



## **Nobilis<sup>®</sup> Gumboro 228E**

To defeat Gumboro, balance is more important than brute force





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Visit [www.gumboro.com](http://www.gumboro.com)

Gumboro.com is the world's most comprehensive website, dealing with every aspect of the disease.

Here you will find authoritative information on prevalence and pathogenesis, on examination of the various control options, the latest research findings and trial data, and much more.



## Nobilis Gumboro 228E: power plus balance

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In vaccination against Gumboro Disease, there are two conventional choices:

- **Intermediate vaccines** have few side effects, but limited efficacy against vIBD in the field or in situations of high infectious pressure.
- **Hot vaccines** have a powerful and aggressive action, but can damage the bursa, impairing the immune response and response to other vaccinations.

**Gumboro 228E gives you a more balanced option** an Intermediate Plus vaccine combining the power of a hot vaccine with the safety of an intermediate.

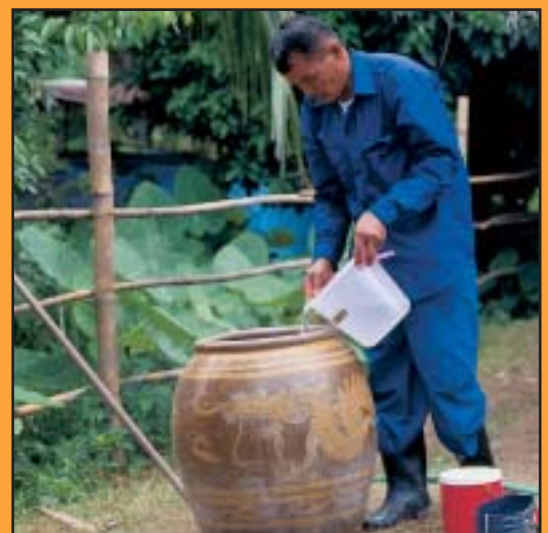


## Unrivalled protection, without immuno-suppression

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**Nobilis Gumboro 228E** has the power to break through higher titres of maternally derived antibodies (MDA) than intermediate vaccines - but without immuno-suppression, as demonstrated by:

- Extensive laboratory trials
- Pathological examination of the bursa
- Performance in Gumboro outbreaks, world-wide.



## Field Study, France

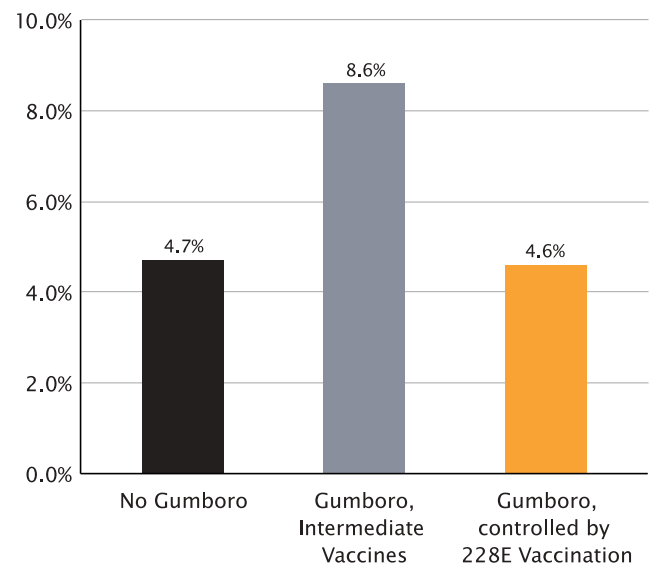
Permission was granted by the French government to use Nobilis Gumboro 228E against a series of vIBD outbreaks in a major poultry producing region of France. Performance data was collected from over 170 million broilers, comprising:

- 151 flocks prior to the outbreak.
- 237 flocks during the outbreak, vaccinated with an intermediate vaccine.
- 252 flocks vaccinated with Nobilis Gumboro 228E during the outbreak.

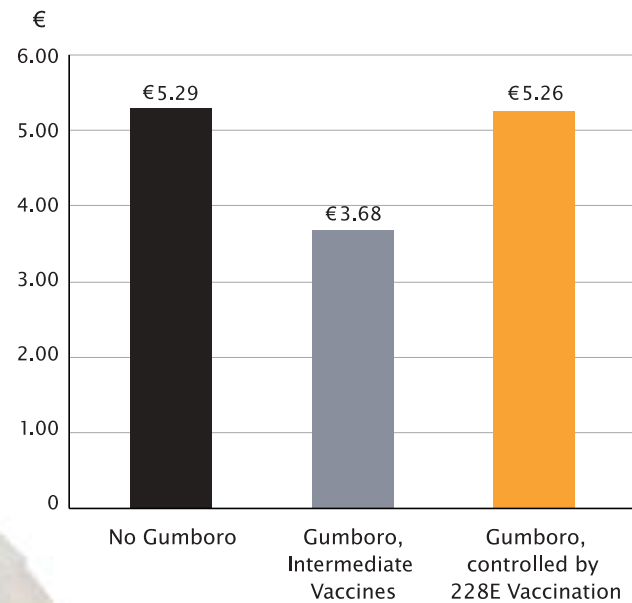
## Results

- Intermediate vaccines failed to prevent fresh outbreaks.
- Nobilis Gumboro 228E provided effective protection.
- Profitability of flocks vaccinated with 228E returned to the levels recorded prior to the Gumboro outbreak.

## Average flock mortality



## Average margin per m<sup>2</sup>



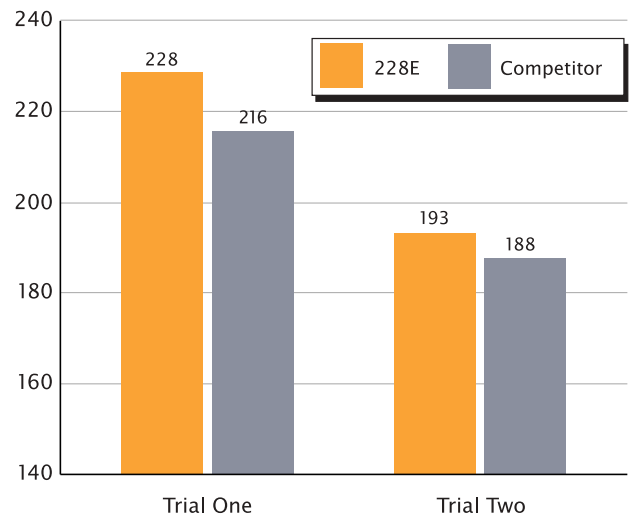
## Gumboro 228E trials in Thailand

Two trials were conducted with commercial broiler flocks in Thailand, comparing the effects of vaccination with Nobilis Gumboro 228E and a widely used "hot" vaccine. In Trial 1, vaccination was at 14 days, in Trial 2, at 14 and 21 days.

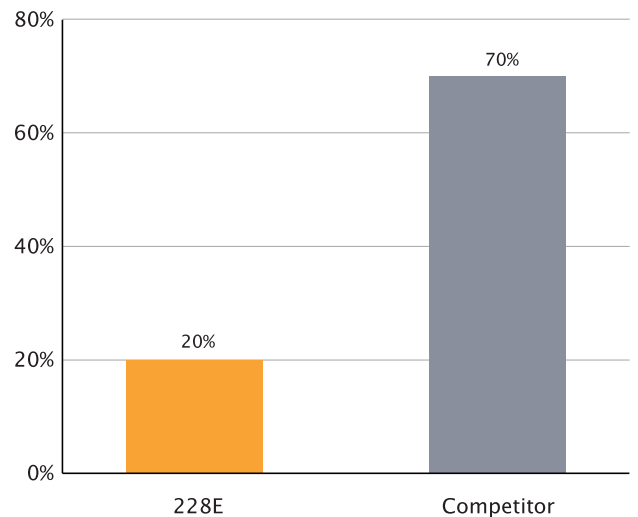
### Results

- Both vaccines controlled Gumboro, but the 228E-vaccinated flocks performed better.
- Flocks vaccinated with the "hot" vaccine showed an incidence of bursal atrophy 3.5 times higher than those vaccinated with 228E.
- Conclusion: Nobilis Gumboro 228E provides effective protection with minimal bursal damage and no negative effect on performance.

## Performance Index Comparison



## Bursal Atrophy Comparison



## Suggested vaccination schedule

Future layers/breeders	Day	Broilers	Day
Parents vaccinated with an inactivated vaccine.	21 - 28*	Parents vaccinated with an inactivated vaccine.	14 - 17*
Parents not vaccinated with an inactivated vaccine.	14 - 24	Parents not vaccinated with an inactivated vaccine.	8 - 12

\*When MDA titres are uniform, one vaccination will normally be sufficient.

### Description

Nobilis Gumboro 228E is a live freeze-dried vaccine against Infectious Bursal Disease (IBD) containing at least 2.0 log<sub>10</sub> EID<sub>50</sub> per bird dose.

### Indication

Active immunisation of chickens against Gumboro disease (IBD).

### Administration

The vaccine can be administered through the drinking water.

### Presentation

Nobilis Gumboro 228E is available in vials containing 1000 or 2500 doses.



# Nobilis® Gumboro 228E

*The world's No. 1 name in Gumboro control*