British Horseracing Authority Medication and Doping Control Research Summary: ACP

Why the research was needed

Acepromazine maleate (ACP) is a (phenothiazine) sedative drug widely used in horses for mild sedation (for example to clip). The only ACP product licensed for use in horses in Britain is ‘Sedalin’, a gel administered by mouth. The primary reason for this study was to develop a Detection Time (DT) to assist veterinarians to use it with minimal risk of it being present in the horse on raceday, as part of the European Horserace Scientific Liaison Committee (EHSLC) programme to develop DTs. This cooperation reduces the number and cost of animal studies needed and prevents duplication. Secondary objectives included collecting urine for an EHSLC programme helping to ensure laboratory harmonisation and competence and taking extra blood samples for more EHSLC work exploring blood sample stability (using blood in addition to urine in doping and medication control can give valuable information and may be more convenient for trainers).

Overview of the study

The study was conducted at the Authority’s Centre for Racehorse Studies with analysis at HFL Sport Science as a pilot in 2 horses, then a main phase involving 6 (i.e. total 8). Research procedures complied with the Animals (Scientific Procedures) Act and were subject to ethical review; analyses were conducted to industry standard quality procedures. The dose used, 0.15 mg/kg bodyweight, by mouth, was the manufacturer’s recommended dose for ‘moderate’ sedation. A jugular vein catheter was used for frequent blood sampling over 2 days then removed before a further six days of less frequent blood and urine sampling.

Outcomes and Conclusions

The pilot study gave valuable data indicating that sampling needed to continue for longer in the main study – this refinement meant that the data produced in the main study was exactly what was needed. Sedation was variable but there were no problems with the horses. All samples were successfully collected and analysed at HFL. The data were presented in October 2011 to the EHSLC and a Detection Time of 72 hours agreed and subsequently published. The data were submitted to the International Federation of Horseracing Authorities’ Advisory Council on Equine Prohibited Substances and Practices and so contributed to the International Screening Limit published for acepromazine.