

# Treatment with Meloxidyl before farrowing did not reduce the proportion of still born piglets

L.U. Hansen<sup>1</sup> and M.B.F. Nielsen

<sup>1</sup>SEGES Innovation, Denmark

## Background

A common feature in modern pig production is increased litter size. Studies suggest that piglets suffering from asphyxia during delivery are less viable at birth.

The later the piglets were born in a litter, the higher is the risk of being stillborn. For the first few piglets in a litter, the risk of being stillborn was only 2 %, whereas this increased to 17 % in piglets born as number 13 later (Langendijk et al., 2018).

Farrowing is a critical period for the sow. During expulsion, a moderate degree of asphyxiation in the piglet is normal. However, later born piglets are likely to suffer from asphyxiation to a greater degree because of the cumulative effects of the successive contractions.

## Objective

The aim of this study was to investigate the effect of a pre-farrowing Meloxidyl (Ceva Santé Animale) treatment on the frequency of still born piglets.

## Materials and Methods

Sows in six farms were included in the study. Before farrowing, the sows were divided into two groups and randomized to achieve even parity.

The study comprised two groups:

- Control: No treatment
- Treatment: Sows were treated intramuscularly with 5 ml Meloxidyl (20 mg/ml). First treatment was given two days before expected farrowing. If the sow did not give birth within 24 hours, a second treatment was given. The sows would maximum receive 2 treatments. Sows farrowing later than 2 days after 1st treatment were still included in the study.

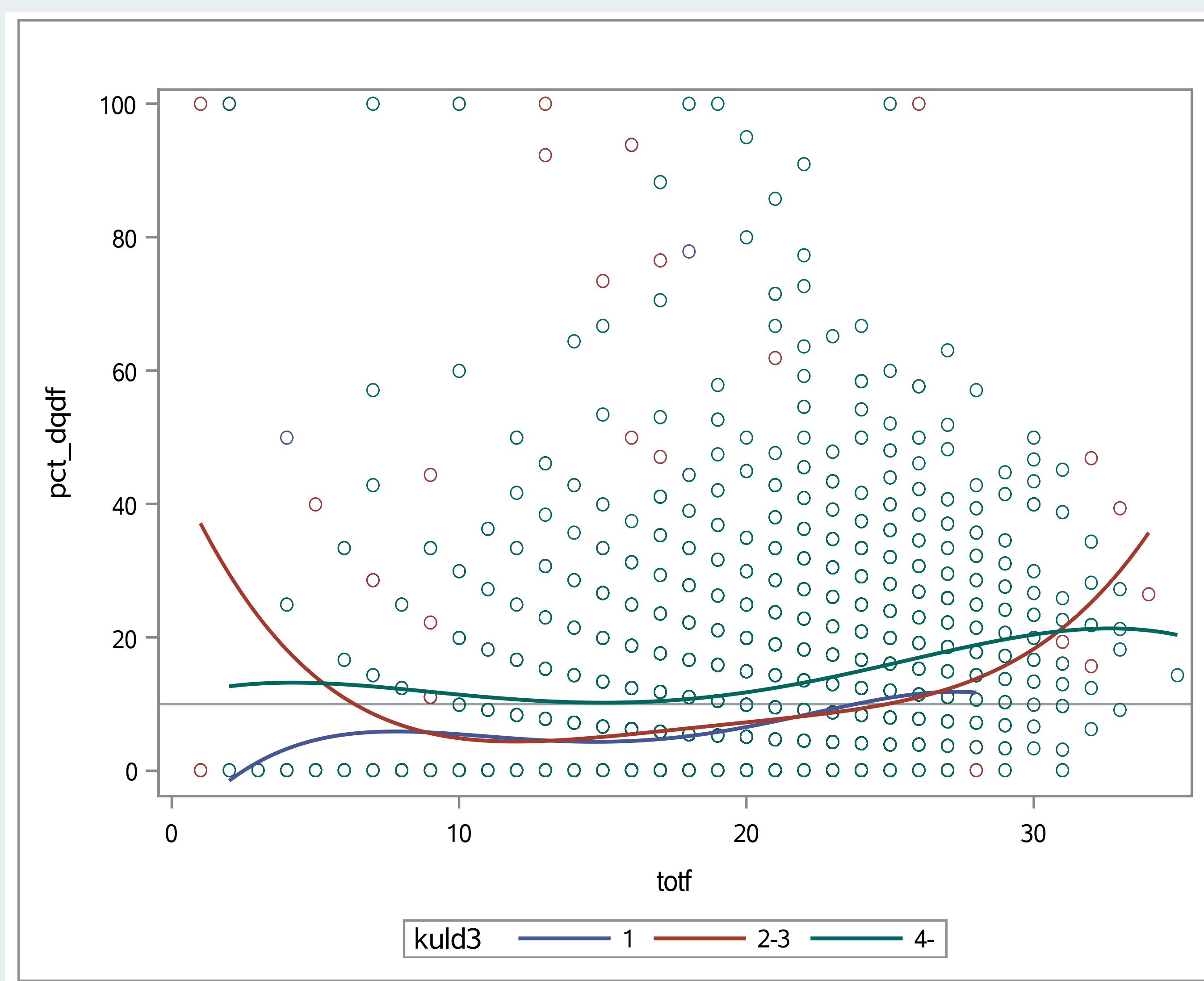
The experiment was performed with a permission from the Danish Medicines Agency (file number 2019101315).

## Results

The study comprised 8,029 sows. The average parity was 3.4. The average litter size was 19.8 total born piglets in both groups. There was no effect on the frequency of still born piglets between control and treatment (8.6 % and 8.4 % stillborn piglets per litter respectively).

Regardless of group about 20 % of the sows contributed with 50 % of the still born piglets. Only a few per cent of the sows had more than 8 still born piglets in both groups.

Data were analyzed for effect of parity “1st parity”; “2nd and 3rd parity”; “4th and older” (figure 1) and there was found a significant difference in the proportion of still born piglets in the litter between parity. The older the sow the larger percentages of still born piglets ( $P < 0.0001$ ). At the same litter size, older sows had app. 5 % more still born piglets per litter than younger sows. If the litter size was above app. 20 piglets, the percentage of still born piglets increased.



**Figure 1.** Correlation between the percentages of still born piglets and parity (1st parity; 2nd and 3rd parity; 4th and older). Totf=total born piglets; pct\_dqdf=proportion of still born piglets; kuld3=parity.

## Conclusion

Treatment of sows with 5 ml Meloxidyl (20 mg/ml) before farrowing did not reduce the proportion of still born piglets. When correcting for litter size, then gilts have the same proportion of still born piglets as 2nd and 3rd parity sows. Older sows have more still born piglets per litter than younger sows, no matter the litter size.



**CONTACT:** Lisbeth Ulrich Hansen | +45 4081 3112 | luh@seges.dk