# Journal club checklist

This checklist provides an outline that you can use to guide your discussion of any article in your journal club. Further advise and tools to use when critically appraising papers can be found in the [EBVM Resources page](https://knowledge.rcvs.org.uk/evidence-based-veterinary-medicine/ebvm-resources/tools-guidelines-and-checklists/).

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|  | **Antibiotic therapy in dogs and cats in general practise in the United Kingdom before referral.  *Journal of Small Animal Practice*** | **What drives antimicrobial prescribing for companion animals? A mixed-methods study of UK veterinary clinics.  *Preventive Veterinary Medicine*** |
| **What are the aims or objectives of the study?**  A clearly stated aim or objective will make it easier for you to assess whether the research has been appropriately designed to meet these aims. | The stated aim is to describe antibiotic prescription by veterinarians in general practises in the United Kingdom before referral and to analyse if UK antibiotic stewardship guidelines were followed. | This paper lists two aims  i) to epidemiologically analyse the variation in the percentage of antimicrobial events comprising of Highest Priority Critically Important Antibiotics (HPCIAs) in companion animal dogs attending UK clinics belonging to large veterinary groups  ii) to analyse how the organisational structure of companion animal practice influences antimicrobial use, based on insight gained from anthropological fieldwork. |
| **What methods did the researchers use?** | The authors reviewed the clinical records from dogs and cats referred to the Internal Medicine and Oncology departments of two referral hospitals in the UK. | The paper is described as using “mixed methods” combining quantitative (epidemiological) data from the VetCompass database, and qualitative (ethnographic/ anthropological) data based on observations from a researcher who spent time in a number of veterinary practices in order to understand the factors affecting and context of antimicrobial prescribing. |
| **Is the study design described clearly enough to enable you to follow what was done?** |  |  |
| **Are the number and type of patients or participants and the timeframes used to collect data clearly described?** | The study included records from 917 dogs and cats,  referred to the Internal Medicine department of hospital A between March 1, 2018, and February 28, 2019, and to the Internal Medicine and Oncology departments of hospital B between November 1, 2016, and November 1, 2017. | The complete data set for epidemiological analysis included data from 234,539 dogs from 365 clinics belonging to three large veterinary groups (two commercial and one charitable) for the period spanning June 2012 to June 2014.    The ethnographic data was collected from three UK companion animal clinic sites belonging to different large veterinary groups (two commercial and one charitable) over 9 months in 2019. |
| **Is the data collected clearly described?** | The paper retrospectively reviewed the clinical records of the animals referred. What data did the researchers extract from these records? | This paper collected two completely different sets of data.  1) Epidemiological (quantitative) data – based on data recorded in the electronic patient records in the Vet Compass data base.  2) Anthropological (qualitative) data including field notes, semi-structured interviews and company policies. |
| **Do you think that the methodology and data collected are appropriate to meet the aims of the study?**  **If not, what are the limitations?** |  |  |
| **Is the analysis of data clearly described?** | The paper used descriptive statistics. | The paper included descriptive statistics of the number of antimicrobial events and HPCIA events per dog, but it also used logistic regression to investigate the use of HPCIAs by dog, clinic, and group.  The qualitative data was analysed by thematic analysis. |
| **What are the main results of the study?**  Both studies report a number of findings so it may be helpful consider the results under each subheading. |  |  |
| **Against what criteria do the papers judge antimicrobial prescribing, and how do these compare?** | BSAVA: PROTECT ME | WHO: Critically important antimicrobials for human medicine 6th revision  RUMA: HP-CIA’s – ‘last resort’ antibiotics |
| **Are you aware of any other antimicrobial usage guidelines?** |  | |
| **What are the similarities and differences between the two papers?** | This paper only uses quantitative information from the clinical records, although in the discussion it does refer to “Various drivers have been attributed to the overprescription of antibiotics in veterinary practise”. | This paper only looks at the use of HPCIAs in dogs, However, further information on antimicrobial prescribing in this data set can be found in: Buckland (2016) |
| **Do the results answer the research questions?** |  |  |
| **If a similar study was conducted in your practice, do you think the results would be similar or different to those found in the study?** | You may want to consider cases beyond those referred to oncology or internal medicine specialists. | You could discuss not only the use of HPCIAs but also whether any of the themes from the anthropological study (3.3.1-3.3.5) are relevant in your practice. |
| **Having read the papers do you think that there are changes you should make in your practice?** |  | |
| **Are there any other sources of information you need to access before changing practice?** |  | |

**References**

BSAVA/SAMSoc (2018) PROTECT ME [BSAVA] [online] Available from: <https://www.bsavalibrary.com/content/chapter/10.22233/9781910443644.chap6_1> [Accessed 20 July 2023]

World Health Organization (2018) *Critically important antimicrobials for human medicine : 6th revision* [WHO] [Online] Available from: <https://www.who.int/publications/i/item/9789241515528> [Accessed 20 July 2023]

RUMA. *HP-CIA’s – ‘last resort’ antibiotics* [RUMA] [Online] Available from: <https://www.ruma.org.uk/hp-cias/> [Accessed 20 July 2023]

Buckland. E.L. et al. (2016) Characterisation of antimicrobial usage in cats and dogs attending UK primary care companion animal veterinary practices. *Veterinary Record*, 179 (19), p. 489. <https://doi.org/10.1136/vr.103830>.