Reviewer's report

Title: Columnar cell lesions of the canine mammary gland: pathological features and immunophenotypic analysis compared with the human breast

Version: 1 Date: 26 May 2009

Reviewer: Rohit Bhargava

Reviewer's report:

This study describes the presence of columnar cell lesions in canine mammary tissue and its resemblance to human breast tissue. The manuscript is well written; however, several minor essential revisions are required.

1) The authors state that this study was performed on 126 consecutive canine mammary glands. How were these 126 mammary glands obtained? Are these from an autopsy series? Were these removed for mass lesions, etc? Knowing the reasons for mammary gland removal will help estimate the true prevalence of columnar cell lesions in the canines.

2) In the results section, it is mentioned that in-situ carcinomas were more frequently observed with FEA. It will be more helpful to know the type of in-situ carcinoma associated with all the columnar cell lesions, i.e. ductal versus lobular, low-grade DCIS versus high-grade DCIS and if there was any statistical difference between types of in-situ carcinoma associated with FEAs. Similarly, it will be useful to know the subtype and receptor status of associated invasive carcinomas. Please also provide the details of type of benign tumors associated with columnar cell lesions. These details will enhance the manuscript and will provide a better understanding of lesions associated with columnar cell lesions.

3) The authors also suggest that dogs are a suitable model for the comparative study of non-invasive breast lesions. However, this is difficult, if not impossible as there are huge challenges associated with use of dogs as laboratory animals. The authors may want to expand on this statement within a paragraph in the discussion section.

4) Table 1 is confusing. Please break it down to 2-3 tables and provide details of all the associated lesions.

5) Typographical errors:

5A) Page 7, last paragraph, 2nd line: Please change “The presence such lesions” to “The presence of such lesions”.

5B) Page 8: Correct the spelling for Abbreviations.

5C) Legend for figure 4: Please correct typographical errors in the bold text.

5D) Figure 4: Please correct spelling for “without”. Is HCC same for CCH? If yes, then change it to CCH.
6) Finally, please delete "compared with the human breast" from the title. This gives a wrong impression that human breast tissue was also examined in this study.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests