Upon the quick arrival of the KHRC veterinarians, the horse was agonal and unresponsive. After attempts to stimulate the horse failed, the horse was humanely euthanized.

### **Veterinary Review**

- This 5-year-old gelding, owned by Kenneth Ramsey and trained by Saffie Joseph Jr., ran at Churchill Downs on May 2, 2023 in an Allowance Optional Claiming \$80,000 race. This race was run at 5 ½ furlongs over a firm turf course.
- This gelding ran poorly in the race, trailing the field. The horse returned to be unsaddled where he became weak and collapsed. He became agonal and attempts to stimulate him failed. He was administered euthanasia solution and was loaded onto the ambulance and transported off the course.
- The body was submitted to the University of Kentucky Veterinary Diagnostic Laboratory for necropsy.

### **Review of pre-race exam findings and exam history**

- A review of pre-race exam findings for the Case horse was performed. This gelding was lightly raced. Pre-race exam findings were consistent with horses at this stage of their careers. He was deemed sound in the pre-race exams with no persistent gait abnormalities noted. Scrutiny during the warmup on track prior to the race revealed no gait abnormalities.

### **Review of the 60-day treatment report**

The trainer's veterinarian provided veterinary records for the previous 60 days. Veterinary work was very minimal and routine.

### **Analysis of risk factors and other criteria (case horse compared to uninjured cohorts)**

- Comparative statistical analysis with the cohorts in the field was not done due to this being a sudden death.

### **Review of necropsy and Drug Testing results**

- **Drug testing:** No prohibited substances detected. No therapeutic medication detected above regulatory threshold concentrations

Note: Only blood was submitted for analysis. Urine collection does not usually occur for horses euthanized. The diagnostic laboratory is instructed to collect urine if it is present in the horse's bladder, but it rarely is. While a blood-only sample is subjected to the broadest scope of analysis possible, that scope is reduced compared to what can be applied to a paired blood/urine sample

- Toxicology testing:** Toxicology screening for anticoagulant drugs revealed two substances at trace amounts. The pathologist's comments are included below.
 

“Trace amounts of the anticoagulant rodenticides chlorophacinone and diphacinone were detected in the liver tissue. The concentrations were below the minimum levels of quantification (50 ppb), but above the minimum levels of detection for these analytes. These results indicated possible prior exposure to anticoagulant rodenticides. These concentrations are not likely high enough to be associated with coagulopathy.”
- Necropsy report:**

Spinal examination: No significant lesions were identified in the spinal column.

Brain: Mild, multifocal, acute congestion and hemorrhage.

Lung: Moderate to marked, multifocal, acute, pulmonary hemorrhage with blood in the airways. There was evidence of previous EIPH.

Liver: Mild multifocal, subacute lymphoplasmacytic hepatitis (background lesion).

Stomach: Marked, multifocal to locally extensive, acute to subacute, squamous ulceration and hyperkeratosis.

No significant lesions: brain, heart, spleen.

### **Conclusions (below)**

- Horse specific factors:** This horse showed traces of two rodenticides in the toxicology screen on liver tissue. These were above the minimum levels of detection, but below the minimum levels of quantification (50ppb). A paper (referenced below) published in 2016 following a cluster of sudden deaths in Southern California (2011) referenced rodenticides as a possible cause for the sudden deaths, but the paper references the rodenticides at the parts per million level. The substances found in this horse were much lower (parts per billion). Another difference is that the majority of the horses in the paper referenced had hemoperitoneum (6/7) which this horse did not exhibit. For these reasons, and the pathologist's opinion, we do not feel that the rodenticides found at the trace levels were the probable cause of the sudden death.
 

There was some hemorrhage in the airways, but in the pathologist's opinion it was not enough to be the cause of the sudden death.
- Race specific factors:** None
- Other factors:** None

<https://www.ivis.org/library/aaep/aaep-annual-convention-las-vegas-2015/idiopathic-hemorrhage-associated-anticoagulant-rodenticide-exposure-exercising-horses>

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## **SUDDEN DEATH ASSOCIATED WITH ANTICOAGULANT RODENTICIDE EXPOSURE AND IDIOPATHIC HEMORRHAGE IN EXERCISING HORSES**

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