Comparison of AVINEW®+H120 protection against velogenic Chinese Newcastle virus challenge strain with combinations of live Newcastle disease and infectious bronchitis Massachusetts strain administered at day-old to coloured chickens

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Day-old vaccination with AVINEW + H120 resulted in a high level of protection against a challenge performed at D21 of age, when a decrease of maternally derived antibodies (MDA) had begun but the level was decreased enough to allow the challenge interpretation. Comparison with two combined live vaccines of Newcastle Disease and Infectious Bronchitis, Massachusetts strain, showed an equivalent level of protection using AVINEW + H120 (96.7% of protection) as compared to both others (respectively 86.7% and 90% of protection). The challenge model, using a Beijing standard velogenic strain at D21 in colored chickens resulted in 40% mortality in unvaccinated challenged controls and was thus severe enough to allow the trial interpretation. The 60% protection obtained in this group was most likely the result of remaining MDA level. Hemagglutination Inhibition (HI) test monitoring showed increased titers post-challenge and thus validated the challenge model as well.