

SWINE HEALTH

Title: Evaluation of the safety and efficacy of a second generation live chimeric PCV1-2 vaccine in the PCV2-PRRSV coinfection model – **NPB #08-132**

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Scientific Abstract:

The efficacy of a live chimeric porcine circovirus (PCV) type 1-2 vaccine based on subtype PCV2a was evaluated in a PCV2b and porcine reproductive and respiratory syndrome virus (PRRSV) coinfection model. Eighty-three, 2-week-old pigs were randomized into 12 treatment groups including eight vaccinated and four control groups. Pigs were vaccinated intramuscularly or orally at 3 weeks of age followed by inoculation with PCV2b and PRRSV at 7 weeks of age. PCV1-2a vaccination elicited an anti-PCV2-IgG response which was delayed in pigs vaccinated orally. Intramuscular vaccination significantly reduced PCV2b viremia compared to non-vaccinated pigs. The results indicate that PCV1-2a vaccination induced protective immunity against PCV2 in pigs experimentally coinfecting with PCV2b and PRRSV and the intramuscular route of vaccination is more effective than oral.

These research results were submitted in fulfillment of checkoff-funded research projects. This report is published directly as submitted by the project's principal investigator. This report has not been peer-reviewed.

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