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## Are all enteric viruses infecting pigs associated with the development of diarrhoea?

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Viral enteric infections may result to serious gastrointestinal diseases in pigs with substantial economic losses. To determine the association of porcine *Kobuvirus* (PKV-1), porcine *Astrovirus* (PAstV), porcine *Sapovirus* (PSaV) and *Rotavirus A* with diarrhea, viruses were detected by RT-PCR in rectal swabs originating from 411 healthy and diarrheic pigs of different age categories on farms in Slovakia. Among all ages of animals, PKV-1 was detected equally in diarrheic (63.8%) and clinically healthy (62.9%) pigs. This virus was more often detected in diarrheic (74.6%) than in healthy (64.4%) suckling piglets (<28 days) but data were not statistically significant. High prevalence of PAstV infections in both healthy (91.3%) and diarrheic (94.4%) pigs of all age categories was detected. PSaV was detected more sporadic, but also equally in clinically healthy (8.4%) and diarrheic (10%) pigs. Taken together, this study did not confirm a clear relationship of PKV-1, PAstV and PSaV infections with diarrhea in pigs. On the other hand, the *Rotavirus A* infection was detected among the same animals in 39% diarrheic and 9.2% healthy suckling piglets ( $p < 0.001$ ) confirming *Rotavirus A* as a causative agent of diarrhea in this age group. Preliminary analysis of virome using NGS method also did not confirm significant differences in the composition of viruses in healthy and diarrheic pigs. What is role of some enteric viruses in pigs is still a great scientific challenge.

### Biography

Stefan Vilcek is a Professor at University of Veterinary Medicine and Pharmacy in Kosice, Slovakia. His scientific filed is genetic detection and characterization of viruses (as Pestiviruses, pig enteric viruses and others) infecting farm and free-living animals. He published around 100 scientific papers indexed by PubMed, which were highly cited (over 2100 times in Web of Science). He is also a Member of the Editorial Board several international journals.

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