Detection time for Phenylbutazone 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.

The Commonwealth of Australia does not necessarily endorse the views in this publication.

<table>
<thead>
<tr>
<th>Preparation administered</th>
<th>Bute Paste (Ranvet)</th>
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<tbody>
<tr>
<td>Active ingredients</td>
<td>phenylbutazone 200 mg/mL</td>
</tr>
<tr>
<td>Other proprietary names</td>
<td>Butin Antiinflammatory Oral Paste; P-Butazone Paste</td>
</tr>
<tr>
<td>Classification</td>
<td>Non-steroidal anti-inflammatory drug (NSAID) (S4)</td>
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<tr>
<td>Route of administration</td>
<td>Oral (6 day course)</td>
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<tr>
<td>Dose</td>
<td>10 mL twice on the first day, then 5 mL twice daily for 4 consecutive days, then 5 mL once on day 6 (equivalent to 3.1 to 3.9 mg/kg twice on the first day, then 1.5 to 2.0 mg/kg twice daily for 4 days, then 1.5 to 2.0 mg/kg once on day 6)</td>
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<tr>
<td>Number of horses studied</td>
<td>12 (median body weight 562 kg, range 508 to 654 kg)</td>
</tr>
</tbody>
</table>

**Results from sample of race horses**

Period of detection in urine (including metabolites, isomers and/or artifacts): 5 DAYS, based on a screening limit in urine of 100 ng/mL for phenylbutazone

**Notes**

- 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.

Acknowledgement
The ETRA group acknowledges the generous financial support of RIRDC and their industry sponsors, which made this research possible.

References


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