# Effect of 400 IU of eCG-like glycoprotein or native eCG in lactating dairy cows on TAI pregnancy rate

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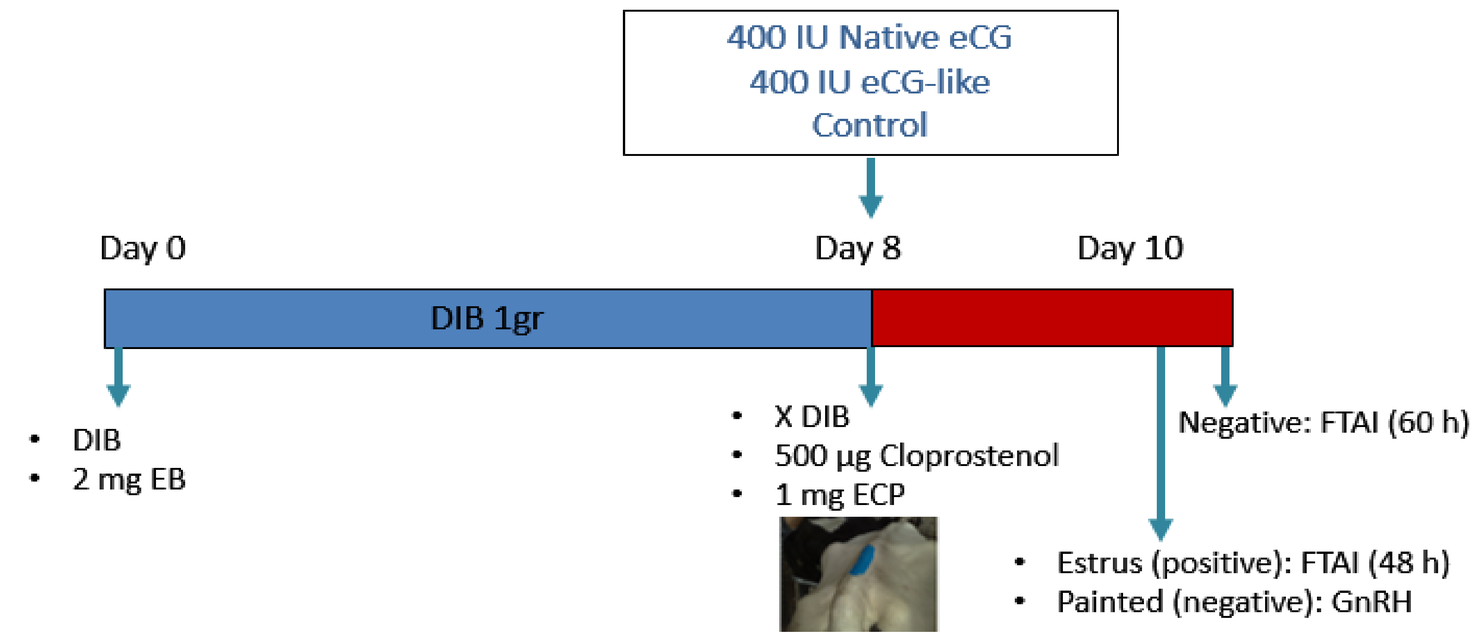
## Introduction

The aim of this experiment was to compare the effect of the application of 400 IU of eCG-like glycoprotein produced by recombinant technology with native eCG on the pregnancy rate in dairy cows treated with progesterone and estradiol-based TAI program in dairy cows in Argentina.

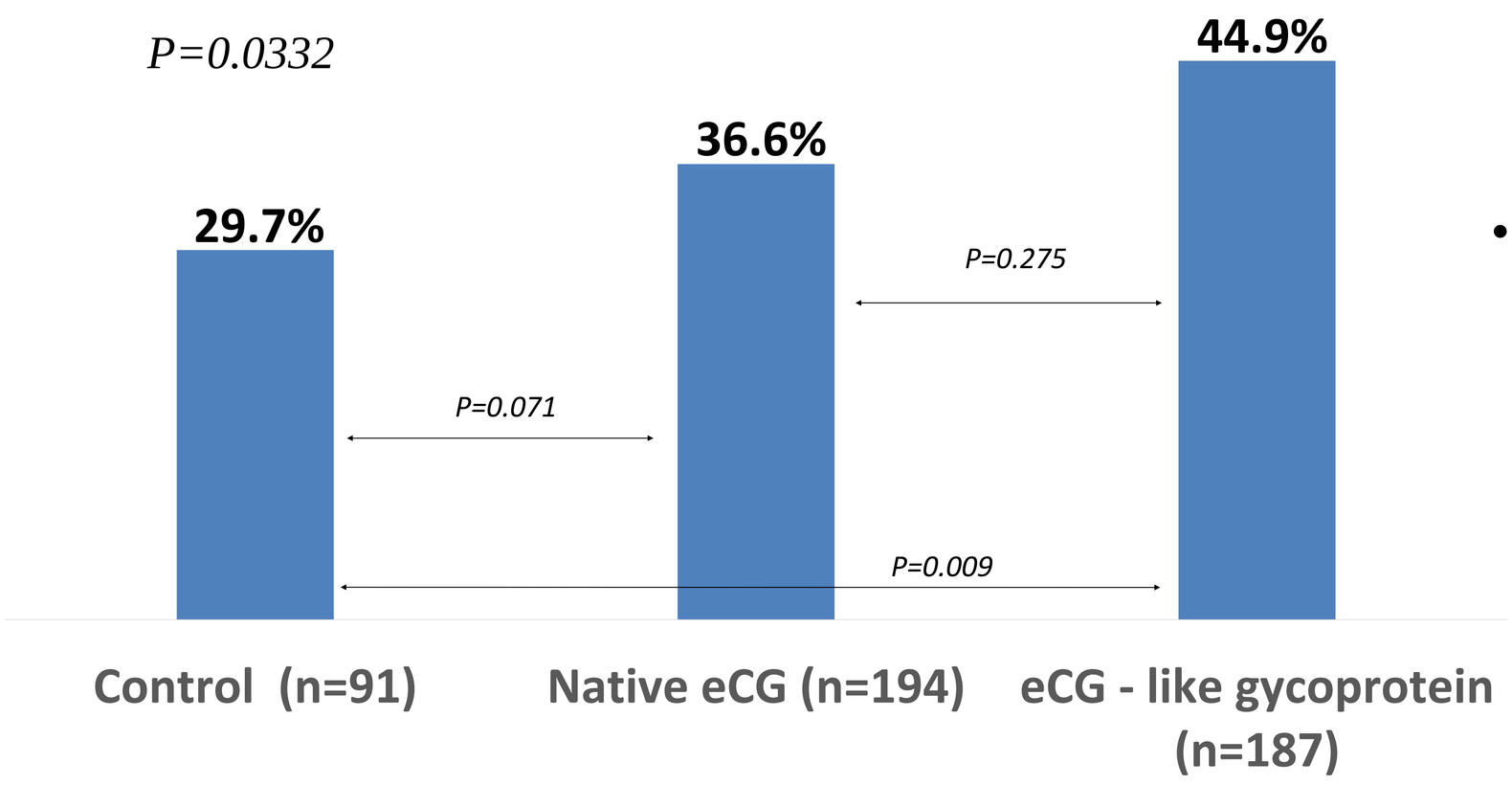
## Materials and Methods




The experiment was conducted in three commercial dairies in Cordoba Province (Argentina) where 472 Holstein cows with a body condition score of 2.9±0.3 (avg± SD, scale 1-5), 2.0±1.3 lactations, 124±100 days after calving, number of previous breeds 0.8±1.7 and a production of 27.3±8.3 liters/cow/day. All cows were treated with the same FTAI progesterone and estradiol-protocol. Response variable was pregnancy rate (PR) and explanatory variables were treatment, days in milk, body condition score, milk production, ovarian structure on Day 0, lactation, breed number, milk production, estrous manifestation at 48 h (or GnRH treatment) and their interactions. Statistical analysis was performed by logistic regression.

- ✓ EB:Estradiol benzoate (Gonadiol®,Syntex)
- ✓ DIB: Intravaginal device (1 gram of P4, DIB®, 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)
- ✓ GnRH: 100 µg gonadorelin acetate (Gonasyn®, Syntex)
- ✓ ECP: estradiol cypionate (Cipiosyn®, Syntex)
- ✓ FTAI: Fixed time artificial insemination

## Results




- The overall PR was 38.6% (182/472) and was affected by the treatment (*P=0.0332*).

## Conclusions

eCG like-glycoprotein produced by recombinant technology and native eCG increase equally the PR in a progesterone and estradiol-based synchronization protocol.