

## **Mushroom Compound May Help Dogs With Invasive Cancer**

September 20, 2012

<http://www.asianscientist.com/2012/09/in-the-lab/yunzhi-mushroom-hemangiosarcoma-dogs-2012/>

AsianScientist (Sep. 20, 2012) – A mushroom compound may help dogs with cancer survive longer than without treatment, offering pet owners an alternative to chemotherapy for their pooches.

Known commonly by its Chinese name *yun zhi* (??), *C. versicolor* is recognized in traditional Chinese medicine as a treatment for cancer.

In a recent study published in the journal *Evidence-Based Complementary and Alternative Medicine*, Professor Dorothy Cimino-Brown and Jennifer Reetz from the University of Pennsylvania School of Veterinary Medicine in the United States found that a compound in the Yunzhi mushroom called polysaccharopeptide, or PSP, has immune-boosting and tumor-fighting properties.

Cimino-Brown and Reetz examined the effect of PSP on canines stricken by naturally occurring hemangiosarcoma - an aggressive, invasive cancer that arises from the blood cells and typically affects the spleen. The cancer commonly strikes golden retrievers and German shepherds.

Fifteen dogs that had been diagnosed with hemangiosarcoma participated in the trial. Divided into three groups of five, each group received a different dose - 25, 50, or 100 mg/kg/day - of I'm-Yunity, a formulation of PSP that has been tested for consistency and good manufacturing processes.

The owners were instructed to give their dog capsules of I'm-Yunity, compounded by Penn pharmacists, daily. Each month, the owners brought their dogs to Penn's Ryan Veterinary Hospital for follow-up visits. There, the researchers took blood samples and conducted ultrasounds to determine the extent that tumors developed or grew and spread in the dogs' bodies.

Based on how aggressive the tumors were and the dogs' survival rates, the results of the researcher's trial suggest that the I'm-Yunity was effectively fighting the tumors.

"Prior to this, the longest reported median survival time of dogs with hemangiosarcoma of the spleen that underwent no further treatment was 86 days. We had dogs that lived beyond a year with nothing other than this mushroom as treatment," Cimino-Brown said.

Although chemotherapy is another viable option for treating hemangiosarcoma, many owners opt not to pursue chemotherapy once their dog is diagnosed.

"Chemotherapy doesn't hugely increase survival, it is expensive and it means a lot of back and forth to the vet for the dog," Cimino-Brown said. "So you have to figure in quality of life."

While I'm-Yunity is also an expensive treatment, if proven effective, it would offer owners a way of extending their pet's life without regular trips to the vet. Furthermore, no evidence of adverse effects from the PSP treatment has been found.

The researchers are now preparing to pursue further trials of I'm-Yunity in dogs with hemangiosarcoma to refine their results by comparing placebo effects to standard chemotherapy.

In the future, the company that manufactures I'm-Yunity may also pursue large-scale clinical trials in humans.

"Although hemangiosarcoma is a very sad and devastating disease, in the long term, if we prove that this works, this treatment can be a really nice alternative for owners to have increased quality time with their pet at the end of its life," she said.

The article can be found at: [Cimino-Brown D et al. \(2012\) Single Agent Polysaccharopeptide Delays Metastases and Improves Survival in Naturally Occurring Hemangiosarcoma.](#)

-----

Source: [University of Pennsylvania](#); Photo: Tobyotter/Flickr/CC.

Disclaimer: This article does not necessarily reflect the views of AsianScientist or its staff.