

Dogs set to benefit from simple blood test to spot liver disease

August 9 2018



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Vets have developed a blood test that quickly spots early signs of liver

disease in dogs, a study suggests.

Experts say that the test—based on insights gained from human patients—could help [vets](#) identify damage and start treatment early, saving the lives of many [dogs](#).

The test—which is to be launched worldwide—means that fewer dogs will have to undergo invasive liver biopsies, findings by the University of Edinburgh suggest.

Diagnosing canine liver disease is challenging and catching early signs of damage is key to its treatment, vets say. Current diagnosis is based on biopsies, which are expensive and can lead to complications.

Vets based at the University's Royal (Dick) School of Veterinary Studies teamed up with medical doctors to look at blood levels of a molecule known as miR-122 in dogs. This molecule is found in high levels in people living with liver disease.

They worked with pets and their owners to test miR-122 levels in 250 dogs, including cocker-spaniels, labradoodles and Old English sheepdogs.

Dogs with liver disease were found to have significantly higher levels of a miR-122 compared with healthy dogs and dogs who had a different disease that did not affect the liver.

The team now plan to launch a testing kit to help vets worldwide quickly assess if their patient pooches have [liver](#) damage.

The study is published in the *Journal of Veterinary Internal Medicine*.

Lead vet researcher, Professor Richard Mellanby, Head of Companion

Animal Sciences at The Hospital for Small Animals at the University of Edinburgh, said: "We have found a specific, sensitive and non-invasive way to detect [liver damage](#) in dogs. We hope that our test will greatly improve outcomes by allowing vets to make rapid and accurate diagnosis."

Dr. James Dear, Reader at the University of Edinburgh's Centre for Cardiovascular Science and NHS doctor, who co-led the study, said: "I am delighted that the [blood test](#) we developed to improve the diagnosis of [liver disease](#) in humans can be used to help dogs too."

More information: W. Oosthuyzen et al, Sensitivity and specificity of microRNA-122 for liver disease in dogs, *Journal of Veterinary Internal Medicine* (2018). [DOI: 10.1111/jvim.15250](https://doi.org/10.1111/jvim.15250)

Provided by University of Edinburgh

Citation: Dogs set to benefit from simple blood test to spot liver disease (2018, August 9) retrieved 19 April 2024 from <https://phys.org/news/2018-08-dogs-benefit-simple-blood-liver.html>

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