IMM-045

SAFETY OF THREE ADJUVANTS USED FOR AUTOVACCINE PRODUCTION AGAINST ACTINOBACILLUS PLEUROPNEUMONIAE: A FIELD EVALUATION ON FATTENERS

A. Trotel [1], E. Pagot [1], M. Dia [1], N. Gaide [2], R. Danguy Des Deserts [2], F. Herault [2], H. Morvan [2], A. Le Roux [3], N. Amenna-Bernard [2].

[1] ZOOPOLE Développement, Ploufragan, France; [2] LABOCEA, Ploufragan, France; [3] HYOVET, PLESTAN, France.

Among alternatives to antibacterial treatments, autovaccines remain a relevant customized solution in herds affected by *Actinobacillus pleuropneumoniae* (App). In this trial, different formulations are tested (with and without antigen) to assess secondary effects under field condition.

This controlled, randomized and blinded study was conducted in accordance with GCP principles. One batch of 200 piglets was included on a commercial farm where an App autovaccine was usually administered (biovar 1, serovar 2). At 9 weeks, healthy subjects were randomized into 8 treatment groups of 20 cases, sex, litter and weight being taken in account. Three complete vaccines (App antigen + the 3 tested adjuvants – a mineral oil (1), a water based gel (2), and a micro-emulsion (3)) were administered to 3 groups, whereas 3 control groups received these adjuvants without antigen. One placebo group received only NaCl solution and the last one the antigen solution with no adjuvant. A clinical follow-up was implemented on all included animals. Local reactions were monitored during 2 weeks after injections, and necks were assessed macroscopically and histologically after slaughter.

During the two weeks following D0, weight gain was not affected by vaccination. A significant increase in rectal temperature was observed between all groups, particularly with adjuvant (1) + Ag – more than 88.2 % of cases showing an increase above 2°C after 6 hours. Adjuvant (1) also had a significant impact on general state (+3h, +6h). Local reaction scores were significantly different from NaCl group for all groups. At 26 weeks old, histological lesion score on injection site showed no significant differences between groups.

All three tested adjuvants, combined with Ag or not, induce significant local and general reactions during first 24-48h, but have no long-term impact on growth and neck quality.