The effect of PG600 at weaning on sow performance

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Maintaining a consistent flow of good quality weaned pigs should be the principal goal of a commercial swine operation, and to achieve this, producers must consistently meet weekly breeding targets. PG600 (400 IU eCG and 200 IU hCG; Intervet, USA, De Soto, KS) has been proven to induce a synchronized estrus in weaned sows. The primary objective of this study was to determine effects of PG600 treatment at weaning on the percentage of sows bred and subsequent litter sizes.

Primiparous crossbred (PIC C22 and C29) sows from a 5,000 sow commercial farrow-to-wean facility were initially allocated to experiment by farrow weight and genetics to 1 of 2 treatments: 1) PG: PG600 (n = 189) administered intramuscularly in the sow's neck on the morning of weaning or 2) CON (n = 218): no treatment at weaning. Sows were bred according to herd protocol, depending on the day estrous was first detected. Considering all sows assigned to treatment, there was no difference between PG and CON sows for the percentage of sows in heat within 7 days of weaning ($P > 0.05$; 92.1 vs 88.1%, respectively). The percentage of sows bred over a 3-d period (d 3-5 after weaning) was higher in PG than CON sows ($P < 0.0001$; 85.2 vs 75.2%, respectively) and consequently, weaning to estrus interval was reduced in PG versus CON sows ($P < 0.0001$; 4.0 ± 0.07 d vs 4.4 ± 0.07 d, respectively). For those sows bred within 7 d of weaning, farrowing rate (82.8 vs 86.4%), total born (12.2 ± 0.3 vs 12.9 ± 0.3) and born alive (11.6 ± 0.3 vs 12.1 ± 0.3) were similar ($P > 0.05$) between PG and CON sows, respectively.

Implications: Although the performance of PG and CON were similar in the current study, the advantage PG600 at weaning was realized in a tighter and more synchronous breeding "week" of 2-3 days, which in turn, focuses heat stimulation, heat detection and breeding into a narrower time window resulting in a decrease in the spread of time at farrowing of the subsequent litter and thus age at weaning.