

RETROSPECTIVE ANALYSIS OF CANINE TUMOR DISTRIBUTION IN PORTUGAL DURING 2019

Catarina Peças¹, Cátia Marques^{1,2,3}, Joana Catita^{1,2,3}, Pedro Faísca^{1,4}, José Catarino^{1,4}, Mariana R. Batista^{1,2,3}, Maria Soares^{2,3,5}

¹ Faculty of Veterinary Medicine, Lusófona University, Lisbon, Portugal; ² Centre for Interdisciplinary Research in Animal Health (CIISA), Faculty of Veterinary Medicine, University of Lisbon, Lisbon, Portugal; ³ Associate Laboratory for Animal and Veterinary Sciences (AL4Animals), Lisbon, Portugal; ⁴ DNAtch, Lisboa, Portugal; ⁵ IUEM, Instituto Universitário Egas Moniz, Egas Moniz - Cooperativa de Ensino Superior, CRL, Campus Universitário – Quinta da Granja, Monte de Caparica, 2829-511 Caparica, Portugal

INTRODUCTION

Keeping dogs as pets became increasingly popular in the last decades, with them being considered as family members. Cancer is one of the leading causes of death in dogs and dealing with oncology cases is often a great challenge for veterinarians and owners. Most tumors are multifactorial which makes its epidemiology to likely change over time and geographically. Thus, updated data is of the utmost importance to guide clinicians and researchers in oncology

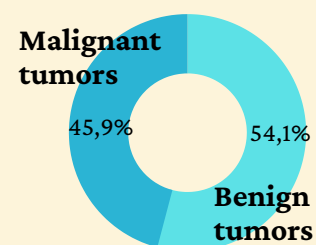
OBJECTIVES

The goal of this study was to characterize the distribution and the demographics of tumors diagnosed in dogs in Portugal.

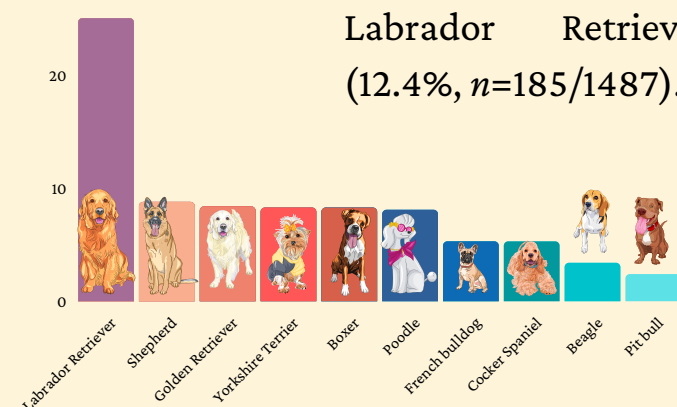
RESULTS



Among 1542 animals, a total of 2019 tumors were diagnosed and 22.4% of these dogs ($n=346/1542$) displayed multiple tumors.

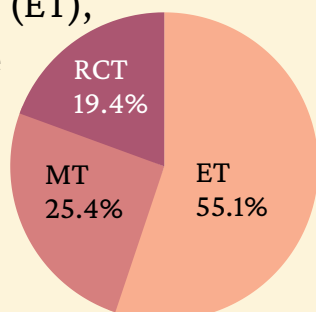


Except for mixed breed animals (50.5%, $n=751/1487$), the most affected breed were Labrador Retriever (12.4%, $n=185/1487$).



Among epithelial tumors (ET), the breast tumors were more frequent (48.5%, $n=536/1106$), including adenomas ($n=228$) and carcinomas ($n=162$).

Lipomas (22.3%, $n=114/512$) and perivascular tumors (16.6%, $n=85/512$) were the most common mesenchymal tumors (MT). Mast cell tumors represented 54.4% ($n=212/390$) of round cell tumors (RCT).



MATERIAL & METHODS

This study retrospectively analyzed 2286 histopathology reports from a national veterinary laboratory obtained from dogs during 2019.

Data on breed, sex, age, histological type of tumor and malignancy data were collected.

CONCLUSIONS

A high incidence of multiple tumors in dogs reveals the importance of early tumor detection and diagnosis. **Mammary** and **perivascular tumors**, along with **mast cell tumors** were the most diagnosed canine tumors in Portugal.

CLINICAL RELEVANCE

These results demonstrate the importance of carrying out national surveys to improve prophylactic measures, diagnosis, and treatments, as well as to explore newer tumor research strategies.