MEPIVACAINE

Detection time for Mepivacaine from research findings in *The Pharmacokinetics of Equine Medications* (RIRDC Pub. No.11/117)

**IMPORTANT INFORMATION AND DISCLAIMER**

This information is for the guidance of equine veterinarians to assist in determining an appropriate withholding time from competition.

If you are not an equine veterinarian, you must not rely on any information contained in this publication. You should seek the advice of an equine veterinarian before administering a therapeutic drug to a horse and before making decisions about withholding time in your particular circumstances.

This publication summarises the results of a study in which a single dose of a particular formulation of the drug was administered using a particular method to a limited number of horses of a particular weight. Formulation differences exist between drugs of different companies and may also affect the pharmacokinetics of the drug. Therefore this summary is not, and should not be regarded as, advice regarding the period of detection in urine in any particular case. The actual period will depend on the particular circumstances of each instance of drug administration.

While reasonable care has been taken in preparing this publication to ensure that the information is true and correct, the Commonwealth of Australia, the Rural Industries Research and Development Corporation (RIRDC), the authors (ETRA) and contributors give no assurance as to its accuracy or completeness. They expressly disclaim, to the maximum extent permitted by law, all responsibility and liability to any person, arising directly or indirectly from any act or omission, or for any consequences of any such act of omission, made in reliance on the contents of this publication, whether or not caused by any negligence on their part.

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### Preparation administered
Mepivacaine (Nature Vet)

Active ingredients: mepivacaine hydrochloride 20 mg/mL (equivalent to 17.4 mg/mL mepivacaine)

### Other proprietary names
Vetacaine

### Classification
Local anaesthetic (S4)

### Route of administration
Subcutaneous (single administration)

### Dose
20 mL/horse (equivalent to 0.68 to 0.99 mg/kg)

### Number of horses studied
12 (median body weight 488 kg, range 405 to 593 kg)

#### Results from sample of race horses

**Period of detection in urine (including metabolites, isomers and/or artefacts):**

**MAY EXCEED 4 DAYS**, based on a screening limit in urine of 10 ng/mL for the 3’hydroxymepivacaine metabolite.

**Notes**

- In this study the pharmacokinetics of mepivacaine were non-linear and excretion times were highly variable, therefore, mepivacaine is NOT recommended for use close to competition;

- For competition horses, forensic tests may be performed using plasma or urine to measure the parent drug, metabolites, isomers and/or artifacts;

- Different formulations of this compound from different manufacturers may be excreted differently;

- The detection time specified here is provided for the guidance of veterinarians to estimate an appropriate withholding time, based on the particular circumstances of drug administration and the addition of a suitable safety margin.
Equine Therapeutics Research Australia (ETRA)

RIRDC has collaborated with several key industry bodies to sponsor a research consortium – Equine Therapeutics Research Australia (ETRA) – to provide more accurate information about the pharmacokinetics of equine medications. Four Universities, four Australian horseracing forensic laboratories and Equine Veterinarians Australia together identified the 18 most important drugs. After administration to a number of horses, the concentration of these drugs was measured in blood plasma and urine. The information in this sheet is based on this research and is provided for the guidance of equine veterinarians.

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References


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