



Telomerase Cancer Vaccine

The **Veterinary Specialty Center of the Hudson Valley (VSCHV)** has been granted a USDA permit allowing the Department of Oncology to import a canine cancer vaccine from Europe. **VSCHV is the only site in the United States where this vaccine will be available.** The vaccine has been developed by a well recognized medical health company, who will use the data to help obtain FDA approval. The vaccine has published data and efficacy against canine Lymphosarcoma but we feel it will also benefit other canine cancers including osteosarcomas, transitional cell carcinoma and hemangiosarcomas.

A vaccine targeting telomerase enhances survival of dogs affected by B-cell lymphoma
Peruzzi D, Gavazza A, Mesiti G, Lubas G, Scarselli E, Conforti A, Bendtsen C, Ciliberto G, Aurisicchio L.
Mol Ther. 2010 Aug;18(8):1559-67. Epub 2010 Jun 8.
PMID: 20531395 [PubMed - indexed for MEDLINE]

What is Telomerase?

The enzyme telomerase allows for replacement of short bits of DNA known as telomeres, which are otherwise shortened when a cell divides via mitosis. In normal circumstances, without the presence of telomerase, if a cell divides, at some point the cell will reach its limit (aging, cell will die). With the presence of telomerase, each dividing cell can replace the lost bit of DNA, and any single cell can then divide unbounded--a crucial step in enabling cancerous growth. Telomerase activation has been observed in ~90% of all human tumors and the majority of canine tumors, suggesting that the immortality conferred by telomerase plays a key role in cancer development.

Consultations can be scheduled by calling **(845)-632-3200** or contact the Department of Oncology at VSCHV at **erogers@vschv.com**