

**Library & Information Services**

**Journal Club Checklist**

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| **Title** | **Efficacy and safety of enflicoxib for treatment of canine osteoarthritis: A 6-week randomised, controlled, blind, multicentre clinical trial** |
| **What are the aims or objectives of the study?** | The authors state that the primary objective of the study was to confirm the efficacy and safety of enflicoxib (Daxocox) for the treatment of naturally occurring osteoarthritis in dogs.  They also state that they also aimed to determine the lowest effective dose, using two dose rates of enflicoxib. |
| **Who carried out the research?** | Two of the authors work for Ecuphar (a pharmaceutical company), one works for Ondax (an independent research organisation), and one works for the statistical service at a university. Their qualifications and research experience are not clear from the paper. |
| **Where was the research carried out?** |  |
| **Who funded the research?** |  |
| **Do you think that the involvement of the pharmaceutical company introduces any potential bias in the study?** | You may be interested to read the following paper  Wareham, K.J. et al (2017) Sponsorship bias and quality of randomised controlled trials in veterinary medicine. *BMC Veterinary Research*, 13, no.234. <https://doi.org/10.1186/s12917-017-1146-9> |
| **Why do you want to review this paper?** | Do you have any specific questions that you want answered from your reading? |
| **What methods did the researchers use?** |  |
| **Is this methodology appropriate to the objectives or question?** | More detailed guidance on how to critically appraise different types of study can be found in [EBVM Toolkit: Section 3 - Critically appraising the evidence for validity](https://knowledge.rcvs.org.uk/evidence-based-veterinary-medicine/ebvm-toolkit/#critically) |
| **Is the study design described clearly enough to enable you to follow what was done?** | Are the methods of randomization and blinding clearly described?  There is a lot of information in the Materials and Methods section so it may be easier to break it down into separate components – see below. |
| **Are the number and type of patients clearly described?** | Are the inclusion and exclusion criteria clearly described?  Are these patients or participants relevant to your practice, if not what differences need to be considered? |
| **How many groups were there and what treatment did each receive?** | Aside from the intervention, were the groups treated equally?  Why did they use two dosage regimes as well as an alternative treatment and a placebo?  Why do you think that the researchers chose mavacoxib as the positive control? |
| **Were the data collected clearly described?** | What outcomes were measured, and which measurement tools were used?  How does the Veterinary Clinical Sum Score (CSS) compare with the way that you would assess a dog with arthritis? |
| **Is the analysis of data clearly described?** |  |
| **Are all patients or participants accounted for in the analysis?** | It is important to distinguish between the analysis based on Intention to Treat (ITT) – all animals that received at least one treatment, and those in the Per Protocol (PP) population that completed the full study. |
| **How did the researchers define a “responder” and what effect might this have had on the results?** | For the Veterinary Clinical Sum Score (CSS) – a responder was defined as a score of <6. It is important to note that there was a wide range of baseline CSS scores and that the researchers also included a subgroup analysis of the 138 dogs with an initial CSS of 8 or above, which they described as “more severe”.  For the owner assessed PSS and PIS s the outcome measure is based on a decrease in score regardless of starting value. |
| **Are the results of the study clearly described?** | How easy is it to compare the results between the veterinary (CSS) and owner ((CBPI = PSS+PIS) results?  What differences are there between the results based on veterinary and owner assessments?  What differences are there between the results based on the population of all dogs and those with an initial score of 8 or above). |
| **In terms of adverse events are there any unexpected results?** |  |
| **Do the results answer the research questions?** |  |
| **How do these results compare with your own experience of treating dogs with osteoarthritis using NSAIDs?** |  |
| **Are the results statistically significant?**  **Is there any other information you would like to have seen reported?** | Although P values are provided (which quantifies how likely it is that the results occurred by chance), Confidence intervals (giving the range of likely values) were not. |
| **Are the findings likely to be clinically significant?** | Were all clinically important outcomes considered?  Were the outcomes the ones you would choose? If not what else would you like to have seen reported?  Are the benefits worth the harms and costs? |
| **What are the limitations of the study?** | Some of the limitations that you might consider are   * The wide range of disease severity at recruitment * The subjective nature of the assessments * The short timescale for follow up |
| **Do the findings support or alter your current knowledge?** |  |
| **Do the findings provide sufficient evidence for us to consider changing your current practice?** |  |
| **Having read the paper are there any other sources of information you need to access before changing practice?** |  |