

Veal Calf MLV Vaccine Comparison

Key Points

EXPRESS® 5-HS, Bovi-Shield® 4 Comparison in Veal Calves

- Treated calves vaccinated with **EXPRESS® 5-HS** required significantly ($p=0.05$) fewer treatments than treated calves vaccinated with Bovi-Shield® 4.
- For every 1000 calves treated the dollar savings is at least \$900*.

Study Design

Test animals	73 veal calves in two veal barn rooms Each calf was randomly assigned to a treatment group
Test site	Commercial veal production unit in Ontario, Canada
Investigators	Practicing DVM, researchers, all blind to treatments

Average Geometric Mean Titers Following Vaccination Drop for All Calves

Control	No vaccination
Group 1	Bovi-Shield® 4
Group 2	EXPRESS® 5-HS

Sample Collection

Blood for antibody determination was collected on days 0 and 45.

Geometric Mean Titer Following Vaccination

Vaccine	BVD Type 1		BVD Type 2	
	Room 3	Room 4	Room 3	Room 4
Bovi-Shield 4	1:45	1:39	1:94	1:50
EXPRESS 5-HS	1:1198	1:738	1:236	1:400
Control	0	0	1:96	0

Average Geometric Mean Titers Following Vaccination for All Calves

Vaccine	BVD Type 1	BVD Type 2
Bovi-Shield 4	1:42	1:72
EXPRESS 5-HS	1:968	1:318
Control	0	1:48

No statistical analysis was run on titer responses.

Individual Calf Treatments and Repeat Treatments

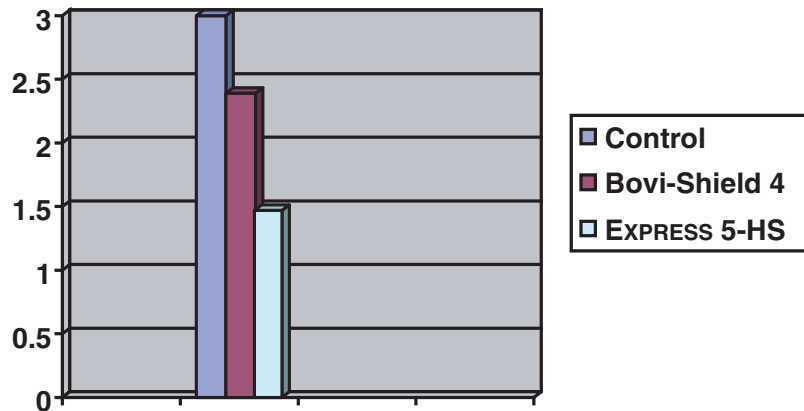
Vaccine	Room 3 Treatments	Room 3 Repeat Treatments	Room 4 Treatments	Room 4 Repeat Treatments	Total Repeat Treatments
Bovi-Shield® 4	13/17	10/13	5/14	2/5	12/18 (67%)
EXPRESS® 5-HS	13/16	7/13	10/17	2/10	9/23 (39%)
Control	3 /4	3/3	4 /5	2 /4	5/7 (71%)

Total and Average Treatments per Treated Calf

Vaccine	Treatments	Calves Treated	Average
Bovi-Shield 4	43	18	2.39 ^a
EXPRESS 5-HS	34	23	1.47^b
Control	21	7	3.00 ^a

Different letters indicate significant difference at p=0.05

Average Treatments per Treated Calf



The Bottom Line

- Bovi-Shield 4 vaccinated calves required 2.4 treatments; **EXPRESS 5-HS** vaccinated calves required 1.5 treatments per treated calf.
- Using **EXPRESS 5-HS** means 900 fewer treatments per 1000 calves treated than Bovi-Shield 4. That means savings of \$900 per 1000 calves treated.*
- In this study Excenel® at \$0.67 per treatment was used on most first and second treatments, Nuflor® or Micotil® at \$1.83 per treatment was used on most third and fourth treatments.
- Treated calves vaccinated with Bovi-Shield 4 required more expensive treatments on average than did calves vaccinated with **EXPRESS 5-HS**. Treatment costs do not include labor, potential trim due to reduced carcass quality from the extra injections, or reduced productivity.

*Assumes \$1.00 average cost per treatment.

Excenel is a registered trademark of Pfizer Inc.

Nuflor is a registered trademark of Schering-Plough Animal Health.

Micotil is a registered trademark of Elanco Animal Health, a division of Eli Lilly and Company.