RESEARCH ABSTRACT
SWINE HEALTH

Title: Serum Markers of PRRSV Infection **#04-123**

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Abstract

Detection of PRRS by serological screening for antibodies is simple, reliable, and of benefit to the swine industry. However, there is a delay of one to two weeks between onset of infection and ELISA antibody response. During this time transmission can occur, leading to outbreaks. ELISA tests also are ineffective in differentiating acute from persistent infection and infected from vaccinated animals. The response of animals to infectious challenge includes changes in the composition of proteins in blood and serum. We hypothesized that PRRSV infection will produce a characteristic profile of protein differences in serum that is an early diagnostic signature of infection detectable by mass spectrometry (MS). Early identification of serum protein changes that indicate PRRS infection status, would have great value for monitoring the health of individual pigs and herds. We have identified a protein of 9244 molecular weight that is associated with PRRSV infection and is present as early as one day after infection.