Robust litters begin with Parvo Shield® L5E at prebreeding

- Provides broad-spectrum protection against parvovirus, five strains of leptospirosis and erysipelas, all of which cause reproductive loss
- Helps producers manage these diseases for consistent conception and farrowing rates, which can result in large litters of healthy pigs
- Is proven safe to be given to pregnant or nursing animals

Strong adjuvant, safe protection

Vaccines are formulated with adjuvants to strengthen and improve immune response. Adjuvants come in many formulas and activate the immune cells differently. Some are less irritating and less likely to reduce animal performance than others. A recent trial demonstrated[1]:

- Gilts given Parvo Shield® L5E had significantly ($P < 0.05$) less incidence of fever than gilts vaccinated with FarrowSure® Plus
- Sows given Parvo Shield L5E had significantly ($P < 0.05$) less incidence of severe injection-site reactivity vs. those given FarrowSure Plus

See back side for trial setup, data and analysis.

Dosing and administration

Vaccinate gilts and sows with a 5-mL dose intramuscularly four to six weeks prior to breeding, with a second dose in three to four weeks. Revaccinate with a single dose four to six weeks prior to each subsequent breeding.

In gilts, maternal antibodies to parvovirus may persist for five months or longer; that is why the first dose should be given no earlier than four to six weeks prior to breeding.

Boars should be vaccinated semiannually.

1. Hammer M., et al. Reactivity profile of two parvovirus erysipelas leptospira (PEL) vaccines – a safety study. *American Association of Swine Veterinarians*. 2006;217-220.

Broad-spectrum protection against parvovirus, five strains of leptospirosis and erysipelas.

Table 1:
Comparison of febrile rate incidence in response to one dose of vaccine by parity (mixed parity cohort)

	Number (and %) with fever		P value
Parity	Parvo Shield L5E[a]	FarrowSure Plus[b]	Within parity x vaccine treatment (rows)
0	0/24 (0%)	5/19 (26%)	0.0121
1+	1/39 (2.5%)	1/45 (2%)	NS (1.0)

[a] No significant difference (P = 1.0) within vaccine treatment x parity (columns)
[b] P = 0.0073 within vaccine treatment x parity (columns)

Table 2:
Comparison of inappetence incidence in response to one dose of vaccine by parity (mixed parity cohort)

	Number (and %) with inappetence		P value
Parity	Parvo Shield L5E[a]	FarrowSure Plus[b]	Within parity x vaccine treatment (rows)
0	5/24 (21%)	9/19 (47%)	NS (0.1021)
1+	0/39 (0%)	3/45 (7%)	NS (0.2448)

[a] P = 0.0060 within vaccine treatment x parity (columns)
[b] P = 0.0004 within vaccine treatment x parity (columns)

Table 3:
Comparison of severe injection-site reactivity incidence in response to one dose of PEL vaccine by parity (mixed parity cohort)

	Number (and %) with severe[a] site reactions		P value
Parity	Parvo Shield L5E	FarrowSure Plus	Within parity x vaccine treatment (rows)
0	0/24 (0%)	2/19 (10.5%)	NS (0.1894)
1+	0/39 (0%)	6/45 (13.3%)	0.0281

[a] Any lesion scoring ≥ 3 inches in diameter or three or more days of any detectable site reactivity

Safety profile of Parvo Shield L5E vs. FarrowSure Plus analyzed

Two recent trials compared Parvo Shield L5E, which uses an aluminum hydroxide adjuvant, with FarrowSure Plus, which uses an oil-based adjuvant.

Trial setup:

- A 1,200-sow, conventional-health commercial herd was used
- 122 nine-month-old gilts with no previous parvovirus-erysipelas-leptospira (PEL) vaccination
- 127 mixed-parity sows with a history of vaccination with FarrowSure Plus
- Both groups were randomly split – half received Parvo Shield L5E and half received FarrowSure Plus
- Approximately one-third of each vaccine treatment group consisted of parity 1 gilts and the remaining two-thirds was composed of a mixture of parities 1 through 8 (referred to as parity 1+)

Febrile response

Temperatures were recorded daily post-vaccination. No statistical differences were detected for febrile response for swine receiving Parvo Shield L5E between parity 0 and parity 1+ groups (Table 1). However, animals receiving one dose of FarrowSure Plus demonstrated significantly higher febrile response when parity 0 rates were compared to parity 1+ rates.

No statistical differences in febrile response were detected between subgroups of parity 1+ swine vaccinated with either vaccine. However, in parity 0, swine vaccinated with FarrowSure Plus had significantly ($P < 0.05$) higher rates of febrile response than swine vaccinated with Parvo Shield L5E.

Inappetence

Feed consumption was scored as 0 (all feed consumed) or 1 (not all feed consumed). Both vaccine groups showed a significant difference in inappetence for 0 parity subgroup vs. their respective 1+ parity subgroup (Table 2).

No statistical differences in inappetence were detected between subgroups of parity 0 or parity 1+ swine vaccinated with either vaccine.

Injection-site reactivity

Injection-site reactions were scored as 0 (no reaction), 1 (<3-inch diameter reaction or swelling = mild), 2 (>3-inch diameter reaction or swelling = severe). Any injection-site lesion lasting for three or more days was categorized as severe.

Both vaccine groups showed no statistical differences in injection-site reactivity between their respective parity 0 and parity 1+ groups or the parity 0 groups when the vaccines were compared against each other.

However, there was more severe injection-site reactivity in the parity 1+ subgroup given FarrowSure Plus than the 1+ subgroup given ParvoShield L5E (Table 3). This difference was not seen in the parity 0 subgroup.

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