



### KEY WORDS

- ✓ Mammary carcinoma
- ✓ Mast cells
- ✓ 7-12 DMBA
- ✓ Tryptase
- ✓ Chymase

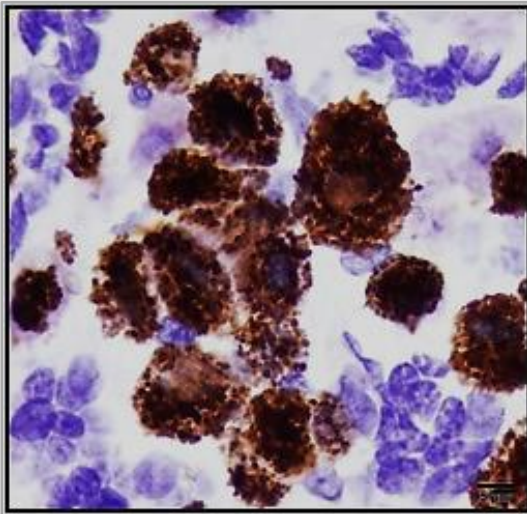
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## INVESTIGATION OF MAST CELLS AND THEIR ROLES IN EXPERIMENTALLY INDUCED MAMMARY CARCINOMA IN RATS AND MAMMARY TUMORS IN CATS AND DOGS

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### THESIS ABSTRACT

Breast cancer, which is one of the most common and important types of cancer in humans and animals worldwide and in our country, causes material and spiritual severe losses. Although mast cells are considered one of the most important cells of the immune system and are known to increase significantly in cancer tissues, their possible roles and phenotypes are not yet precise. In the thesis study, the possible localization, presence, possible roles, and immunophenotypic characteristics of mast cells in this region were investigated experimentally for both conditions; mammary tumors in rats and naturally occurring mammary carcinomas in cats and dogs. In the study, TNF-alpha, MMP-9, and PCNA expressions were also examined, and their possible relations with mast cells were questioned.

### TUMOR TISSUE AND CAN BE BENEFICIAL IN TERMS OF PROGNOSTIC. APPLICATION AREAS OF THE THESIS RESULTS

The number of mast cells increased in experimental rat and cat dog mammary carcinomas cases compared to healthy mammary tissues, and the increase was drastic especially in the intratumoral area; having a negative correlation with PCNA expression suggested that the increasing number of mast cells in the region probably showed a good effect on the living being. In light of these findings, it was concluded that mast cells can play an essential role in tumor tissue and can be beneficial in terms of prognostic.

### ACADEMIC ACTIVITIES