

TITLE

EFFICACY OF COLIPROTEC® F4/F18 IN PIGLETS WITH POST-WEANING DIARRHEA DUE TO F18-ETEC IN A COMMERCIAL ITALIAN FARM.

Mariavittoria Gibellini¹, Paolo Ferro¹

¹ *Elanco Italia Spa*

CONTENT

Background and Objectives:

Post-weaning diarrhea (PWD), mainly caused by enterotoxigenic *Escherichia coli* (ETEC), remains a major cause of economic losses for the pig industry. Coliprotec®F4/F18 is a live oral vaccine for active immunization of pigs against PWD caused by F4-ETEC and/or F18-ETEC.

This study investigated the efficacy of Coliprotec®F4/F18 administered to piglets before weaning in a pig farm in Italy.

Materials & Methods:

A 550-sow farm with a history of PWD due to F18-ETEC confirmed by laboratory PCR diagnosis was selected for this study. The farm has a separated nursery unit. Full litters of pigs from one weaning batch were randomly distributed into 2 groups at 24 days of age (0 dpv, days post-vaccination). Group-A (200 piglets) was vaccinated with Coliprotec®F4/F18 at 0 dpv and Group-B (200 piglets) remained unvaccinated. Pigs were weaned the day after vaccination. Average daily weight gain (ADWG), mortality, diarrhea and PWD-specific treatments were investigated by group during the 72-day nursery period.

Results:

Following vaccination with Coliprotec®F4/F18, clinical signs of PWD decreased and PWD-specific antibiotic treatment was not required in Group-A. Gentamicin treatment was used in the non-vaccinated Group-B due to a PWD outbreak. Mortality was reduced in the vaccinated group (Group-A: 4.5%; Group-B: 7%). An improvement of 77 g/d in ADWG was shown during the second half of post-weaning period for the vaccinated group, with an overall improvement of 52 g/d for the entire nursery period (Group-A: 390 g/d; Group-B: 338 g/d). Coliprotec®F4/F18 vaccinated pigs were 3.53kg heavier at the end of the nursery period. Results showed a positive Return On Investment (ROI 3,35:1).

Discussion & Conclusion:

This study shows that Coliprotec®F4/F18 was efficacious in reducing clinical signs and mortality due to PWD caused by F18-ETEC. In addition, pigs vaccinated with Coliprotec®F4/F18 showed better performance parameters as substantiated by an increased ADWG during the nursery.