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Development of an Autologous Canine Cancer Vaccine System
for Resectable Malignant Tumors in Dogs

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Highlights:

- A procedure for an effective autologous canine cancer vaccine has been developed.
- The autologous canine cancer vaccine can be prepared for any resectable tumor.
- The autologous canine cancer vaccine elicits strong anti-tumor humoral immunity.
- The autologous canine cancer vaccine has extended lives of dogs with cancer.

Abstract

While conventional therapies exist for canine cancer, immunotherapies need to be further explored and applied to the canine setting. We have developed an autologous cancer vaccine (K9-ACV), which is available for all dogs with resectable disease. K9-ACV was evaluated for safety and immunogenicity for a variety of cancer types in a cohort of companion dogs under veterinary care. The autologous vaccine was prepared by enzymatic digestion of solid tumor biopsies. The resultant single cell suspensions were then UV-irradiated resulting in immunogenic cell death of the tumor cells. Following sterility and

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