

Gifts in Action - Seeking New Ways to Treat Bone Cancer

University of Missouri College of Veterinary Medicine oncologists are recruiting dogs for a novel treatment aimed at stopping the spread of a deadly form of cancer. Radiation oncologist, Dr. Jimmy Lattimer, has worked with the Veterinary medical teaching Hospital medical and surgical oncology faculty, investigators from the MU Research Reactor, and collaborators at Valco Instrument Company Inc. of Houston, Texas, to treat seven dogs with osteosarcoma. The team hopes to identify additional candidates that may benefit from enrollment in this clinical trial evaluating a novel approach to treatment of bone cancer.

The treatment involves delivering a radiopharmaceutical drug directly to the site of bone involvement in dogs with bone cancer. A specially designed drill creates tiny holes in the bone through which a liquid pharmaceutical can be administered. The radiopharmaceutical then forms a gel-like compound that keeps the radioactivity relatively confined to the tumor site. The method differs from the standard radiopharmaceutical therapy that is currently in use, whereby the patient is treated with an intravenous injection and the drug goes throughout the body. The result of standard radiopharmaceutical therapy for bone cancer is that bone marrow suppression can be substantial and often leads to a delay in giving chemotherapy which, in turn, may give the cancer the chance to spread to other sites.

“Our hope is that using the specialized bone drill and innovative form of radiopharmaceutical treatment, we will negate the need for amputation and will also be able to treat with chemotherapy in order to slow or prevent metastatic disease,” said Dr. Carolyn Henry, director of the Tom and Betty Scott Endowed Program in Veterinary Oncology.

The Gabriel Institute is funding the research. The Gabriel Institute was founded by Stan Stearns after his beloved St. Bernard died while being treated for osteosarcoma. The purpose of the institute is to initiate and support research in the hope of finding a cure for bone cancer and to honor the extraordinary dedication of search-and-rescue, assistance and police dogs. Dogs enrolled in the osteosarcoma clinical trial are eligible for financial assistance from the Gabriel Institute for the cost of their treatment. For information on the Gabriel Institute, log onto gabrielinstitute.org.

For more information about the study or other cancer drug trials currently under way at the CVM, contact Debbie Tate, oncology clinical trials coordinator at 573-882-7821.