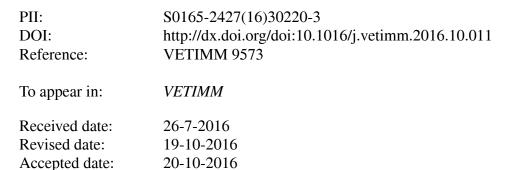
### Accepted Manuscript

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

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### ACCEPTED MANUSCRIPT

## 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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