



## Bursa-Vac® 51 Vaccine: Protection Against Standard and Variant IBD Strains

**T**he ability of **Bursa-Vac® 51** vaccine to protect against standard and variant strains of IBD virus was determined by challenge using the standard IBD virus (Graph 3) and several known variant strains. (Graphs 1, 2). Protection was determined by bursa: body weight ratios of challenge birds compared to the non-challenged group. Individual scores within two standard deviations of the non-challenged, vaccinated controls were considered protected.

### Key Points

- ➔ **Bursa-Vac® 51 vaccine demonstrated protection against the following variants:**
  - Delaware E
  - GLS
  - Mississippi
  - Georgia U-28
  - Arkansas
  
- ➔ **A minimum protective dose of Bursa-Vac® 51 vaccine demonstrated excellent protection against the standard strain of IBD.**

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### Trial 1: Bursa-Vac® 51 vaccine vs. variant IBD challenge

#### Part 1

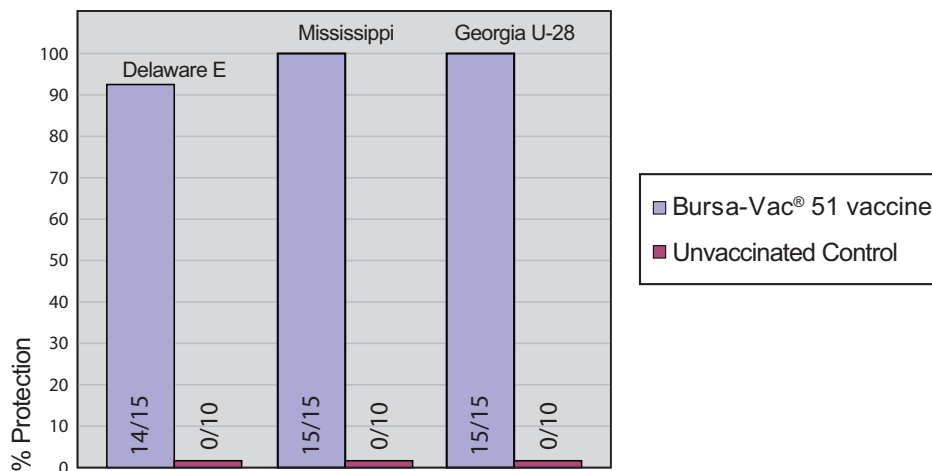
14-day old SPF leghorn chickens were vaccinated with **Bursa-Vac® 51** vaccine and challenged with three variant IBD strains. The vaccine was administered via the drinking water. At three weeks post-vaccination, each group of vaccinates and non-vaccinated controls was divided into 3 groups for challenge with Delaware E, Mississippi, or Georgia U-28 strain IBD (Graph 1). Bursa: body weight ratios were determined at 13 days post-challenge.

#### Part 2

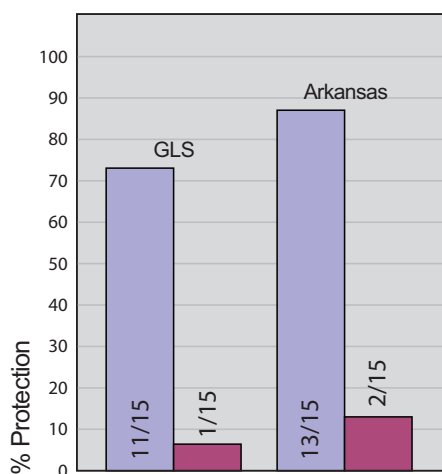
10-day-old SPF broilers were vaccinated with **Bursa-Vac® 51** vaccine by eyedrop. Two weeks post-vaccination, the vaccinates and hatchmate controls were divided into 2 groups for challenge with GLS variant or Arkansas variant IBD strains (Graph 2).

Protection against challenge was again determined by comparative bursa: body weight ratios.

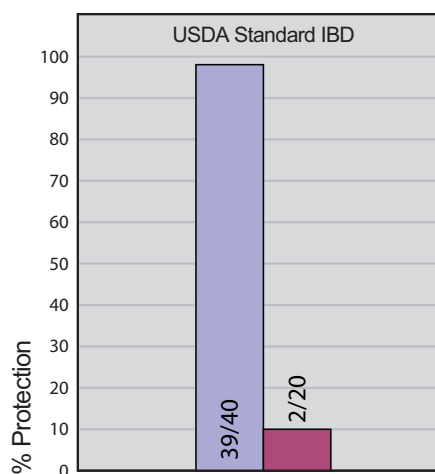
**Graph 1: Bursa-Vac® 51 vs Delaware E, Mississippi, and Georgia U-28 variants of IBD virus**



**Graph 2: Bursa-Vac® 51 vs GLS, and Arkansas variants of IBD virus**



**Graph 3: Bursa-Vac® 51 vs USDA standard IBD virus**



**Trial 2: Bursa-Vac® 51 vaccine vs. USDA standard IBD challenge**

14-day-old SPF leghorn chickens were vaccinated with the minimum protective dose of Bursa-Vac® 51 vaccine via the drinking water. Two weeks post-vaccination, the vaccinates and hatchmate controls were challenged with the virulent USDA standard strain of IBD, and protection was determined by evaluation of gross and microscopic lesions of the bursas 5 days post challenge (Graph 3.)

Bursa-Vac® 51 vaccine demonstrated excellent protection against challenge with the USDA standard IBD strain.

**Conclusion**

Bursa-Vac® 51 vaccine demonstrated excellent protection against both the USDA standard IBD challenge virus and a broad range of variant-type IBD challenge viruses.

[ Innovative Solutions in Poultry Health ]

