



## **BACTERIAL DISEASES**

BBD-023

## VACCINATION WITH COLIPROTEC® F4/F18 BEFORE WEANING IN A FRENCH FARM DEALING WITH POST-WEANING DIARRHEA: A CASE REPORT

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Post-weaning diarrhea (PWD) remains a major cause of economic losses for the pig industry. A number of preventive measures have been recommended to control PWD. Coliprotec® F4/F18 is a live non-pathogenic *E. coli* vaccine for active immunization of pigs against F4-ETEC and F18-ETEC. This case report describes the implementation of Coliprotec® F4/F18 one week before weaning to control PWD due to F4-ETEC in a French farm.

This study reports on a 220-sow farrow-to-finish farm with history of PWD. After weaning at 28 days of age, complete batches of piglets are transferred to a nursery for 50 days. Before implementation of Coliprotec® F4/F18, PWD control strategy consisted of an antibiotic-free specific diet supplemented with a therapeutic dose of zinc oxide (3000 ppm) and water medication with colistin (100 000 IU/kg/day for 3 days). In order to optimize the control of PWD, it was decided to vaccinate piglets with Coliprotec® F4/F18 at 21 days of age. A new feed with a feed additive dose of zinc oxide (131 ppm) and less digestive security was implemented for the vaccinated pigs. Mortality, average daily gain (ADG) and antibiotic treatments were recorded for five batches before (1587 piglets) and seven batches after (2099 piglets) the implementation of Coliprotec® F4/F18.

Following vaccination with Coliprotec® F4/F18, PWD clinical signs decreased and PWD specific antibiotic treatments were not required. Mortality of the nursery phase was decreased from 3.72% for the non-vaccinated groups to 1.86% for the vaccinated groups. Nursery ADG was 546.44 and 528.61 g/day for the non-vaccinated and the vaccinated groups, respectively.

In this farm, implementation of Coliprotec® F4/F18 one week before weaning improved clinical signs of PWD and reduced the mortality rate by nearly 2% in the nursery, while PWD antibiotic treatments and therapeutic levels of zinc oxide in the feed were not needed.