

## Fra Results

148 whereas normal levels of electrolytes was measured after administration of effective Baytril®  
149 treatments (Figure 5a). Significantly increased urea levels have been measured in piglets  
150 treated with Terramycin®, while they were found slightly elevated in piglets treated with  
151 Metacam®.

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### 153 **Serum protein levels**

154 Compared to uninfected piglets the serum proteins in placebo treated piglets (Figure 4) were  
155 clearly raised and the C-reactive protein (17 fold), albumin (2 fold) and beta-2 globulins (1.7  
156 fold) were found to be significantly raised.

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158 Our results revealed a much stronger up-regulation of CRP after effective Baytril® treatment  
159 than after placebo treatment. An apparently increased induction of CRP was observed even  
160 after treatment with a sub-therapeutic level of Baytril® and Zoolac® combination with  
161 effective Baytril®, whereas ineffective Terramycin® treatment apparently suppressed this  
162 immune response mediator. The use of Metacam® seemed to have a suppressive tendency on  
163 the CRP production (Supplementary Material 2 and Figure 5).

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165 An unexpected result was seen related to the reduction in the alpha 1 protein fraction in the 3  
166 piglets that received probiotic and meloxicam in addition to the therapeutic level of Baytril®.

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### 168 **Impact of antibiotic use and other treatments on expression of the *tra* genes of pRAS1**

169 The expression of *traD*, *virB11* and *virD4* was strongly induced by ineffective treatment  
170 (Terramycin®, Zoolac®, Zoolac®+Metacam®, and sub-inhibitory levels of Baytril®) and  
171 naturally lower number of mRNA copies of these *tra* genes were found with effective