We are delighted that the International Pig Veterinary Society Congress 2004, decided to select South Africa as the host country for the 20th IPVS Congress. The Pig Veterinarians of South Africa will ensure that this congress lives up to the best traditions of previous congresses; incorporating an interesting and topical scientific programme, fascinating accompanying persons tours and an excellent social programme, allowing delegates the opportunity to network with their overseas colleagues.

This, the first IPVS congress on the African continent, will undoubtedly be of enormous benefit in generating solutions to the emerging pig veterinary challenges, especially those related to exotic and changing viral diseases, decreased use of antimicrobials and nutritional advances. The congress is important to further pig veterinary science in South Africa, to encourage younger veterinarians to join the pig industry, as a vehicle to generate funds for research and to improve the pig industry in Southern Africa.

South Africa is a magnificent and beautiful country, and offers tourists value for money. Thus, pre and post congress tours will be a major attraction for delegates to come to South Africa. Durban, in KwaZulu Natal, is a vibrant multi-cultured city with magnificent beaches, easily accessible game parks, theme villages and a moderate winter climate making it an ideal tourist destination. We urge our colleagues throughout the world to use this opportunity to get a glimpse of the continent’s rich and fascinating wonders and to enjoy the hospitality of their African friends.

Dr Peter Evans
Chairman: Local Organising Committee: IPVS 2008
THE USE OF AIVLOSIN IN-FEED TO CONTROL PORCINE PROLIFERATIVE ENTEROPATHY IN DENMARK

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Introduction
Porcine proliferative enteropathy (PPE, ileitis) is a common enteric disease in Danish pigs. The causative organism is the anaerobic bacterium Lawsonia intracellularis, and over 90% of Danish pig herds are thought to be infected (1). A double-blinded, controlled clinical trial was conducted on a commercial pig herd in Denmark to investigate the efficacy of Aivlosin® in-feed for the treatment of porcine proliferative enteropathy (PPE) caused by Lawsonia intracellularis. The active ingredient of Aivlosin® is acetylisovaleryltylosin (AIVT).

Methods
180 pigs were allocated to 3 groups of 60. The pigs were 6-8 weeks of age, with a mean weight of 17.7 kg. Two groups were treated with medicated feed, namely acetylisovaleryltylosin (AIVT) at 42.5 ppm for 10 days, and tylosin at 100 ppm for 21 days. The third group was an untreated control. The trial continued for 28 days, and included a post-treatment observation period of 18 or 7 days for the AIVT and tylosin groups respectively. At trial initiation 96% of the animals had faecal consistency scores ≥2 (liquid faeces). Faecal consistency score and body condition score were recorded on a scale 0-3 (0 = normal) and analysed statistically. Productivity parameters of bodyweight and feed consumption were recorded, and feed conversion ratio (FCR) was calculated.

Results
Aivlosin was well tolerated. The pigs were fed ad libitum and consumed approximately 5% of their bodyweight per day.

Faecal Consistency Scores: Mean scores decreased from 2.3, 2.3, 2.2 to 1.6, 1.3 and 1.1 in the control, tylosin and aivlosin groups respectively over the 28 day trial. Showing a 27%, 42% and 51% decrease for the control, tylosin and aivlosin groups. At most time points the mean faecal scores of the treated groups were statistically lower (better) than those of the untreated group.

Body Condition Scores: At the end (Day 28) of the trial body condition scores in the control group were comparable to those at Day 0 (0.20). However, the body condition scores for the treated groups both decreased over the trial period and average scores were 0.02 and 0.00 for the tylosin and aivlosin groups. At most time points the mean faecal scores of the treated groups were statistically lower (better) than those of the untreated group.

Productivity: The overall FCR was lower for both treated groups over the entire trial duration. There was a statistically significant improvement in weight gain during the trial (p<0.05) in the medicated groups (aivlosin and tylosin) compared to the non-medicated group.

Mortality: Five animals were euthanased from the control group and none (0) from the treated groups.

Table 1 Clinical and productivity results.

<table>
<thead>
<tr>
<th></th>
<th>FCS</th>
<th>Change in body condition score</th>
<th>ADG (kg)</th>
<th>FCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>0-28</td>
<td>0-28</td>
<td>0-28</td>
<td>0-28</td>
</tr>
<tr>
<td>Control</td>
<td>1.67a</td>
<td>9%a</td>
<td>0.579a</td>
<td>2.07</td>
</tr>
<tr>
<td>Tylosin</td>
<td>1.06b</td>
<td>91%b</td>
<td>0.761b</td>
<td>1.89</td>
</tr>
<tr>
<td>Aivlosin</td>
<td>0.97b</td>
<td>100%b</td>
<td>0.764b</td>
<td>1.85</td>
</tr>
</tbody>
</table>

Differing superscripts in columns are significantly different (p<0.05)

Laboratory Analysis: L. intracellularis was detected by PCR in all groups before the trial. Table 2 shows the number of samples tested, the number of positive results, and the % positive. Both treatments resulted in a substantial reduction in the number and percentage of positive L. intracellularis PCR results.

Table 2 Number of positive L. intracellularis PCR results.

<table>
<thead>
<tr>
<th></th>
<th>Day</th>
<th>0</th>
<th>10</th>
<th>11-28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>10/15 (67%)</td>
<td>10/20 (50%)</td>
<td>5/13 (38%)</td>
<td></td>
</tr>
<tr>
<td>Tylosin</td>
<td>7/14 (50%)</td>
<td>3/10 (30%)</td>
<td>0/1 (0%)</td>
<td></td>
</tr>
<tr>
<td>Aivlosin</td>
<td>8/15 (53%)</td>
<td>2/12 (17%)</td>
<td>0/7 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

Other enteric disease pathogens such as pathogenic E. coli and Brachyspira hyodysenteriae were absent. Occasional isolates of Brachyspira pilosicoli and non-pathogenic spirochaetes were recorded, but not considered to be clinically significant by the investigator and the monitor.

Discussion
Aivlosin in-feed treatment at 42.5 ppm (2.125 mg AIVT/kg BW/day) significantly reduced faecal consistency scores and the number of days on which abnormal faecal scores were recorded. Aivlosin also significantly improved body condition scores at all time points. By improving the clinical parameters, growth rate, an indirect indicator of efficacy was also significantly improved. Feed conversion ratios were also improved over the 28 day trial period.

Conclusions: The trial indicated that acetylisovaleryltylosin, when used at a dose of 2.125 mg/kg BW/day for 10 days in-feed, was efficacious for treatment of PPE/ileitis caused by L. intracellularis.

Reference