

Comparative Cancer Center

Gifu University Faculty of Applied Biological Sciences

Initiates Cancer Prevention Project for Domestic Dogs

-Designer Food Developed to Aid Cancer Prevention in Domestic Dogs-

The Comparative Cancer Center of the Gifu University Faculty of Applied Biological Sciences (Kohji Maruo, Director) and research partners have established a "domestic dog cancer prevention project" which will begin a study on September 1, 2015. The use of domestic dogs to validate a cancer-prevention effect through an interventional study is the first such effort worldwide.

In the initiative, the research partners of the Gifu University, National University Corporation (Location: 1-1 Yanagido, Gifu City, Gifu Prefecture; Hisataka Moriwaki, President) are several primary care veterinarians, foremost among them the Gifu Veterinary Medical Association (Public Interest Incorporated Association; Toshiharu Ishiguro, Chair); CCI Corporation (Shuji Okabe, President); and Petline Co., Ltd. (Yasuhiro Asami, President).

■ Research Outline

Golden Retriever dogs (male/female, age 5-6 years), which are susceptible to cancer, will be given a dog food*¹ supplemented with phytochemicals shown to have anticancer activity in basic research, and the health status of the dogs will be monitored during the study period (envisioned as 3 years). The study will be implemented as a double-blind, randomized study.*²

Once Golden Retriever dogs reach 5-6 years in age, both males and females have a gradual high incidence of cancer. If the designer food demonstrates efficacy among such dogs during the study period, commercialization will be considered.

*¹ Dog food details

A food with cancer-preventing potential is termed a **designer food**. The **phytochemicals** used in designer foods are chemical substances discovered among components found in foods such as vegetables, fruits, beans, potatoes, seaweeds, green tea, herbs, and other plant-based foods; pigments and fragrances; and scum.

The planned study will use a food based on the commercially available "Field" dog nutrition food (<http://www.petline.co.jp/dog/11/>), supplemented with rosemary and green tea.



*² Double-blind randomized study

An experiment in which physicians and patients involved in the study are unaware of study elements such as the drug utilized or the modality of treatment, and in which patients are assigned randomly to an investigational agent group or a control group. This technique allows the utmost exclusion of arbitrary, extrinsic factors and acquisition of highly accurate data.

In the planned study, veterinarians and animal owners will not be informed about the designer food attributes; a subject group will be given the designer food; a control group will be given a dog food not containing phytochemicals; and data such as the incidence of cancer in the two respective groups will be collected.

The level of safety maintained in the study will be equivalent to that in clinical trials conducted with human subjects. The amount of phytochemicals used will be based on human supplements, and dosage will be adjusted to dog weight. Regular checkups will be given twice a year, and the first priority of the study will be the health care of the domestic dogs.

■ Research Background

In dogs and humans alike, the number one cause of death is cancer. The intent is to prevent these cancers and save many dogs, or even one. The planned research began with this conception.

In Japan, it is not well known that the cause of death among dogs is often cancer. Through this project, the plan promotes a "canine cancer registry" and promotes awareness of canine cancer among many dog owners. For this initiative, Gifu Prefecture is the only such location in Japan, and elsewhere in the world, such work has only been carried out in few countries.

For the future too, the intent is to expand the "canine cancer registry" nationwide in Japan, and to raise awareness of canine cancer among dog owners and collect cancer data that will help in "canine cancer prevention."

Likewise, preventive research is an area that private firms are reluctant to enter from a business perspective, and one which Gifu University hopes to move forward as a national university. In animal hospitals, dogs' lives can be saved individually, one dog at a time, but by advancing preventive research, the University hopes to further research that will allow more lives to be saved.

■ The Comparative Cancer Center

The Comparative Cancer Center of Gifu University was established in April 2010 as the first center in Japan to conduct education and research aimed at conquering animal and human cancer. In its mission to develop the new academic field of "comparative oncology" and deliver health and happiness for animals and humans, the Center contributes to human medicine and health care as derived from its foundation in veterinary medicine.

■ Profile: Professor Kohji Maruo

1973 Graduated Tokyo University of Agriculture and Technology; PhD, veterinary medicine

March 2004 - Present Professor, concurrent appointment: Joint Department of Veterinary Medicine, Faculty of Applied Biological Sciences, Gifu University /Doctoral Course of the United Graduate School of Veterinary Sciences, Gifu University



April 2010 – Present Director, Comparative Cancer Center (concurrent appointment)

Recipient of awards including Japanese Association of Comparative Clinical Medicine award, 2004; Japanese Society of Clinical Veterinary Medicine (Oncology Section) Outstanding Research Presentation award, 2011.

Fields of expertise: Animal life sciences, veterinary clinical oncology, veterinary surgery, development of evaluation systems for anticancer agents, development of new diagnostic and treatment techniques for companion animal cancer, pathophysiological exploration of companion animal cancer

■ University information	■ Veterinary Medical Association information	■ Company information	■ Company information
Corporate name: Gifu University, National University Corporation	Corporate name: Gifu Veterinary Medical Association, Public Interest Incorporated Association	Corporate name: CCI Corporation	Corporate name: Petline Co., Ltd.
Representative: Hisataka Moriwaki, President	Representative: Toshiharu Ishiguro, Chair	Representative: Shuji Okabe	Representative: Asami Yasuhiro
Address: 1-1 Yanagido, Gifu City, Gifu Prefecture	Address: Gifu Prefecture Welfare/Agriculture Bldg. 2-2-1 Shimonara, Gifu City, Gifu Prefecture	Address: 12 Shinhasama, Seki City, Gifu Prefecture	Address: 657-1 Ohari-cho, Tajimi City, Gifu Prefecture
URL: http://www.gifu-u.ac.jp/en/	URL: http://www.gifujyu.jp	URL: http://www.ccijp.co.jp/	URL: http://www.petline.co.jp/
■ Inquiries concerning this release			
■ For questions, media information, or reference materials concerning this release, please contact the following. ■			
Gifu University, PR Liaison: CuA united inc. Representative: Inoue			
TEL: +81-52-332-1334 / FAX: +81-52-308-3804 / E-MAIL : info@cua-united.com URL: http://www.cua-united.com/			