

# A NEW UNIQUE TEST FOR DETECTING CANCER DISEASES IN COMPANION ANIMALS



Immunodiagnostic assay for measuring the presence of the enzyme thymidine kinase (TK1) in blood from dogs.

Available in the Scandinavian market in 2018.



Immunodiagnostic assay for measuring the presence of the enzyme thymidine kinase (TK1) in blood from cats. Planned to be launched in 2019.



Immunodiagnostic assay for measuring the presence of the enzyme thymidine kinase (TK1) in blood from horses. Planned to be launched in 2019.



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### UNIQUE TEST FOR CANCER DISEASES

# SOON IN THE VETERINARY TOOLBOX

Alertix Veterinary Diagnostics develops and markets a new unique assay for detecting cell growth in veterinary medicine.

The assay is also very useful for monitoring and follow-up of cancer treatment and furthermore for screening companion animals over a certain age.

#### HOW ALERTIX WORKS

Alertix' immunodiagnostic assays measures the presence of the enzyme thymidine kinase (TK1) in blood. TK1 is released into the bloodstream in case of increased cell growth and cell turnover. Therefore, an elevated TK 1-level strongly indicates tumor cell growth – cancer.

#### Also detects solid tumors

There are other assays for measuring TK1 on the market. Those mainly detect hematologic malignancies – e.g. leukemia and lymphoma. These cancers constitute approx. seven percent of all cancers. However, solid tumors are often missed by traditional TK1 assays. This is because they measure the reaction rate of the enzyme. In the blood of patients with solid tumors, however, a major part of the enzyme is inactive.

#### Unique on the market

What makes Alertix' assay unique is that it measures the TK1 protein by an immunodiagnostic method, which means that we use antibodies that bind to TK1. Subsequently it can be used to detect various forms of tumor cell growth.



#### **APPLICATIONS**

#### 1. Diagnostics

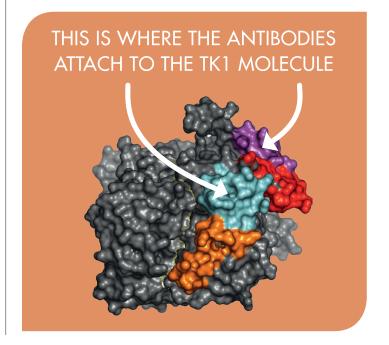
TK1 can be detected in blood serum even before the patient displays clinical symptoms. Therefore, the assay can be crucial for early detection and treatment, which is essential for a good prognosis.

#### 2. Monitoring therapy

Alertix Canine is a powerful tool for monitoring cancer treatment. The test provides basis for deciding if the therapy should be continued or if it is better for the patient to discontinue.

#### 3. Screening

Cancer is just as common in companion animals as in humans. And just as in humans the risk for cancer increases with rising age. Therefore, there are good reasons to offer screening with Alertix Canine to dogs over a certain age. 7-8 years could be adequate. This applies especially to breeds that are particularly inclined for certain cancer types.



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#### BENEFITS WITH ALERTIX

#### Gives a more complete picture

Alertix Canine detects solid tumors as well as blood cancers by a simple blood test. No other assay can deliver that.

#### **Early detection**

The test, in many cases, can detect cancer, even before the patient shows symptoms. Early detection is crucial for successful treatment.

#### Simple and robust

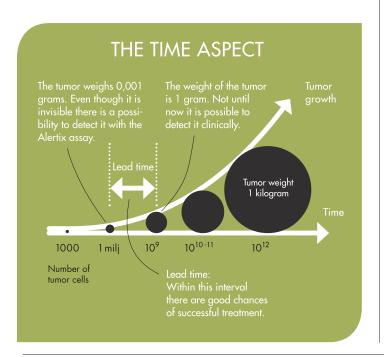
An ordinary blood sample is all it takes. And the sampling requires only equipment found in all veterinary clinics. Handle it like any blood sample and send it to the lab. You can expect the result within a week by e-mail or by ordinary mail.

#### **Cost effective**

A blood test is quite cost effective compared to other test methods. Also, the test is based on the standard platform ELISA.

#### Gentle

Unlike many other tests and examinations neither invasive nor risky measures are necessary. A blood sample is all it takes.





## WHAT DO PET OWNERS THINK?



Three out of four are in favour of using a test for early detection of cancer in their pets.



More than 40 percent are willing to pay equivalent to 70 USD of their own money for a cancer test.



50 percent of the animal owners might consider asking their veterinarian for a cancer test.



One out of three has experience of cancer in their own pets.

Source: Alertix Veterinary Diagnostics' market studies 2017. The studies are based on interviews with 100 dog owners and 100 cat owners.

### KEEP UPDATED

Are you interested in using Alertix' immunodiagnostic assays in your practice. Sign up on alertixvet.com to be sure not to miss any news regarding Alertix.

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# THE RESEARCH BEHIND ALERTIX

Alertix' assays are developed by a research team at The Swedish University of Agricultural Sciences (SLU) lead by Professor Staffan Eriksson.

The research is focused on deoxynucleotide, which are the building blocks of DNA, and especially on the enzyme thymidine kinase (TK1) as a biomarker of cancer diseases.

A scientific breakthrough occured when Staffan Eriksson's team developed an immunochemical method for measuring TK1 in the blood. The method, which is unique and patent pending, offer great benefits compared to previously established methods for determining TK1.



**Staffan Eriksson** 

# ABOUT CANCER IN COMPANION ANIMALS

Cancer diseases are just as common in our companion animals as in humans. This means that at least a third will get cancer during their lifetime. There are also many indications that the number of cancers in pets is increasing. Most methods of treatment are similar to those for humans, and as is the case in human healthcare they have been greatly improved in recent years.



#### Three questions to Henrik Rönnberg

Veterinarian and Professor in medical oncology at SLU and one of the researchers behind Alertix.

#### Which is your driving force as a veterinarian and scientist?

– You could say that I want to give something in return. Animals give so much to us. Quite simply, they make us better humans. Therefore, they deserve that we do all in our power to ease their complaints and make them feel well.

#### Why should veterinarians take an interest in Alertix?

A simple and reliable cancer test is an amazing tool. In human medicin, obviously, but somehow it feels even more important in a veterinary context. Our patients can't speak for themselves.
 We can never ask a dog or a cat how it feels, or where it hurts.
 Therefore, the symptoms often get severe before they are discovered. By then it's too late to take actions in most cases.

#### What is your role in the project?

- To put the results into a veterinary context. The result of an analysis doesn't say everything. The trick is to be able to combine it with the full picture of the patient in order to make a correct interpretation.

#### **FACTS IN SHORT:**

- Cancer is essentially a lifestyle disease
   also in companion animals.
- Skin cancer is the most common form of cancer in dogs.
- Testicular cancer is not unusual in older male dogs.
- 30 % of all female dogs get mammary tumors.
- Cancer causes 45 % of all deaths in dogs according to an American study.

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