

A field study on broiler flocks in Brazil to evaluate zootechnical parameters, molecular epidemiology, and condemnation index with the use of Live IBD Vaccine versus HVT-IBD Vector Vaccine

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Since 1997, the Brazilian poultry industry suffers from the acute form of the Infectious Bursal Disease (IBD), and more recently from variants strains causing a subclinical form. Routine laboratory tests performed by Simbios Biotechnology between 2002 and 2013 indicated that 42% of positive samples are from molecular Group 15. The present study was conducted in 2013 and 2014 to assess performance, molecular epidemiology and condemnation index of flocks vaccinated with Live IBD Vaccine (TABIC MB) versus HVT-IBD Vector Vaccine. Two broiler companies in southern Brazil, an area with high IBD pressure, used HVT-IBD vector vaccine for more than two years, then switched to live IBD vaccine. The data of the last 6 flocks of 52 broiler farms was compared with the next 6 flocks (about 8.3 million broilers). The outlines of the study were designed to have the same genetic line, and age at slaughter between 44 to 46 days. After the introduction of the Live MB vaccine, the mortality decreased significantly from 5.37% to 4.81%; the Feed Conversion Rate improved from 1.786 to 1.673; Daily Body Weight Gain went from 61.2 to 63.8 grams a day, and the Productive Efficiency Index from 310 to 354. Switching from HVT-IBD to live vaccine decreased by 78% of RT-PCR positive flocks to subclinical IBD and by 42% of cellulitis at processing plants. These figures demonstrate that, at high IBD challenge, the MB strain vaccine provided better zootechnical results and condemnation index than HVT-IBD Vector Vaccine.