RESEARCH ABSTRACT

SWINE HEALTH

Title : Role of Cachectic Cytokines in PMWS **- NPB #: 06-074**

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Scientific Abstract: The inflammatory mediators TNF-alpha,and IL-1 along with PCV-2 viral load were determined from pigs experiencing a high mortality due to a natural outbreak of PMWS. The objectives were to test the hypothesis that PMWS results from an immunological triggering event which produces a strong immune response which in turns drives virus load. There was no correlation between TNF-alpha levels and PCV-2 log copy number at 0, 3, 14, and 30 days post introduction for naïve piglets introduced in the monitor group at 37 days post inoculation (P value >0.05). There was an association between levels of TNF-alpha and PCV-2 load among PCV-2 viremic pigs at 0dpi (coefficient correlation: 0.67, P≤0.05); 3dpi (coefficient correlation: 0.83, P≤0.05). At 14dpi and 30dpi coefficient correlation are reported as 0.37 and 0.49 respectively. Due to testing on banked samples and low sample size, major conclusions need to be guarded. As in most studies additional work is clearly needed to sort out the pathophysiology associated with PMWS.