

Effect of 400 IU of eCG-like glycoprotein or native eCG on the reproductive performance in suckled beef cows in Argentina

M.G. Moscoso ², L. Cutaia ³, S. Pérez Wallace ³, C. Romano ¹, L. Alisio ², D. Moreno ²

¹ Actividad Privada

² Facultad de Ciencias Agropecuarias, Universidad Católica de Córdoba, Argentina

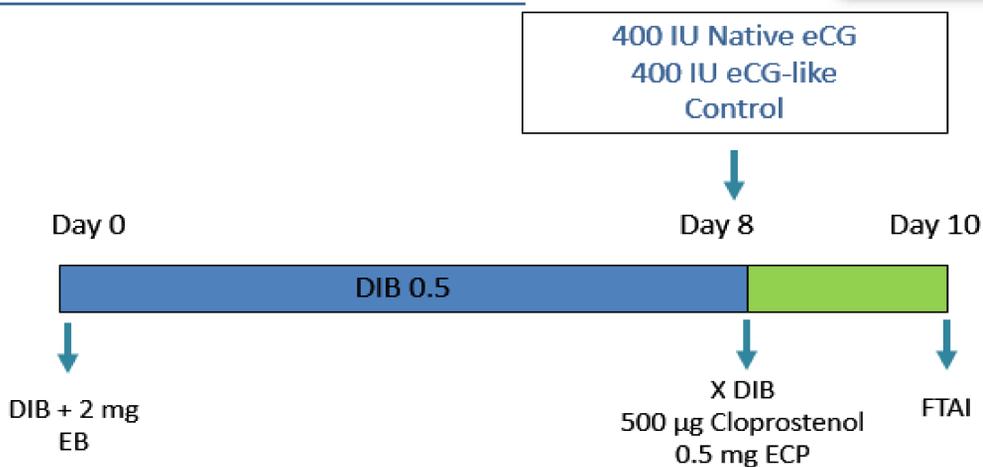
³ Syntex SA, Argentina, lcutaia@syntexar.com

Introduction

The objective of this experiment was to compare an eCG-like glycoprotein produced by recombinant technology with native eCG on the reproductive performance in a TAI program in suckled beef cows in Argentina



Materials and Methods



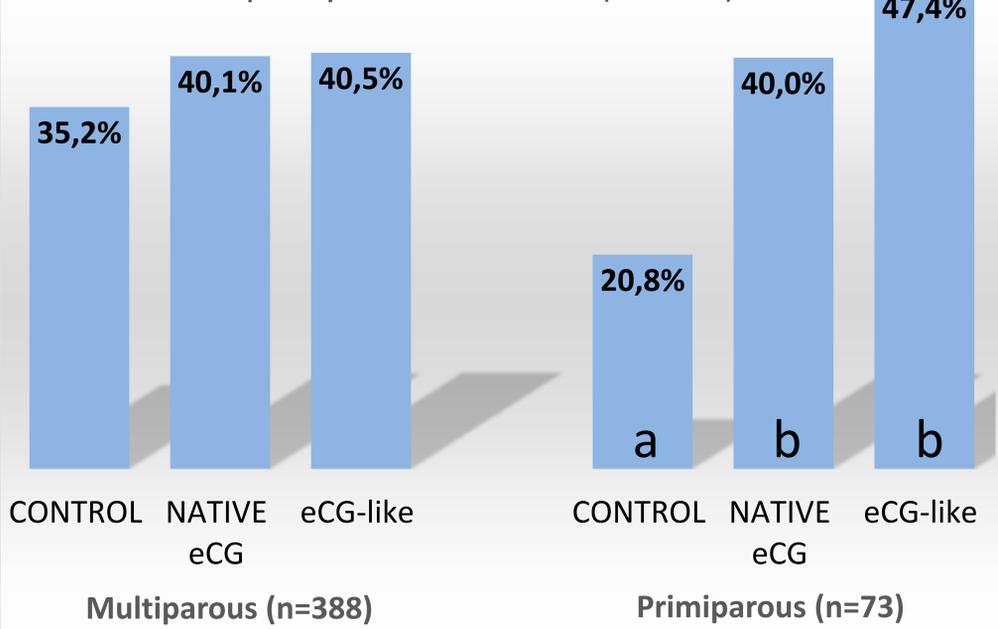
* PD (Day 80)

Suckled Braford multiparous (n=388) and primiparous (n=73) cows with an $AVG \pm SD$ of body condition score (BCS) was 2.45 ± 0.32 (scale 1-5) and 90 days after calving were ultrasound on Day 0 to determined anestrous and were treated with the same TAI progesterone–estradiol protocol. Pregnancy diagnosis was performed by ultrasound at Day 80. Response variable was FTAI pregnancy rate (PR); first 42 days' pregnancy rate (P42) explanatory variables were treatment, parity, anestrous, BCS at Day 0 and 80, BCS change and their interactions. Statistical analysis was performed by logistic regression (Infostat[®])

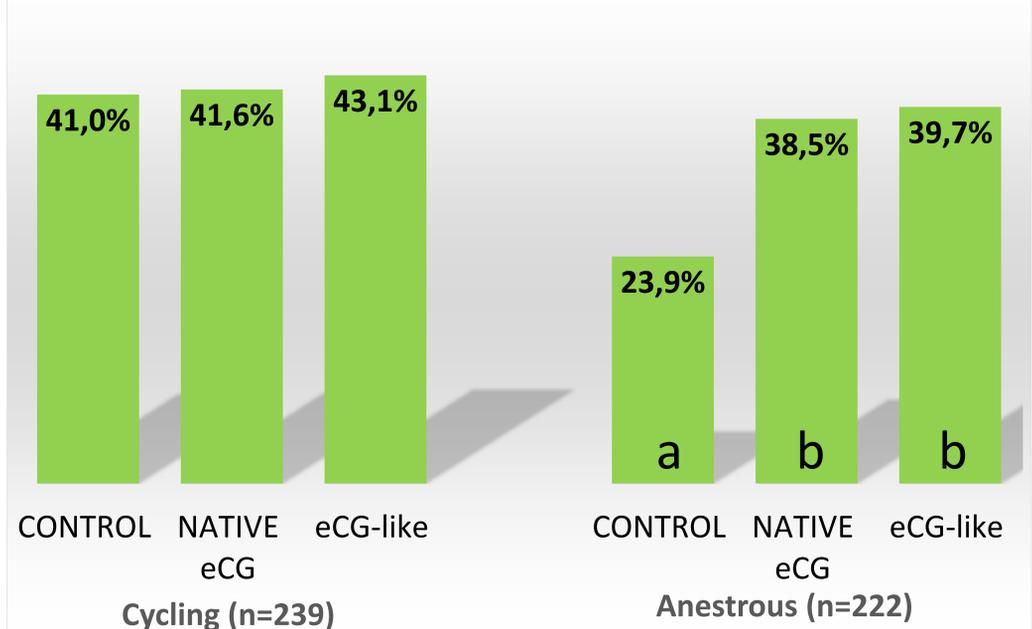
- ✓ EB: Estradiol benzoate (Gonadiol[®], Syntex)
- ✓ DIB: Intravaginal device (0.5 gram of P4, DIB0.5[®], Syntex)
- ✓ Native eCG: 400 IU of equine chorionic gonadotropin (Novormon[®], Syntex)
- ✓ eCG-like: 400 IU eCG-like glycoprotein (PCT/EP2019/073277, Syntex)
- ✓ PGF: 500 µg Cloprostenol sodium (Cyclase[®], Syntex)
- ✓ ECP: estradiol cypionate (Cipiosyn[®], Syntex)
- ✓ PD: Pregnancy diagnosis
- ✓ FTAI: Fixed time artificial insemination

Results

Interaction of parity and treatment ($P < 0.05$)



Interaction of anestrous and treatment ($P < 0.05$)



- PR was 38.2% and was affected by the interaction of anestrous and treatment ($P < 0.05$) and the interaction of parity and treatment ($P < 0.05$).
- eCG-like and native cows has higher PR than control (41.4%, 40.1% and 32.9%; $P < 0.05$).

- P42 was affected by the interaction of anestrous and treatment ($P = 0.03$). The treatment with reCG and NAT increase the P42 than CON in anestrous cows (60.2%, 67.9% and 50.7%), however in cyclic cows the P42 was similar (70.8%, 62.9% and 65.4%)

Conclusions

eCG-like glycoprotein produced by recombinant technology and native eCG increased the reproductive performance in primiparous or anestrous suckled beef cow.