

INACTI/VAC® Chick-ND with Day of Age Marek's Vaccination

Introduction: Inacti/Vac Chick-ND has been developed specifically for use in young chicks in geographic areas where highly pathogenic Newcastle (ND) disease is endemic. The vaccine can be safely injected subcutaneously into day old chicks. The vaccine contains a high concentration of a high titering strain of Newcastle disease, suspended in a stable oil emulsion. When injected, the oil emulsion controls the absorption of the virus and enhances the development of high levels of immunity. The product is labeled for vaccinating chicks one day of age or older. When administered properly, Inacti/Vac Chick-ND does not interfere with Marek's vaccination. To demonstrate, the following trial was conducted to show Marek's vaccine is not affected when Inacti/Vac Chick-ND is given at day of age.

Trial: One-day-old commercial broiler chicks were vaccinated with 2,750 PFU (plaque forming units) of Marek's disease vaccine. Inacti/Vac Chick-ND was injected 2 and 4 hours after Marek's vaccination. Both vaccines were administered subcutaneously into the neck. Two days post-vaccination, chicks were challenged with Marek's virus. Fourteen day post challenge, chicks were necropsied and the thymus glands were examined and scored. Table A shows the results from the trial.

Table A

Group #	Marek's Vaccine	Hours Before Chick-ND	Marek's Challenge	Thymus Score	Marek's Protection
1	Yes	2	Yes	0.664	Yes
2	Yes	4	Yes	0.650	Yes
3-Marek's Vaccine Control	Yes	Not Vaccinated	Yes	0.653	Yes
4-Marek's Challenge Control	No	Not Vaccinated	Yes	0.453	No
5-Control	No	Not Vaccinated	No	0.710	-

Discussion: There is no significant difference in the thymus scores between the challenged groups vaccinated with Inacti/Vac Chick-ND at 2 and 4 hours (Groups 1 and 2), and the group that did not receive Inacti/Vac Chick-ND (Group 3). There is a significant difference in the thymus score of the Marek's challenged group that did not receive Marek's vaccine (Group 4) and those that did (Groups 1, 2, and 3). Furthermore, there is no difference between the Marek's vaccinated - Marek's challenged groups (Groups 1, 2, and 3) and the non-Marek's vaccinated - non-Marek's challenged group (Group 5).

Conclusion: Inacti/Vac Chick-ND administered at 2 and 4 hours after Marek's vaccination does not interfere with the efficacy of the Marek's vaccine. For more information on Inacti/Vac Chick-ND or other quality LAHI products, please contact your area manager.