Effect of a synthetic recombinant eCG on follicular development and ovulation in anestrous ewes

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Objective

- Evaluate the effect of a synthetic recombinant eCG as an alternative to native eCG in ewes during seasonal anestrous.

Materials and Methods

- *n*= 31 anestrus multiparous Corriedale ewes.

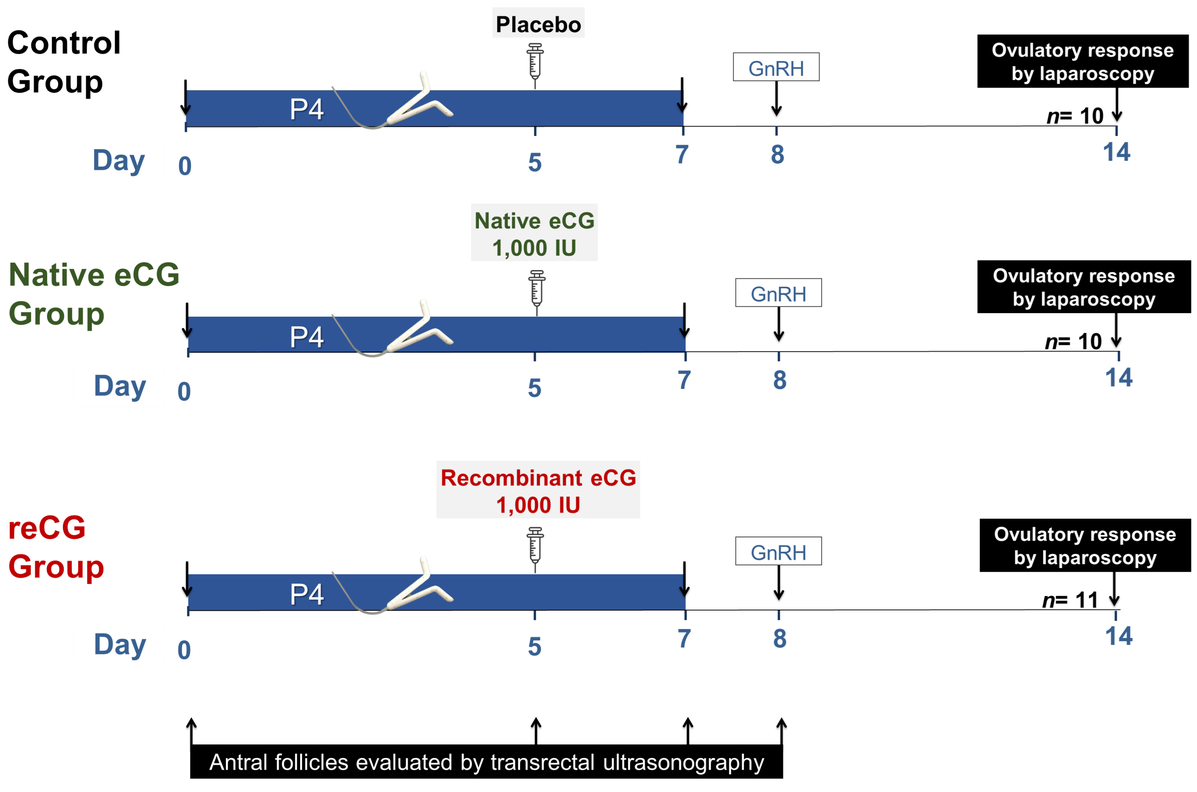

Figure 1. Experimental design.

- P4 - 0.3 g progesterone (DICO, Zoetis).
- GnRH - 100 µg gonadorelin acetate (Gonasyn, Zoetis).
- Antral follicle population (> 2 mm) were evaluated by ultrasonography (7.5 MHz, M–7 Vet Premium, Mindray, Shenzhen, China).
- Statistical analysis: ANOVA.

Results

- Ovulation occurred in 50% (5/10) treated ewes for the control group and in 100% treated ewes for native eCG group (10/10) or recombinant eCG (11/11) group (*P*< 0.05).

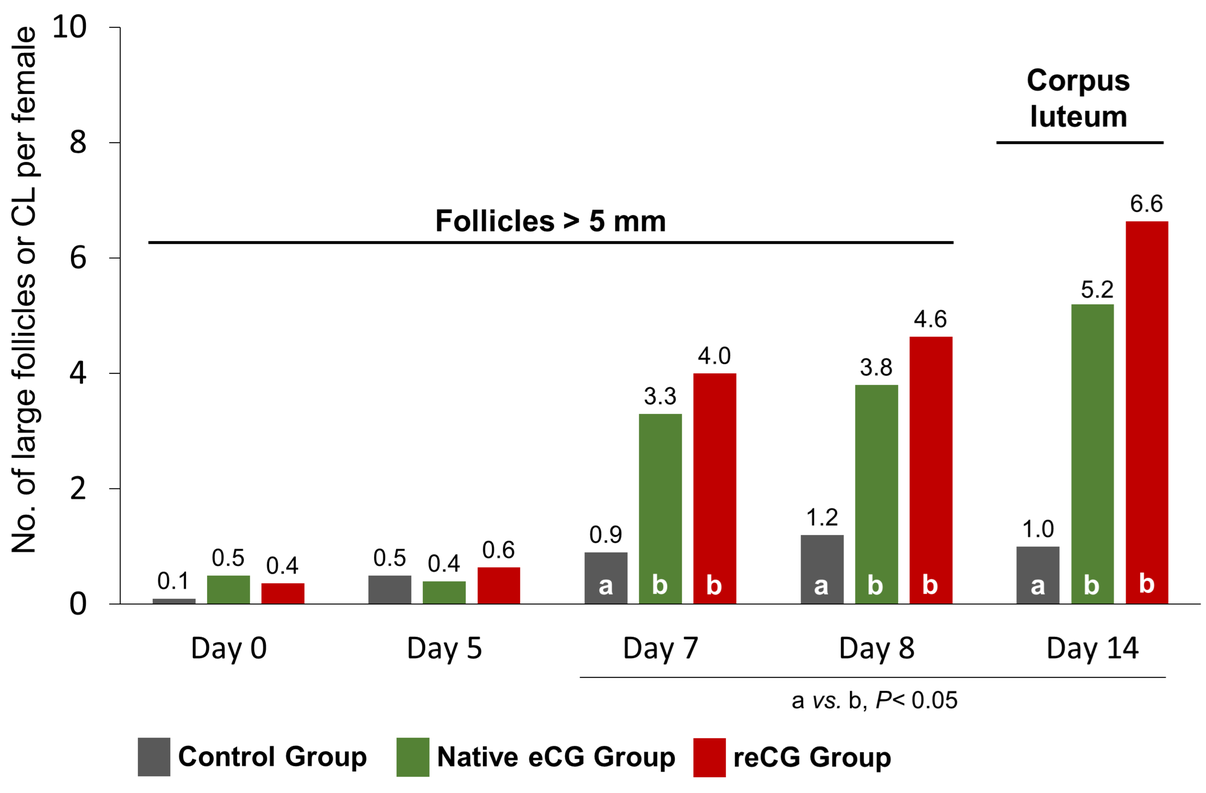

Figure 2. Ovarian response after placebo, native eCG and recombinant eCG treatment in anestrus ewes.

Conclusion

The synthetic eCG–like glycoprotein has similar biological activity than native eCG in terms of follicular response and ovulation rate in anestrous ewes.