

**TITLE**

**EARLY APPLICATION OF PARENTERAL TOLTRAZURIL-IRON COMBINATION (FORCERIS®) IS COMPARABLE TO LATER TREATMENT IN THE CONTROL OF EXPERIMENTAL CYSTOISOSPOROSIS IN SUCKLING PIGLETS**

Anja Joachim<sup>1</sup>, Barbara Hinney<sup>1</sup>, Adnan Adnan Hodži<sup>1</sup>, Hamadi Karembe<sup>2</sup>, Aruna Shrestha<sup>1</sup>, Daniel Sperling<sup>2</sup>

<sup>1</sup> *Vetmeduni, Vienna*

<sup>2</sup> *Ceva, France*

**CONTENT**

Cystoisosporosis (coccidiosis) is a leading cause of diarrhea in suckling piglets and is controlled by metaphylactic toltrazuril application. Recently, a single-dose combination product (Forceris®) has been developed for the prevention of piglet cystoisosporosis and iron deficiency anaemia. It is applied intramuscularly between the 2nd and 4th day of life (dol) (24 – 96 h after birth). In previous experimental studies, it was shown that treatment with Forceris® on the 2nd dol followed by experimental infection with *Cystoisospora suis* on the 3rd dol significantly reduced oocyst shedding and diarrhoea and to consequently improves body weight gain and health of the treated piglet compared to an infected untreated control. A subsequent study with experimental infection on the 1st dol and treatment on the 2nd dol was conducted to determine the efficacy of Forceris® when applied after the onset of neonatal infections. Piglets were randomly assigned to the Forceris® group (n=13; 45 mg toltrazuril + 200 mg iron/piglet), and to the Control group (n=12; 200 mg iron/piglet). General animal health was recorded daily and body weight was determined weekly during the study (1st – 29th dol). Individual faecal samples were collected from the 5th - 18th dol and examined for faecal consistency and the presence of oocysts. In the Control group all piglets shed countable oocysts, while the Forceris® group remained negative (p<0.0001). Diarrhoea was seen in all animals in the Control group and in one animal in the Forceris® group (p<0.001). Body weight gain was significantly depressed in the Control group compared to the Forceris® group during the first two weeks after infection (p=<0.0001). Forceris® was safe to use and effective in a single application against experimental infections with *C. suis* on the 1st dol and can be recommended for treatment of porcine coccidiosis in neonatal piglets.