

News & Comments

Classification and National Guidelines for Histological Diagnosis of Canine Mammary Gland Tumours: Reproducibility and Feasibility

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The canine mammary tumour (CMT) histological diagnosis and grade are regarded as the benchmark for patient care and research outcomes. In this regard, misinterpretation and/or diagnostic heterogeneity among institutions among pathologists can have a significant impact on how clinical data that uses the histology result as the reference standard is interpreted. Particularly, there may be negative effects on the assessment of therapy procedures and the interpretation of prognostic/predictive molecular markers. The use of various classification and grading methods, as well as, even when adopting common systems, the subjective interpretation of histology criteria or deceptive concepts and phrases used to categorize and grade CMTs, can lead to serious issues. This study's objective was to evaluate IOV in the grading and classification of CMTs when applying the same system and guidelines.

A total of fifteen veterinary pathologists from veterinary state laboratories and academic veterinary schools are listed as authors. For the entities of the DTF classification, the WP developed national recommendations and created consensus standards for histological diagnosis and malignancy grading. Twenty telematic sessions, each lasting an average of 90 minutes, were organized by all components for this reason and because of the COVID-19 pandemic to address common issues and misunderstandings about the histological assessment of CMTs. During the ring study, a decision was made and put into practice on the crucial factors. To assess how the classification and national criteria affected the reliability of morphological diagnosis, the ring research was carried out on a few chosen histology samples.

The authors of this study used the same histological classification approach (DTF classification, and consensus recommendations) to assess concordance and agreement in the diagnosis of CMTs. The use of uniform classification and grading systems is essential for standardization as well as the creation of international consensus working groups and recommendations when taking reader-related factors into account. The complexity of the lesions can make it more challenging to get to blinded consensus diagnosis when it comes to the identification of histological cancer subtypes. Our work should be taken with some limitations in mind because there aren't many ring studies used in veterinary medicine to evaluate IOV and because there are many different approaches used in that field.



There is no question that morphological observation and its correlation with clinical factors have provided a solid foundation for clinical medicine as it is now, and that pathological investigation has contributed to many of the classifications that are currently in use. However, it is also true that subjective histopathology methods render the fundamental ideas erroneous. Having a diagnosis that is repeatable is crucial, for this reason. Comparing studies of CMTs would be made easier with less methodological differences between veterinary pathologists. To do this, scientists re-examined the histopathological criteria for CMT diagnosis, considering the key features of all entities specified in the most recent classification of CMTs, and assigned a weighting to the factors that determine the diagnosis and grade of these tumours.

Source: [Veterinary Sciences](#)

KEYWORDS

Canine mammary tumours; diagnostic agreement; interobserver variability; classification; standardisation; guidelines

