

# Plavix may be treatment for dogs at risk of thromboembolic disease

July 14 2010

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Companion animals that have a long-term need for anticoagulant drug therapies may soon find help in a top-selling antiplatelet drug marketed to humans: clopidogrel, commonly known by the trade-name Plavix.

Researchers in the University of Georgia College of Veterinary Medicine have found that clopidogrel may be a safe and effective treatment for dogs that need long-term anticoagulant therapy. In addition, it may offer a safe alternative to NSAIDs for treating dogs at risk of thromboembolism due to concurrent therapeutic use of [corticosteroids](#).

Other than aspirin, there are currently no approved antiplatelet drug therapies available to prophylactically treat companion animals with known or suspected hypercoagulability. Anticoagulants such as heparin, which must be administered by injection, are often used instead, but for patients who need long-term treatment, the researchers on the study said many animal owners are reluctant to administer injectable drugs to their pets.

In addition, critically ill dogs are at risk for thromboembolic disease, including pulmonary and aortic thromboembolism, both of which are associated with severe illness and death. Dogs that develop [thrombosis](#) and are subsequently treated with thrombolytic agents are at a substantial risk of hemorrhage or metabolic instability.

The researchers wanted to evaluate clopidogrel as a potential treatment

for dogs with hypercoagulability due to excessive platelet activation. Clopidogrel, which is only available as an oral therapy, has been safely administered to cats, rabbits and calves, but little has been published about its effects in dogs.

In a study of healthy dogs, researchers found that most dogs had a significant inhibition of platelet function within three hours of receiving clopidogrel. All of the dogs in the study tolerated the drug well and showed no evidence of bruising, [hemorrhage](#) or other adverse effects. In addition, platelet activity returned to normal levels within approximately seven days after the drug was discontinued, which is similar to the response found in humans.

The researchers caution that their study only provides data on the effectiveness of [clopidogrel](#) in healthy dogs, and not on dogs that are critically ill or receiving other drugs. Further pharmacokinetic and pharmacodynamic studies in critically ill canine patients are planned, in addition to studies evaluating this drug in healthy horses.

**More information:** The study is published in the July 2010 issue of The American Journal of Veterinary Research; it can be found online at [avmajournals.avma.org/toc/ajvr/71/7](http://avmajournals.avma.org/toc/ajvr/71/7).

Provided by University of Georgia

Citation: Plavix may be treatment for dogs at risk of thromboembolic disease (2010, July 14) retrieved 25 April 2024 from <https://phys.org/news/2010-07-plavix-treatment-dogs-thromboembolic-disease.html>

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