

Evaluation of expression of MUM-1 receptor in canine T cell lymphomas: preliminary results

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Objectives: High grade lymphoma is the most common hematopoietic neoplasia in dogs. T cell lymphomas are usually associated with lower response to therapy. In human T cell lymphoma, the expression of the Multiple Myeloma oncogene 1 (MUM-1) in T cell lymphomas is associated with poor prognosis. In veterinary medicine this association is still to be studied. The aim of this study is to evaluate the expression of MUM-1 expression in canine high grade T cell lymphoma and correlate it with response to treatment and prognosis.

Material and Methods: Data was retrieved retrospectively from a group of 105 dogs diagnosed with high grade lymphoma and treated with a CHOP based protocol. End points were defined as Time-to-progression and Overall survival. Immunohistochemistry was performed for all samples using tissue micro array technology.

Results: Immunophenotyping identified 79% (83/105) B cell and 21% (22/105) T cell lymphomas. From these 62% (14/22) were high grade. Median OS for B cell lymphoma was 222 days vs 152 days for T cell type.

Conclusion: The preliminary analysis of our data reveals an increased percentage of B cell lymphomas in the studied population, compared with the publish literature. Dogs suffering with T cell lymphoma have decreased survival times when compared with B cell type justifying the exploration of MUM-1 expression as a prognostic indicator.

Keywords: Dog, Lymphoma, MUM-1, Prognosis, Comparative oncology.

Funding: This work is part of the project “Avaliação da expressão do oncogene-1 de Mieloma Múltiplo (MUM-1/IRF-4) em Linfomas Nodais T de cães e a sua relação com o prognóstico”, Acronym TCLMUM1.