seen as an opportunity to use single killed AI vaccine and therefore base the protection against ND on the recombinant, which raised the question of the viability of the live cell-associated vaccine combined with the killed oil-adjuvanted vaccine. It is also customary to increase the temperature of the killed vaccine in order to reduce its viscosity (thickness). The objective of this work was to determine the effect on the viability of the recombinant vaccine when injected alone, or simultaneously with a killed oil-adjuvanted vaccine at different temperatures, using a quantitative RT-PCR primer designed for detecting the HVT virus genome in feather follicles at different ages. All treated groups tested positive, but when compared to the control, differences were seen in the amount of HVT genome detected, which suggests it is advisable to consider the temperature of the killed vaccine whenever an MD vaccine is applied at the same time.

Session B Sunday 8:30:00 AM


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The protection against a lethal genotype VII Newcastle disease (ND) challenge provided by concomitant subcutaneous (SQ) hatchery application of vector HVT-IBDV (VAXXITEK HVT-IBD®) and live-plus-killed Newcastle disease vaccines (AVINEW® and GALLIMUNE ND®) was compared against the protection provided by protocols including commercial vector HVT-ND vaccines in commercial broilers. Seven groups of 24 one-day-old commercial broilers were used. Groups 1 and 2 tested SQ hatchery vHVT-IBD and live-plus-killed ND with or without field boost. Groups 3-4 and 5-6 tested the protection provided by two commercially available HVT-ND vaccines with and without live hatchery and field ND vaccines boosts. Group 7 remained as unvaccinated/challenged control. Serological response and percentage of survival were used as efficacy criteria. No adverse effects were observed with concomitant day-old SQ HVT-IBD and live-plus-killed ND vaccination. Significantly higher (P<0.05) ND antibody titers were observed when SQ live ND vaccine was used. The control group died within five days after challenge. The protection in the SQ vaccinated birds with and without field boost was 100 and 95.8%, respectively. The two commercial HVT-ND vector vaccines applied without live boosts failed to provide full protection and reached 83.4 and 79.2%, respectively. After live revaccinations the vector vaccines groups protection reached 91.6%. The observed protection levels and the differences in serological responses suggest the suitability of including live plus killed SQ vaccination for endemic areas and the need of live boosts to complement protection in the commercially available ND vector vaccines.

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Immunoresponse Induced by Newcastle Disease Virus (NDV) Vaccine Vectors in Commercial Chicks in the Presence of NDV Maternal Antibody.

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To address the concern that NDV maternal antibody (Mab) in chicks may suppress the immunoresponse to the NDV vectored vaccines, we evaluated the replication and immunogenicity of the LaSota and PHY LMV42 strain-based vectors in chickens which had naturally acquired NDV maternal antibody. The results showed that both LaSota and PHY LMV42