



poultry focus

business news for the poultry industry

intervet

As we near the end of 2003, we can look back on a year of significant technical achievement. The past 12 months have seen four major vaccine launches, with more to come before the year is out.

In this issue, for example, we preview the new Nobilis® IBmulti/ND/EDS vaccine, and discuss some of the technical issues surrounding it.

We'll also be reminding you of all the equipment that's available from Intervet UK, including vaccinators and training materials. And there are 10 double barrel Serena syringes to win with this issue.



More new vaccines to be launched



Nobilis IBmulti/ND/EDS will be launched before the end of the year. Also, the erysipelas vaccine Eryvac will soon be available in convenient 1000-dose poultry packs.

Nobilis® IBmulti/ND/EDS combines inactivated

antigens of Infectious Bronchitis strain M41 and D274, Newcastle Disease and Egg Drop Syndrome. Its ability to produce an enhanced immune response when given as a booster following live immunisation against Infectious Bronchitis and Newcastle Disease is discussed on page 2 of this newsletter.

Convenient 1000-dose packs of **Eryvac®** are also to be launched. Eryvac protects against the bacterial organism *Erysipelothrix rhusiopathiae (insidiosus)*, which is frequently found on free range layer units. The bacterium can survive for long periods in the soil and is also found in mites, rodents and other animals, so effective protection through vaccination is vital.

Stocks of the vaccine **Nobilis® OR inac**, which protects against respiratory disease caused by *Ornithobacterium rhinotracheale* infection, are

already available. **Nobilis® OR inac** contains inactivated antigens and is administered by injection. These vaccines bring to a total of six the number of new products launched in 2003. They follow the successful Salmonella vaccines, **Nobilis® Salenvac® T** and **Nobilis® SG9R**, and mycoplasma vaccine, **Nobilis® MG 6/85**.

SALENVAC® T WINS PRODUCT INNOVATION AWARD

Intervet's new combined salmonella vaccine for breeder and layer birds, **Nobilis® Salenvac T**, picked up a prestigious award for product innovation at the recent VIV Europe Trade Fair in the Netherlands.



The vaccine was also nominated in the show's "Food Safety" category, as it represents an important advance in making poultry meat and eggs safer for human consumption.

After a successful UK launch, Salenvac T will now be launched across Europe in the spring of 2004.

Nobilis® IBmulti/ND/EDS: improving protection against challenge by different IB strains

The viruses that cause IB belong to the group of coronaviruses. As such, they frequently form new serotypes, either through mutation or through recombination with other IB viruses. That's why IB continues to be such a threat to commercial flocks: it's a constantly moving target.

However, only a few changes on the surface of the virus composition are sufficient to produce what we define in the laboratory as a new serotype. In fact, most of the virus particle remains unchanged.

It is this knowledge that we have now used to improve the breadth of protection possible against different IB challenges.

IMPROVING INFECTIOUS BRONCHITIS (IB) PROTECTION

The traditional method for identifying IB viruses has been to classify them into different serotypes on the basis of serological tests in the laboratory.

However, in terms of protection, it is probably more relevant to consider how existing vaccines can induce immunity against viruses belonging to different serotypes. This is why the new term 'protectotype' was introduced. An IB vaccine virus and a group of defined viruses where cross protection has been demonstrated belong to one protectotype.

Broiler study

Challenge studies were carried out using two live attenuated vaccines based on the Massachusetts strain Ma 5 and the variant IB 4/91, to see what protection they offered against different IB viruses known to cause serious disease in commercial broiler flocks around the world. Of the vaccination programmes tested, the best protection against the widest range of serotypes was found to be the use of Nobilis Ma 5 at day-old followed by Nobilis IB 4/91 at 2 weeks.

Challenge Virus	Protection following challenge at 5 weeks after vaccination with							
	Unvaccinated		Nobilis® Ma5 (day-old)		Nobilis® 4/91 (2 weeks)		Ma5 + 4/91	
	Score*	%**	Score	%	Score	%	Score	%
Far East	37	-	17	70	21	50	4	100
Arkansas	39	-	10	100	11	90	6	100
Nephropathogenic								
Italian strain	39	-	36	0	6	100	3	100
D207	37	-	6	100	7	90	4	100
D1466	40	-	32	20	29	30	16	80

Diagram 1. Internal Data: 1999

* Mean ciliostasis test score for 10 chicks in group

** % protected

Further trial work showed that birds primed with Nobilis IB 4/91 vaccine in this way, and then boosted with an inactivated IB vaccine based only on the Massachusetts serotype, such as M41, produced high levels of serum-neutralising antibodies against IB 4/91 and an extended duration of immunity. Consequently, no inactivated IB 793B or CR88 type vaccine is required.

Layer study – use of Nobilis IBmulti/ND/EDS

This most recent study has now tested the effect of using the inactivated IB multi component in Nobilis IBmulti/ND/EDS as the inactivated booster given at 16 weeks. The birds were initially vaccinated with Nobilis Ma5 given at day old and Nobilis IB 4/91 at 6 weeks. As mentioned previously, it was remarkable to see that the best antibody titres against IB 4/91 were obtained in the group vaccinated with Nobilis IB multi, even though the 4/91 strain is not included in the product. Similarly, high antibody titres against D274 were found, despite no live priming with this strain.

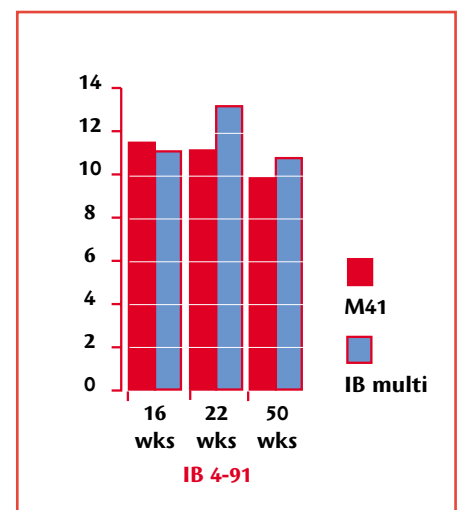


Diagram 2. Neutralising (log2) antibody titre of IBmulti and M41 inactivated vaccines
Internal Data: 1999

Approved administration equipment for use with Intervet vaccines

Sprayers

Water sensitive paper (WSP), provides an invaluable means of checking the efficacy of your spray vaccination systems.

WSP will show you whether the sprays reach their target, how good their coverage is, and whether the droplets are coarse, medium or fine. They can also tell you whether off-target deposits are at an acceptable level.

A technical bulletin on the use of water sensitive paper, by Dr Tibor Cserep, is currently in preparation. To request your copy, please email us at poultry.uk@intervet.com.

WATER SENSITIVE PAPER: HOW TO TEST THE QUALITY OF SPRAY VACCINATION



Birchmeyer sprayer



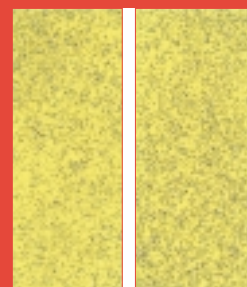
2 bars



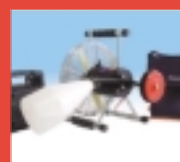
4 bars



6 bars



Garden sprayer



**Electrafan/
Ulvafan sprayer**



Injection equipment

The equipment opposite has been approved for use with Intervet vaccines. Some of these items are offered as a service by Intervet to their customers.



Sterimatic sanitising system



Serena double - gun syringe

10 Serena Double-Gun Syringes worth £75 to be won

We have 10 of these high quality double-gun syringe units available.



The Serena gun is ideal to use in vaccination programmes where two vaccines need to be administered simultaneously.

All you have to do is email your name, address, telephone number and the nature of your enterprise to poultry.uk@intervet.com. The 10 lucky winners will be selected in a draw on January 19, 2004 and will be notified immediately by email.

First 20 entrants will also win a belt mounted bottle pouch* (see back page for details)

Open to vets & producers. No purchase necessary. Draw closes January 16, 2004. Only email entries will be accepted. No alternative prizes or cash equivalents available. Winners will be notified by January 23, 2004. List of prize winners available on application.

Injection Accessories

During vaccination there are potentially several problems that may occur, including needle-stick injuries to the operator, as well as disease transmission between birds and bacterial infection due to the re-use of needles. To reduce these problems the Sterimatic system can be used.

It can be fitted onto standard multi-dose syringes & in addition to a normal set up, you need 2 extra items;

- 1) **A Sterimatic sleeve** (Fits onto the syringe, around the needle, helping to protect it).
- 2) **A Stericap** (Fits into the sleeve, containing a disinfectant pad to clean the needle as it passes through.)

With a needle that's automatically protected & cleaned between each injection, the patented Sterimatic system ensures cleaner, safer vaccinations every time.

Automatic Needle Sanitising System



- Vented filtered spike with draw-off tube
- Bottle cradle
- Sterimatic sleeve
- 10x Stericaps (for 5,000 doses)
- 10x veterinary needles (18G)

(Code no: 07779) **RRP £15.75**

Sterimatic 5,000 dose Refill Pack

- 10x Stericaps (for 5,000 doses)
- 10x veterinary needles (18G)

(Code no: 07777) **RRP £6.50**

Marek Administration Pack



- 37mmx16G disposable needle
- 5ml disposable single-use syringe
- Vented spike with drip chamber and draw-off tube with roller clamp
- Instructions

(Code no: 07778) **RRP £1.75**

Vented, filtered spike with draw-off-tube.

This vented draw-off-tube also includes an air filter reducing any contamination being drawn into the bottle during vaccination. Please note that Salenvac T requires a specific vented spike, to allow air back into the bottle after each application.



BELT-MOUNTED BOTTLE POUCH



Carry the vaccine bottle in this unique belt-mounted bottle pouch that conveniently and securely holds the bottle out of the way, at your side. It also includes pockets for carrying additional Stericaps and needles.

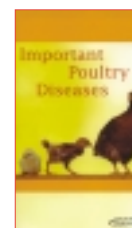
RRP £9.95

* 20 available to first 20 entrants to competition.

TRAINING MATERIALS

Important Poultry Diseases **RRP £5.95**

A handy and highly sought-after pocket guide to all the most important diseases of poultry.



Vaccination techniques

Available on VHS video and DVD. Shows the operator the best and most efficient ways to vaccinate poultry, with the minimum of harm to the birds. 1 hour 30 minutes.



The above training tools are complimentary to veterinary practices and producer libraries.

Nobilis® IBmulti/ND/EDS:

Inactivated vaccine containing Massachusetts and D274 serotypes of Infectious Bronchitis virus (> 4.0 log₂ VN units each per dose), the Clone 30 strain of Newcastle Disease Virus (> 4.0 log₂ HI units) and Egg Drop Syndrome '76 virus (> 6.6 log₂ HI units), inactivated with formalin and suspended in the aqueous phase of an oil adjuvant emulsion containing liquid paraffin. Legal Category [POM].

Advice should be sought from your veterinary surgeon.

Eryvac® contains formalin killed cultures of *Erysipelothrix rhusiopathiae* serotype 2, strains CN3342 and CN3461, and the serotype 1, strain P15/10, (at least 3.3 x 10⁸ cells/ml/strain). Legal Category [PML].

Nobilis®OR Inac contains inactivated whole cell suspension of *Ornithobacterium rhinotracheale* serotype A strain B3263/91 per 0.25ml dose. Legal Category [POM].

Further information is available on each vaccine from the datasheets



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