

# Use of antivirals in retrovirus-infected cats

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A number of antiviral drugs are licensed and widely used for the treatment of specific viral infections in humans. Potential new agents are also being investigated that it is hoped will overcome limitations of the current options, which include a narrow antiviral spectrum, ineffectiveness against latent virus infections, development of drug-resistance and toxic side effects.

The extent to which antiviral chemotherapy might be considered by veterinarians treating cats with retroviral infections is explored in a review article published this month in the *Journal of Feline Medicine and Surgery*.

Among the most common infectious agents of cats are two feline retroviruses, feline immunodeficiency virus (FIV) and feline leukaemia virus (FeLV), which are global and widespread. Retrovirus-infected cats need special management and care, and provided they receive this can live for many years in good health; in most cases, symptomatic treatment only is warranted. In this review, Professor Katrin Hartmann, Head of the Clinic of Small Animal Medicine at the LMU University of Munich, Germany, presents best practice recommendations for managing these cases. Her expert opinion is based on over two decades' research on infectious diseases in cats and dogs, with a special focus on viral infections in cats.

For more severe cases - such as an FIV- or FeLV-infected cat presenting with neurological signs or recurrent infections, or an FIV-infected cat with stomatitis - the advice is to consider incorporating antivirals into the treatment regimen. The selection includes zidovudine (or 'AZT'), the first drug to be approved for the treatment of HIV infection; plerixafor, an agent used in human stem cell mobilisation; or feline interferon omega. Significantly, the last is the only veterinary-licensed antiviral available.

Interest in exploring the efficacy in cats of antivirals intended for treatment of [human immunodeficiency virus](#) (HIV) infection is based on the rationale that

FIV and HIV are closely related, with many of the respective viral enzymes showing similar sensitivities to a range of inhibitors. FeLV is not as closely related to HIV, with the result that the available drugs have mostly been found to be less effective against this retrovirus.

This state-of-the-art publication collates available efficacy data on 14 antivirals, and grades the quality of this data according to evidence-based medicine (EBM) principles. Further clinical guidance is provided with the author's personal interpretation on what the data mean in practical terms - which drugs are likely to be effective in cats, which are possibly effective, which are not effective, and which are simply too toxic. Professor Hartmann concludes with a call for more well-designed clinical trials using antivirals in retrovirus-infected [cats](#), to allow better judgement on [treatment](#) efficacy and side effects.

**More information:** \*Hartmann K. Efficacy of antiviral chemotherapy for retrovirus-infected cats. What does the current literature tell us? *J Feline Med Surg* 2015; 17: 925-939 .

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