

## SWINE HEALTH

**Title:** Use of an uncapsulated *Haemophilus Parasuis* Vaccine in  
**NPB #00-030**

**Investigator:** Carlos Pijoan

**Institution:** University of Minnesota

**Co-Investigator:** Simone Oliveira (Co-PI)

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### Abstract

*Haemophilus parasuis* is the causative agent of the porcine polyserositis, arthritis and meningitis, also known as Glasser's disease. Control of *H. parasuis* infections by current available commercial vaccines is variable and unsatisfactory. An uncapsulated *H. parasuis* vaccine was tested in colostrum-deprived pigs and its effectiveness in protecting susceptible animals against homologous challenge was evaluated. A *H. parasuis* strain highly prevalent in swine herds was submitted to a heat treatment for capsule extraction and uncapsulated bacteria were used to produce a killed vaccine. Colostrum-deprived pigs were vaccinated twice, with a two-week interval, by the intramuscular route. Homologous challenge was performed two weeks after the second vaccination. The nonimmunized control pig developed swollen joints and high fever (105°) 24h post-challenge. At 72h post-challenge, central nervous system signs were observed and the pig died before euthanasia could be performed. Vaccinated animals showed no clinical signs after challenge. The nonimmunized control pig exhibited macro and microscopic lesions characteristic of *H. parasuis* infection. Swabs taken from lesions were PCR and culture positive for *H. parasuis*. Vaccinated animals showed no evident lesions and were PCR and culture negative for *H. parasuis*. The uncapsulated *H. parasuis* vaccine was successful in protecting colostrum-deprived pigs against homologous challenge.

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#### For more information contact:

**National Pork Board, P.O. Box 9114, Des Moines, Iowa USA**

800-456-7675, Fax: 515-223-2646, E-Mail: [porkboard@porkboard.org](mailto:porkboard@porkboard.org), Web: <http://www.porkboard.org/>