

MINIRESIST – A DANISH RESEARCH PROJECT AIMING TO MINIMIZE ANTIBIOTIC RESISTANCE DEVELOPMENT IN PIGS

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The pig industry is often accused for overuse of antibiotics, which may select for antibiotic resistance. Antibiotic resistance in bacteria from pigs and other food production animals is of great public concern due to potential consequences for human health. In 2011, a new research project was launched in Denmark aiming to investigate the influence of different antibiotic treatment regimes on the efficacy of treatment, and on the development and spread of resistant bacteria between pigs during the production cycle and at the time of slaughter. The research consists of collaboration between veterinarians, microbiologists and epidemiologists, and should ultimately lead to the development of a mathematical model for resistance development associated with the use of antibiotics in pig production. This model combined with obtained knowledge on clinical efficacy should be used to optimize antibiotic treatment in pigs with minimum development of antibiotic resistance. Study setup, preliminary results and expected outcomes will be presented at the conference.