

### **Preliminary Canine Results From Osteosarcoma Study**

ELIAS Animal Health shared promising preliminary canine osteosarcoma results for its Autologous Prescription Product cancer immunotherapy at the 2018 American College of Veterinary Medicine (ACVIM) Forum in June, 2018. The study indicated its new cancer immunotherapy featuring a patented combination of vaccine and T cell infusion approach, demonstrated impressive survival times and minimal side effects. This cancer immunotherapy is being distributed as an experimental product under 9 CFR 103.3 to veterinarians treating dogs diagnosed with cancer. Efficacy and safety have not been established.

### **The History of Canine Cancer Treatment Protocols for Osteosarcoma**

Cancer treatments for companion animals diagnosed with appendicular osteosarcoma have only modestly improved survival times in the last several decades. The Table below provides a comparison of survival times using various treatment approaches for dogs diagnosed with osteosarcoma.

ELIAS Animal Health is determined to drive innovation and improve upon outcomes in the treatment of cancer, including osteosarcoma, using cutting edge immunotherapeutic advances. ELIAS looks forward to the presentation of trial results from recent clinical trials conducted at the University of Missouri (and other clinical sites) at the upcoming Veterinary Cancer Society conference in October.

<b>Authors</b>	<b>Year</b>	<b>Treatment</b>	<b>n (dogs)</b>	<b>DFI (Days)</b>	<b>MST (Days)</b>
Brody, R., Abt, D.	1976	Amputation alone	65	-	126
Spodnick G., et. al.	1992	Amputation alone	162	-	134
Bergman, P., et al.	1996	Carboplatin after amputation	48	257	321
Moore A, et. al.	2007	Doxorubicin (30 mg/m <sup>2</sup> ) every 2 weeks for 5 treatments starting 2 weeks after amputation	303	-	248
Phillips B., et al.	2009	Carboplatin monotherapy after amp.	155	256	307
McMahon, T., et. al.	2011	Carboplatin and Gemcitabine Combination after amputation	55	203	279
Selemic LE, et. al.	2014	Carboplatin and doxorubicin after amputation	407	291	284
Frimberger, AE, et. al.	2016	Sequential Doxorubicin and Carboplatin Chemotherapy after amputation	38	-	317
Preliminary Results — ELIAS Protocol	2018	Autologous vaccine and T cell infusion after amputation	15	October announcement (2)	October announcement (2)

(1) Preliminary results reported in June 2018, data not mature, final data will be reported at a later date.

(2) Median Survival Times for dogs completing the vaccination and infusion protocol have been compiled, and will be shared after presentation at Veterinary Cancer Society Scientific Meeting in October 2018.

**Definitions:**

**DFI, Disease Free Interval** is the time frame between amputation and removal of the cancerous tissue until the return of cancer as evidenced by metastatic disease.

**MST, or Median Survival Time** is the time, expressed in days, when half the patients are expected to be alive. It means that the chance of surviving beyond that time is 50%.