

# Bulletin

Boehringer Ingelheim

**TECHNICAL**

## Express 10-HS™ Vaccine

Viral Serology Results From Efficacy and Interference Study

### Objective

- Prove lack of interference among vaccine components.
- Show the components induce a satisfactory immunological response in the host animal.

### Conclusion

- Data indicate no interference in the combination Express™ 10-HS vaccine components.
- Each component satisfactorily stimulated protective level of antibodies.

### Results

- Viral IBR-PI<sub>3</sub>-BVD serology titers after one dose of vaccine.
- BRSV serology titer after a booster dose of vaccine.
- All results for 20 vaccinates, 9 controls

### IBR SN Titers

A titer of  $\geq 1:2$  is protective according to USDA

Vaccination	Day 0	Day 21	Day 28
Total GMT*	<2	33.3	36.6
Controls GMT	<2	<2	<2

\* = Geometric Mean Titer

### PI<sub>3</sub> SN Titers: Twenty Vaccinates and Five Controls

A titer of  $\geq 1:4$  is protective according to USDA

Vaccination	Day 0	Day 7	Day 14	Day 28
Total GMT	<2	<2	2.6	30.2
Controls GMT	<2	<2	<2	<2

### BVD Type 1 SN Titer

A titer of  $\geq 1:8$  is protective according to USDA

<b>Vaccination</b>	<b>Day 0</b>	<b>Day 21</b>	<b>Day 28</b>
Total GMT	<2	>64	5710*
Controls GMT	<2	<2	<2

\*Titers ranged from 724 to >16,384

### BVD Type 2 SN Titer

<b>Vaccination</b>	<b>Day 0</b>	<b>Day 21</b>	<b>Day 28</b>
Total GMT	<2	>15.5	42.7
Controls GMT	<2	<2	<2

### BRSV SN Titers

As the test began some of calves had seroconverted, some were antibody negative. Calves at  $<$  or  $=$  to 1:16 were analyzed as a seroconverted, positive group; those at  $< 2$  were analyzed as a antibody negative group in determining seroconversion.

	<b>First Dose</b>		<b>Second Dose</b>			
	<b>Day 0</b>	<b>Day 21</b>	<b>Day 28</b>	<b>Day 35</b>	<b>Day 42</b>	<b>Day 49</b>
GMT						
Positive Group	6.3	58.6	83	138.9	171.0	215.0
Negative Group	<2	10.2	27.8	60.7	117.0	112.0
Controls	4.0	1.5	6.8	5.5	4.0	7.5