Field experience with continuous use of Vaxxitek HVT+IBD in broilers in EMPCo. – Dubai

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Emirates Modern Poultry Co. - Dubai
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Abstract:

The purpose of this report is to elucidate the practical field experience with application of Vaxxitek HVT+IBD for more than five years in Emirates Modern Poultry Co. (EMPCo. – Dubai) which is the largest integrated broiler meat producer in U.A.E.
• Vaxxitek HVT+IBD was used as the sole vaccine against IBDV as \textit{s/c injection} as well as \textit{in-ovo}.

• The weight of the bursa and its healthy appearance explains the significant good results obtained in weights, FCR, total losses as well as B grade carcases after processing, compared to the use of conventional live IBDV attenuated vaccines (intermediate plus).

• Both application methods of Vaxxitek HVT+IBD gave excellent results.
• Besides being safe compared to attenuated and inactivated vaccines, the immuno-response of VaxxiteK HVT+IBD is not affected by the maternally derived immunity (MDI).

• Appearance of the bursa in both application methods was healthy in 30 days old Cobb 500 broilers, which explains the protective titres against (NDV, IBV, AI H9N2 and IBDV) as seen in Idexx ELISA.
Comparative IDEXX ELISA titre in different IBD vaccines types (vaxxitec HVT + IBD and IBD intermediate plus) in 30 days old Cobb 500 broilers
Emirates Modern Poultry Co. (EMPCo.) is located in Dubai, is the largest in UAE, and produces 12.5 million Kgs. of poultry meat and 5000 tons of value added processed meat annually.

Due to the market requirement its slaughter age is 28–32 days. The company has 78 broiler sheds, each with a capacity of 24,000 distributed in 13 farms of 6 sheds each (breed raised Cobb 500).
Before the introduction of Vaxxitek HVT+IBD vaccine, an attenuated intermediate IBD vaccine was used with some success; then shifted to IBD intermediate plus strain which protected the flock with variable success.

During the use of the conventional IBD vaccine, control of the prevailing viruses (AI H9N2, NDV, IBV) as well as IBDV itself was variable and the mortality and other production parameters were not satisfactory. Besides the field challenges, secondary bacterial infections caused considered downgrading and condemnation in the final product.
Since the introduction of Vaxxitek HVT+IBD five years ago, there is a dramatic change in the production performance.

**Weights** improved significantly and due to the unique UAE market requirement the company is forced to control the high weights to satisfy the consumers.

**FCR** is very close to the standard and mortality significantly reduced when compared with the intermediate and intermediate plus IBD vaccines.
Comparative dress weight in different IBD vaccines types (vaxxitec in ovo, vaxxitec s/c and IBD intermediate plus) in 30 days old cobb 500 broilers.
Comparative B grade in different IBD vaccines types (vaxxitec in ovo, vaxxitec s/c and IBD intermediate plus) in 30days old cobb 500 broilers
Comparative losses (%) in different IBD vaccines types (vaxxitec in ovo, vaxxitec s/c and IBD intermediate plus) in 30 days old cobb 500 broilers.
Comparative FCR in different IBD vaccines types (vaxxitec in ovo, vaxxitec s/c and IBD intermediate plus) in 30 days old cobb 500 broilers
Bursa weight at 30 days old broiler Cobb 500 after in ovo vacxitek vaccination

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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>8</th>
<th>9</th>
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<tbody>
<tr>
<td>Bursa weight (g)</td>
<td>2.43</td>
<td>1.81</td>
<td>1.44</td>
<td>2.07</td>
<td>2.26</td>
<td>2.47</td>
<td>2.21</td>
<td>1.86</td>
<td>2.6</td>
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![Image of bursa samples](image_url)
Conclusion:-

The success of Vaxxitek HVT+IBD in controlling IBD and boosting the immunity against other pathogens, without interference of maternally derived immunity, is significantly evident.

Vaxxitek HVT+IBD is a safe vaccine when applied subcutaneously or Inovo, compared to other attenuated and inactivated IBD vaccines and it is an adjuvant free vaccine.

It also enables the differentiation between field infected and vaccinated birds.

Vaxxitek HVT+IBD is cost effective due to the many positive production results. The success of Vaxxitek HVT+IBD as vector vaccine paves the way for the introduction of other poultry vector vaccines. e.g. AI H9N2
Thank you