

News & Comments

Current Approaches in the Treatment of Canine Gastric Cancer

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Human gastric cancer (GC) has a complicated and poorly understood etiology, with *Helicobacter pylori* infection, established risk factors, genetic cancer syndromes, and other gastrointestinal disorders all playing significant roles. Like in people, early-stage clinical manifestations of GC in dogs are typically mild to non-existent, with vomiting, anorexia, weight loss, and lethargy being the most prevalent symptoms. Symptoms can last anywhere from a few weeks to many months. Chemotherapy guidelines have been devised for common canine neoplasms, and veterinary oncology is a field that is developing. Wide surgical resection to create clear margins is the most typical method of treating canine GC.

A significant class of anticancer chemicals includes platinum medicines. A second-generation platinum-compound chemotherapeutic drug that is safe to use on pets is carboplatin. It was created for use in humans to reduce the myriad adverse effects of cisplatin, including as myelosuppression, nephrotoxicity, nausea, and vomiting, while retaining a similar level of tumour cytotoxicity. Given that it is utilized in both human and veterinary medicine, cisplatin is regarded as the most potent antineoplastic drug in animal systems and by some veterinary oncologists, it is more potent than other platinum medicines. Cisplatin is not advised for cats, though, as it is extremely poisonous to them. Although diverse methods were utilized, some trials aimed to treat canine GC with carboplatin alone.

RNA, DNA, and topoisomerase II are all inhibited by the synthetic DOX analogue mitoxantrone, which has the same activity as DOX in DNA intercalation. But mitoxantrone does not harm cells through oxidation and is less prone to produce reactive oxygen species. Likewise, there are several others treatment strategies like Prednisolone, Piroxicam, where the authors clearly presented in the article in a detail form. Because it is simple to measure, survival time is typically employed as the main endpoint. In veterinary oncology, however, it can be impacted by owner-driven factors like postponing the start of the therapy or euthanasia. Different prognostic markers, such as intraoperative complications and the administration of adjuvant chemotherapy, can also have an impact on survival time. Adjuvant chemotherapy is typically linked to a longer survival period. When compared to a single-agent treatment, chemotherapy, and combination therapies both increase survival in humans. Protocols utilizing trastuzumab in combination with capecitabine or 5-FU in combination with cisplatin have shown promise in patients receiving target treatment for HER-2-positive malignancies.

Source: [Veterinary Sciences](#)



KEYWORDS

Human gastric cancer; canine gastric cancer; anticancer drugs; resistance; chemotherapy

