Reviewer’s report

Title: Inflammatory response associated with mammary carcinomas in female dogs: immunophenotyping of lymphocytes and the relationships between prognostic factors and survival rates

Version: 2 Date: 12 November 2009

Reviewer: Min-Liang Wong

Reviewer’s report:

Comments:

Major:

The major work of this manuscript is the finding of percentages (high or low) of B and T lymphocytes in metastasis and survival rates. It appeared to be preliminary results, and no experiments on the roles of B and T cells in cancer-related inflammation were conducted (but the first two words of the paper’s title “Inflammatory response…” indicates study of relationship between inflammation and tumor). Furthermore, the biological significance of B and T cells in tumor pathogenesis could not be obtained from their data.

Current studies have shown that inflammatory cells such as macrophages, mast cells, neutrophils and eosinophils play important roles in cancer-associated inflammation (reviewed in Alberto Mantovani, Paola Allavena, Antonio Sica and Frances Balkwill. Nature 454, 436-444, 2008). However, the authors did not investigate the status of these cells in their tumor samples; this is a big defect in their work.

Minor:

Abstract

1. The conclusion of abstract is obscure and needed to be clarified.

2. The grammar errors and writing should be corrected and improved in the entire manuscript. For example, “The carcinomas in mixed tumours showed a significantly greater percentage of T lymphocytes than were found in animals without…”

Background

The second paragraph of Background section was directly copied from the first two sentence of Abstract section in the manuscript. They should be modified to make differences.

Methods

1. Page 6. “Palpitation” should be changed to “palpation”. Latero-lateral right and left (LL) should be replaced by right lateral and left lateral, respectively.
2. In the second paragraph of Page 7, the authors stated that tumor tissues were obtained from fragments after bisection of tumor measured as 1.5 X 1.5 cm in size. This indicated intratumoral inflammatory reaction was studied. The authors also described the dynamic interaction between inflammation and tumor development. Accordingly, the dynamic interaction may be different in the areas of intratumor and/or the areas of the periphery. In the reviewer’s opinion, the areas of the periphery should be studied also.

Result
In this study, the involvement of inflammatory cells in the benign tumors was not included.

Discussion
1. The authors described those parameters including clinical stage, histological type, tumor size, involvement of lymph node metastasis and the mitotic index showed significant correlations with each other. But the reviewer did not find any description of significant correlations between tumor size and lymph node metastasis, or tumor size and mitotic index, or tumor size and histological type.

2. In the third paragraph, types of inflammatory cells secrete which kind of growth factors to promote tumor development needed to be clarified.

Figures
Each data in Figures 3, 4 and 5 should be divided into more panels to make them understandable. And the figure legends should be extended also.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

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.