We are delighted that the International Pig Veterinary Society Congress 2004, decided to select South Africa as the host country for the 20th IPVS Congress. The Pig Veterinarians of South Africa will ensure that this congress lives up to the best traditions of previous congresses; incorporating an interesting and topical scientific programme, fascinating accompanying persons tours and an excellent social programme, allowing delegates the opportunity to network with their overseas colleagues.

This, the first IPVS congress on the African continent, will undoubtedly be of enormous benefit in generating solutions to the emerging pig veterinary challenges, especially those related to exotic and changing viral diseases, decreased use of antimicrobials and nutritional advances. The congress is important to further pig veterinary science in South Africa, to encourage younger veterinarians to join the pig industry, as a vehicle to generate funds for research and to improve the pig industry in Southern Africa.

South Africa is a magnificent and beautiful country, and offers tourists value for money. Thus, pre and post congress tours will be a major attraction for delegates to come to South Africa. Durban, in KwaZulu Natal, is a vibrant multi-cultured city with magnificent beaches, easily accessible game parks, theme villages and a moderate winter climate making it an ideal tourist destination. We urge our colleagues throughout the world to use this opportunity to get a glimpse of the continent’s rich and fascinating wonders and to enjoy the hospitality of their African friends.

Dr Peter Evans  
Chairman: Local Organising Committee: IPVS 2008
PORCINE DERMATITIS AND NEPHROPATHY SYNDROME (PDNS) IS ASSOCIATED WITH HYPERGAMMAGLOBULINEMIA

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Introduction
Infections with Porcine Circovirus type 2 can result in post weaning multisystemic wasting syndrome (PMWS), but are also associated with a number of other clinical disease entities among which Porcine Dermatitis Nephropathy Syndrome (PDNS). In a Dutch herd control study PCV2 was detected by PCR analysis in 100 % of all PDNS cases and PCV2 serum antibodies were consistently extremely high and significantly higher than in cases with PMWS. PDNS lesions are characteristically located multifocal in the skin and in the kidneys and are indicative of an immune-complex mediated disease as known from type-III hypersensitivity reaction. Therefore the role of PCV2 in the formation of immune complexes was addressed in this study. It is still unclear how the same virus PCV2 can cause two different syndromes in pigs.

Materials and Methods
Detection of total immunoglobulin concentration: In serum samples from 12 PDNS cases (all confirmed PCV2 positive) from a larger case-control study (1) the total amount of immunoglobulin (Ig) was determined by an indirect ELISA and compared to those of PMWS cases and control pigs. Total serum protein concentrations were assessed by a BSA protein assay kit.

Immunoblots of serum and ICX from a control pig and a pig with PDNS (reducing conditions). Panel A is stained with a Mab-anti-porcine IgG1/IgG2 and panel B with a pab-anti-porcine IgG; M=marker, 1=serum PDNS pig, 2 = serum control pig, 3 = ICP PDNS case, 4 = ICP control pig.

Results
Serum Ig and protein concentration:

PDNS pigs had high antibody titers against PCV2, but more interesting significantly higher total immunoglobulin concentrations (fig. 1) in serum compared to control pigs, but also compared to pigs suffering from PMWS, whereas the serum protein content was only slightly decreased in both affected groups. These findings strongly indicate a hypergammaglobulinemia in PDNS.

PCV2 antigen in immune complexes: In ICX precipitates no PCV2 antigen was identified, although by PCR analysis PCV2 was shown to be present in serum. One particular problem was the non-specific binding of different antibodies, among which the anti-PCV2 antibody to preparations containing protein A (lane 3&4, fig.2)

Figure 1 Immunoglobulin titers in control pigs and pigs suffering from PMWS and PDNS

Discussion and Conclusions
Here we demonstrate that PMWS differs from PDNS in that the latter is associated with a clear hypergammaglobulinemia. Furthermore, high levels of circulating immune complexes (ICX) are present in PDNS. The nature of the ICX is still unknown, but so far no PCV2 antigen was identified, which could be due to lack of suitable antibodies. Hypergammaglobulinemia is a consequence of a number of virus infections (3) and the role of PCV2 herein has to be elucidated.

References