

## Public Abstract

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Title:ESTRUS INDUCTION AND MAINTENANCE OF CYCLES IN GILTS WITH PG-600 AND BOAR EXPOSURE

The ability to induce puberty in gilts at an earlier and predictable age can facilitate introduction into the breeding herd. One method to initiate puberty (PG-600; Intervet), elicits estrus in a majority of gilts. However, a proportion of those gilts do not recycle normally. This study looked at the efficacy of PG-600 and boar exposure alone and in combination to induce and maintain regular cycles. Gilts were presumed prepubertal on arrival from the multiplier and randomly assigned to one of four treatmentst: PG-600, weekday 10 min full physical contact boar exposure (BE), PG-600+BE, and neither PG-600 nor BE (control). Detection of estrus was performed during BE or during two minutes of fence-line boar exposure. Gilts were considered in estrus when they stood to be mounted. PG-600 and PG-600+BE gilts had a higher percentage in estrus within seven d than the BE and control treatments (69.4, 80.8 versus 25.1 and 12.5%, respectively). Eighty-five of 146 gilts in estrus within seven d returned to estrus 18 to 23 d later. Although the BE and control groups had fewer gilts respond within seven d, a larger proportion recycled within 18 to 23 d; (100% of BE versus 78% control and, 55.8% and 50% for PG-600 and PG-600+BE respectively). The greatest response was to PG-600. Response to BE is dependent on many factors, and in this study was lower than expected. Addition of daily boar exposure to PG-600 did not result in dramatic increase in proportion maintaining cycles and may not be warranted.