

Details of Technology

Name of Technology	Development of a novel BRM for acquired immune deficiency syndrome (AIDS) in companion animals	Life Science
Name/Post/Faculty	Reeko Sato / Professor / Academic Group of Animal & Veterinary Sciences, Veterinary Teaching Hospital, Faculty of Agriculture	
Key words	AIDS, immunopotentiator, BRM, propolis, lactoferrine, QOL	

What kind of technology is this?

Outline

Development of the technique for the assay of the efficacy of food-derived novel biological response modifiers (BRM) in animals, the technology for the commercialization of the BRMs, new business related to small animals and the technology contributing to the health maintenance and QOL enhancement in people with immune deficiency

Immune deficiency syndrome is a very severe disease both in humans and animals and the research on the therapeutic method has been performed. Especially, the therapy of acquired immune deficiency syndrome (AIDS) is important as a social problem and is one of the problems to be resolved as soon as possible. BRM (Biological Response Modifier) is an effective substance for the therapy and QOL improvement in patients with immune deficiency syndrome. BRM has been paid an attention, because BRM is effective for maintaining immune activity in patients with AIDS. Thus it is required to develop BRM for humans and animals that shows sharp efficacy and is capable to be given for a long time.

Our research revealed that lactoferrine, iron-binding glycoprotein found in milk was effective for the therapy of chronic stomatitis and QOL improvement in cats with AIDS, and of stomatitis, gingivitis and periodontosis in humans. We further demonstrated that propolis produced in Brazil could maintain the immuno activity and protect the liver in cats with AIDS. In such a way, this seed research is performed to develop novel BRMs such as propolis and lactoferrine contained in foods and naturally occurring substances. For such purpose, a substance with the beneficial effects such as the alleviation of the disease condition in humans with immune deficiency symptom and the inhibition of the progression of chronic inflammation is specified, and the basic research and the clinical application are performed for the commercialization of the substance.

What are its applications?

- BRM for the alleviation of chronic inflammation (stomatitis, gingivitis and periodontosis) and QOL maintenance in patients with AIDS and cats with AIDS.
- High value-added pet food
- Supplement

Related patents

Japanese Patent Laid-Open No. 2006-213609

Related materials

The annual meetings (136th to 143rd) of the Japanese Society of Veterinary Science, the 2nd Internal Academy, four papers (Am. J. Vet. Res. 57, 1996, Vet. Immun. Immunopath. 105, 2005 and others).