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COMPARISON of 5 COMMERCIAL TEST SYSTEMS for the DETECTION of PARVOVIRUS in CAT SPECIMENS

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Parvovirus infections in the dogs show quit different clincial symptoms compared to panleukopenia virus infections in the cat which are rather unspecific and variable. Especially leucopenia is often not present at the moment of clinical investigation. Therefore it is of particular importance to detect the virus antigen early and reliable having the possibility to isolate the affected cats (especially in veterinary clinics with other severe ill animals), to start immediately intensive therapy and to inform the pet owner about prognosis and potential risks for other animals in the same household.

Many rapid tests for the detection of canine and/or feline parvovirus antigen were developed in the last years. Due to narrow structural and antigenic relationship of feline and canine parvovirus it is possible to use every Test-Kit for cats, provided that the Test-kit is at least accredited for either of them viruses.

This study was designed for the comparison of 5 commercial available tests proofing their strength and weakness as well as sensitivity, specificity and predictive values. The total number of 200 feces specimes from healthy and sick (diarrhea) cats were selected, tested in comparison to electron microscopy and evaluated.

The sensitivity and specificity of the different tests vary from 50 to 80% resp. 94 to 100%. The negative predictive value was chosen the most important criteria for a rapid test, because it defines the likelihood of a cat not being infected, therefore she is not a risk factor for other cats.

All rapid tests showed very high negative predictive values (> 90%) and therefore all are qualified for the detection of parvovirus antigen in cat feces. The final ranking based on the combination of high negative predictive value (94%) and fast, easy and reliable practicability placing the *FAST*est® PARVO Strip first best test system of the study.