

## Coarse Fraction RT and/or ONCEPT™ Melanoma Vaccination for Canine Oral Melanoma

**Objective:** To evaluate the effect of combination coarse-fraction radiotherapy (RT) and the ONCEPT™ melanoma vaccine on the outcome of dogs with malignant oral melanoma. The primary study endpoint will be time to tumor progression. The secondary endpoint will be overall survival time. Outcome will be compared to that of dogs receiving RT alone or vaccine alone. Since the study is not funded, data for the three treatment groups (**concurrent RT + vaccine, RT alone, vaccine alone**) will be collected, and treatment selection will be based on **owner's preference**. While this is designed as a prospective, non-randomized trial, retrospective cases are welcome as long as inclusion criteria are met. Data analysis will be on an intent-to-treat basis.

**Inclusion criteria:**

- Dogs with histologically or cytologically confirmed oral melanoma (including those with lip and lingual tumors)
- Treatment (concurrent RT + vaccine or RT alone or vaccine alone) must follow the protocol described below.
- Tumor staging and follow-up must be adequate, as described below.
- Dogs with **all stages of loco-regional disease (microscopic or macroscopic)** will be considered for data analysis. **Dogs with distant metastasis will not be included.**

**Treatment protocol:** Radiotherapy will include **four weekly fractions of 8 Gy for a total dose of 32 Gy**. The ONCEPT™ melanoma **vaccine will be administered q 2 weeks for 4 immunizations, and a booster will follow every 6 months**. **For inclusion into the study, dogs may receive as first-line therapy either RT alone, vaccine alone, or concurrent RT and vaccine**. For dogs receiving concurrent RT and vaccine, it is preferred that the first vaccination be delivered at the time of the first radiation treatment. However, dogs that receive the first vaccine anytime during the RT protocol or just before RT is begun will also be included. Dogs receiving concurrent chemotherapy are excluded. At the time of progressive disease, there are no restrictions on therapy.

**Tumor staging:** Before treatment, full tumor staging, including **measurement of all gross disease according to RECIST\***, **mandibular lymph node measurement in 2 dimensions (long axis X short axis)**, **cytologic or histologic evaluation of regional mandibular lymph nodes and thoracic radiographs**, is required for inclusion in the study. Preference is for tumor staging to occur within two weeks before initiation of the treatment protocol.

**Data collection and follow up:**

**The primary tumor site and regional mandibular lymph nodes should be evaluated/measured at each visit during the treatment protocol.** After

\*RECIST 1.1 criteria (<http://www.recist.com/index.html>)

completion of the treatment protocol, follow-up examinations are required at least **every 6 months**. These follow-up exams should include a thorough physical examination to evaluate/measure the primary tumor site and the regional lymph nodes. Thoracic radiographs are required at least every 6 months. **More frequent follow-up is encouraged.** Cytologic evaluation of lymph nodes after initial tumor staging will be performed at the discretion of the radiation oncologist. Necropsy is strongly encouraged.

**Medication:** Medication for supportive care related to the presence of the primary tumor and/or acute radiation effects will be prescribed at the discretion of the supervising radiation oncologist. **Preference is to avoid NSAIDs, particularly piroxicam**, in light of the possible confounding anti-tumor effects of these drugs. If pain relief is necessary, clinicians are encouraged to consider tramadol, other narcotics, and/or gabapentin instead of NSAIDs. If necessary, glucocorticoids may be considered to alleviate severe acute effects.

**Recommended treatment protocol and follow-up schedule:**

**Concurrent RT + vaccine:**

	RT	Vaccine	PE (1° tumor and LN evaluation)	Thoracic radiographs
Week 1	X	X	Preferably w/in 2 wks prior to therapy	w/in 2 wks prior to therapy
Week 2	X		X	
Week 3	X	X	X	
Week 4	X		X	
Week 5		X	X	
Week 6				
Week 7		X	X	
Week 31		X (6 mo. booster)	X <sup>†</sup>	X <sup>†</sup>
Week 55*		X (12 mo. booster)	X <sup>†</sup>	X <sup>†</sup>

**RT alone:**

	RT	PE (1° tumor and LN evaluation)	Thoracic radiographs
Week 1	X	Preferably w/in 2 wks prior to therapy	w/in 2 wks prior to therapy
Week 2	X	X	
Week 3	X	X	
Week 4	X	X	
Week 28		X <sup>†</sup>	X <sup>†</sup>
Week 52*		X <sup>†</sup>	X <sup>†</sup>

<sup>†</sup> More frequent follow-up is encouraged.

\*Continue q 6 months

**Vaccine alone:**

	<b>Vaccine</b>	<b>PE (1° tumor and LN evaluation)</b>	<b>Thoracic radiographs</b>
Week 1	X	Preferably w/in 2 wks prior to therapy	w/in 2 wks prior to therapy
Week 2			
Week 3	X	X	
Week 4			
Week 5	X	X	
Week 6			
Week 7	X	X	
Week 31	X (6 mo. booster)	X <sup>†</sup>	X <sup>†</sup>
Week 55*	X (12 mo. booster)	X <sup>†</sup>	X <sup>†</sup>

† More frequent follow-up is encouraged.

\*Continue q 6 months

**Please send completed data sheets to the following address after a patient's death or during a call for submissions:**

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