HUVEPHARMA®

BLUE V SEAL®
UdderCare solutions

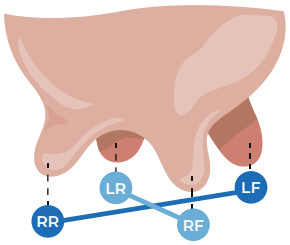
Udder Care | Technical bulletin 3

Implementation of a prepartum teat sealant protocol reduces somatic cell count at first calving in heifers

Objective

To develop a practical pre-calving protocol for first calf heifers using a non-intrusive teat sealant (Blue V Seal®) to lower the incidence and severity of intramammary infections.

Study design



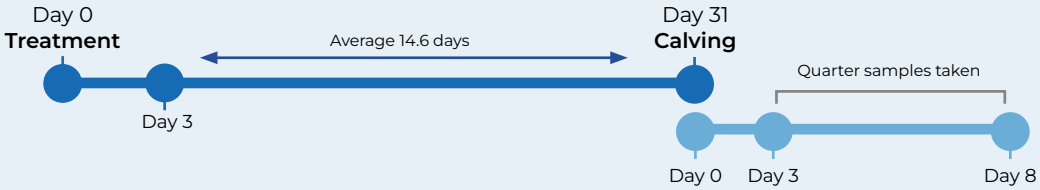
Sealant was applied diagonally to either **left front + right rear** teat, or **right front + left rear** teat (as shown).

Group 1
Treated
BLUE V SEAL

Group 2
Untreated

Group 3
Unhandled

Timeline
All three groups were monitored under identical timeline parameters.



Results

Percentage of quarters at selected somatic cell count (SCC) thresholds

SCC	Treated	Untreated	Unhandled
≤50,000	27.14%	24.29%	15.79%
≤100,000	57.14%	41.43%	57.14%
≤125,000	**65.71%**	**45.71%**	**48.05%**
≤150,000	**71.43%**	**57.14%**	**51.32%**
≤200,000	78.57%	62.86%	59.21%
≤250,000	81.43%	72.86%	65.79%
500,000	8.57%	18.57%	22.37%
Mean SCC (cells/mL)	201,380	351,640	393,840

- Treated quarters had a lower SCC than untreated quarters on the same heifers (201,380 *vs.* 307,080 cells/mL).
- Treated quarters showed significantly lower SCCs compared with the untreated quarters (201,380 *vs.* 351,640 cells/mL).
- Treated quarters had fewer clinical infections than non-treated quarters (8.57% *vs.* 18.57% and 22.37%, respectively).

Effect of treatment on SCC of cows showing clinical mastitis and non-clinical mastitis

Mean SCC (cells/mL)	Treated	Untreated	Unhandled
Before excluding cows with >500,000 cells/mL	201,380	351,640	393,840
After excluding cows with >500,000 cells/mL	88,590	127,130	132,580

- The mean SCC decreased across all groups after excluding cows with SCCs exceeding 500,000 cells/mL.
- There was a significant difference between the SCC in treated quarters and both untreated groups.
- There was no significant difference in SSC between the untreated quarters of both groups.

Conclusions

Implementing a teat sealant protocol in heifers is a cost-effective strategy to reduce the risk of mastitis. Application of the sealant BLUE V SEAL® 1 to 3 weeks prior to calving has been shown to significantly lower somatic cell counts, even in the absence of clinical infection.

References

Charnetzki Todd C. Effect of a non-intrusive periparturient protocol to decrease somatic cell count at first calving. NMC Annual Meeting Proceedings, 2006.

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