

EXERCISE-INDUCED RHABDOMYOLYSIS IN ENDURANCE HORSES

Brigitte Traveria Callejas | Final degree project | Faculty of Veterinary Medicine | June 2019

INTRODUCTION

The most **common sign** is firm and painful muscles. In extreme cases, horses can show reluctance or refusal to move and muscle necrosis and renal failure from myoglobinuria.

The **prevalence of ER** showed in one previous study in a sample of horses participating in 50 miles distance events was a 4.5%.

Exertional rhabdomyolysis (ER) is a frustrating condition that affects many breeds of horses, causing poor performance and financial loss.

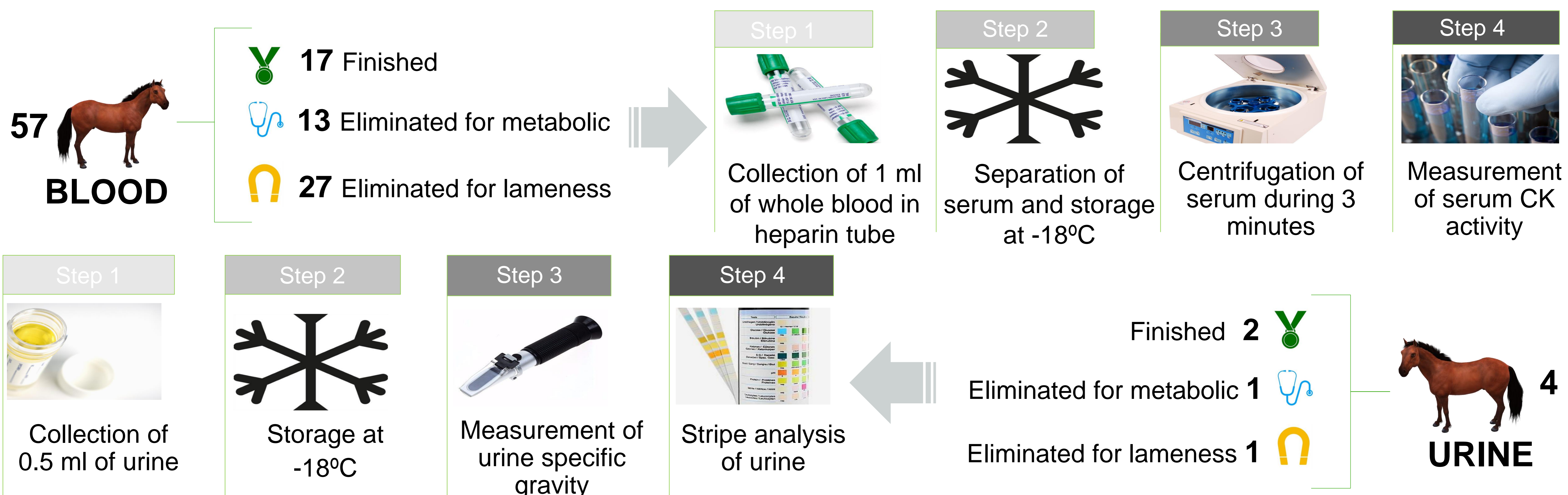
Plasma CK activity is the most specific marker of acute muscle damage. His activity peaks 4 to 6 hours after muscle damage.

Research studies of ER need to be done in endurance horses since there is evidence indicating that ER is an important cause of failure in endurance riding competitions.

OBJECTIVES

To establish the prevalence of exercise-induced rhabdomyolysis in horses competing in different distance endurance race events in the Iberian Peninsula and to determine the presence of renal alterations as consequence of muscle damage.

MATERIALS AND METHODS



RESULTS

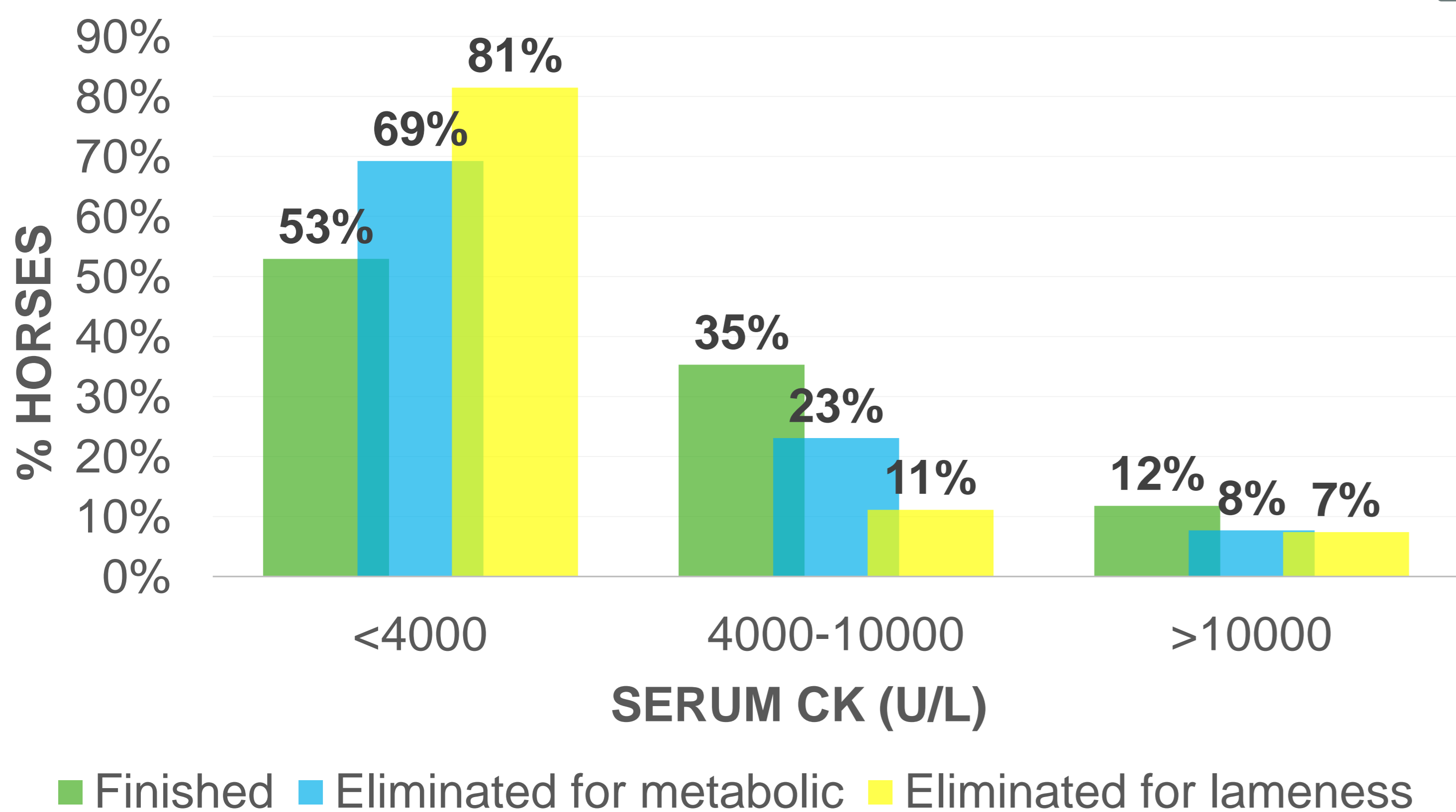
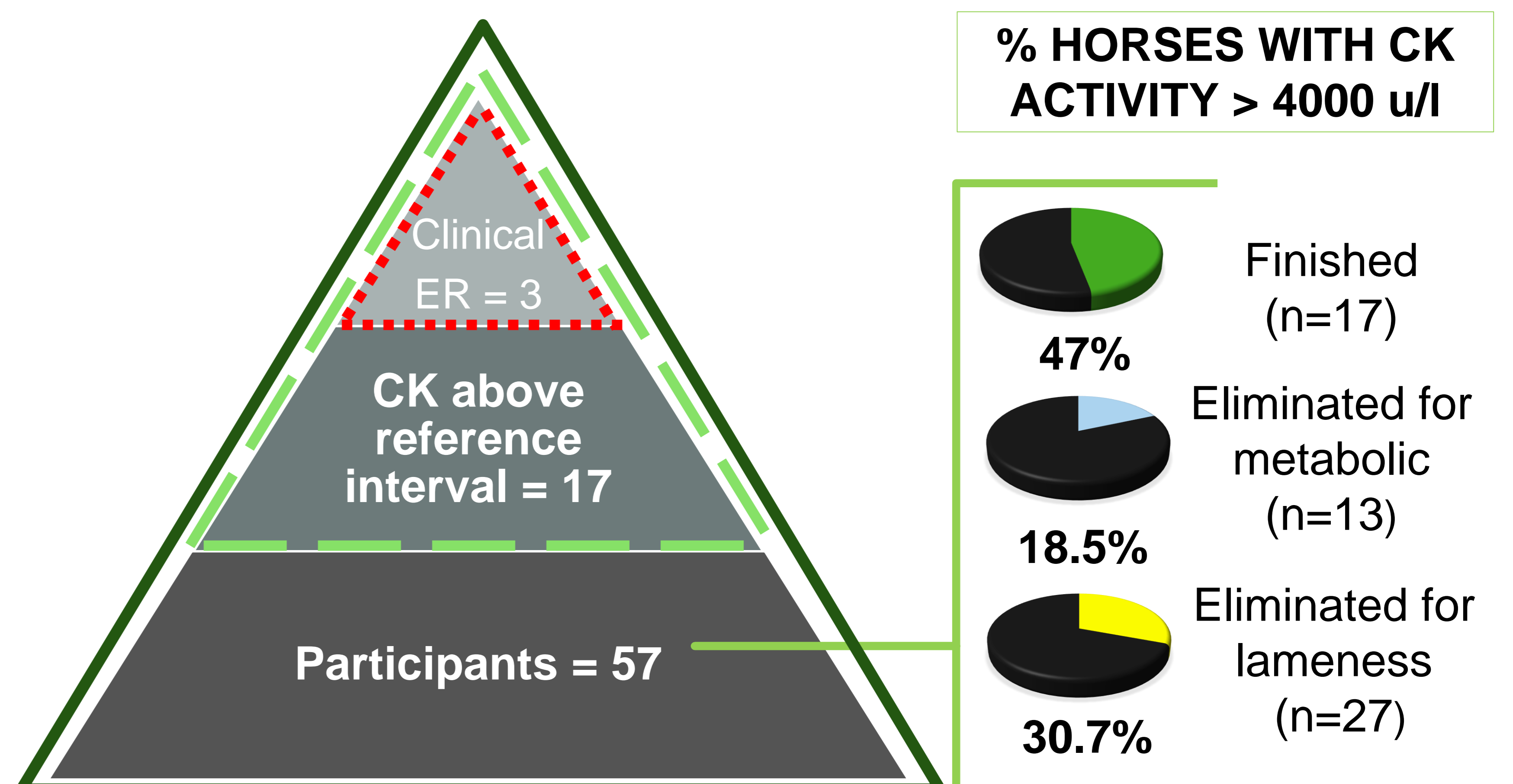


Figure 1. Frequency histogram of serum CK activity in 57 horses according to result in the race



CONCLUSIONS

- ❑ The current study identified an apparent prevalence of 29.8 % of ER in a sample of endurance horses.
- ❑ ER affected approximately twice those which finished the race (47%) over those which were eliminated (22.5%).
- ❑ CK activity above reference interval was mostly not associated with clinical signs.