

Determining Timing of Ovulation in Sows for Successful Artificial Insemination

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Background

If insemination is performed with fresh extended semen during the 24h period before ovulation, there is a strong likelihood of successful fertilization of a large number of eggs. Timing the insemination with ovulation is crucial for success.

Objective

To determine the time of ovulation in weaned sows treated with pregnant mare serum gonadotrophin (PMSG) at weaning and pLH 80 h later.

Results

Seventeen sows were given 600 IU PMSG (Novormon®) at weaning and 5 mg pLH (Lutropin-V®) 80 h later. The time of ovulation was determined using transrectal real-time ultrasonography (RTU). The time from pLH treatment to ovulation ranged from 34 h 16 min to 42 h 30 min (average 38 h 11 min).

Take Home Message

- Based on this preliminary trial, it appears the hormonal regimen results in a controlled and predictable ovulation time.
- A large scale study needs to be performed to determine if this regimen can be used to synchronize the ovulation and insemination of sows on a commercial unit. The benefits would include being able to breed all weaned sows on the same day and with a single insemination.

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