

Administration of two doses of recombinant bovine somatotropin reduces cell damage in vitrified/warmed embryos from superovulated Pelibuey ewes

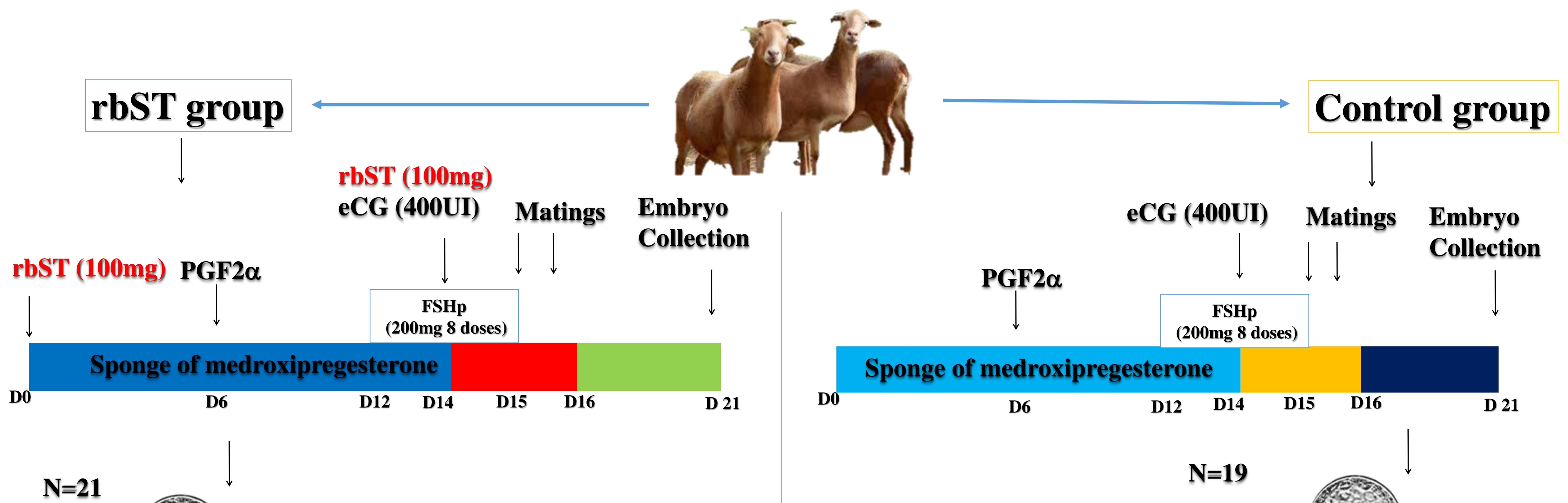
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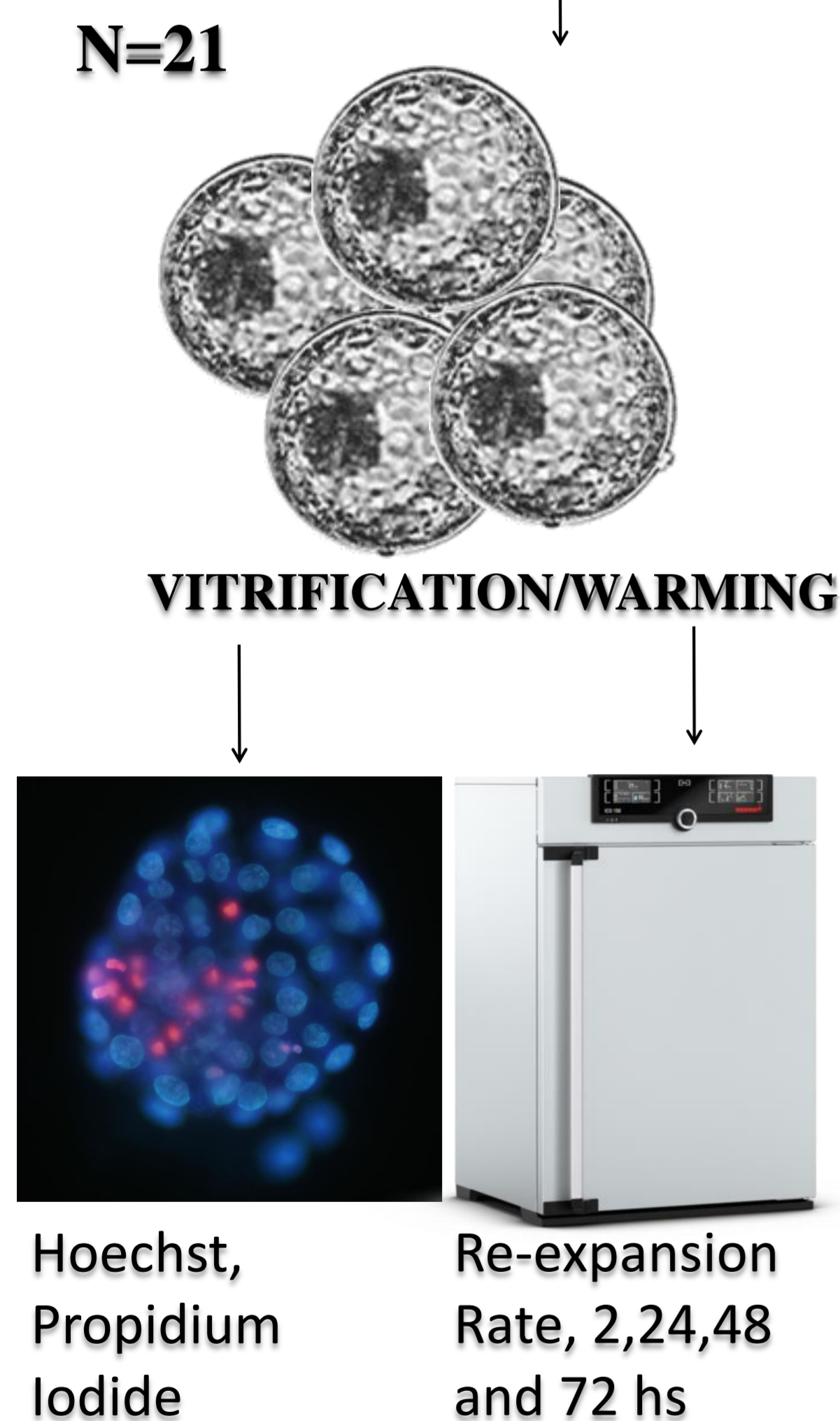
Objective

This study aimed to evaluate the effect of applying rbST during the superovulation (SOV) of Pelibuey sheep on the cryotolerance of vitrified embryos.

Materials and Methods

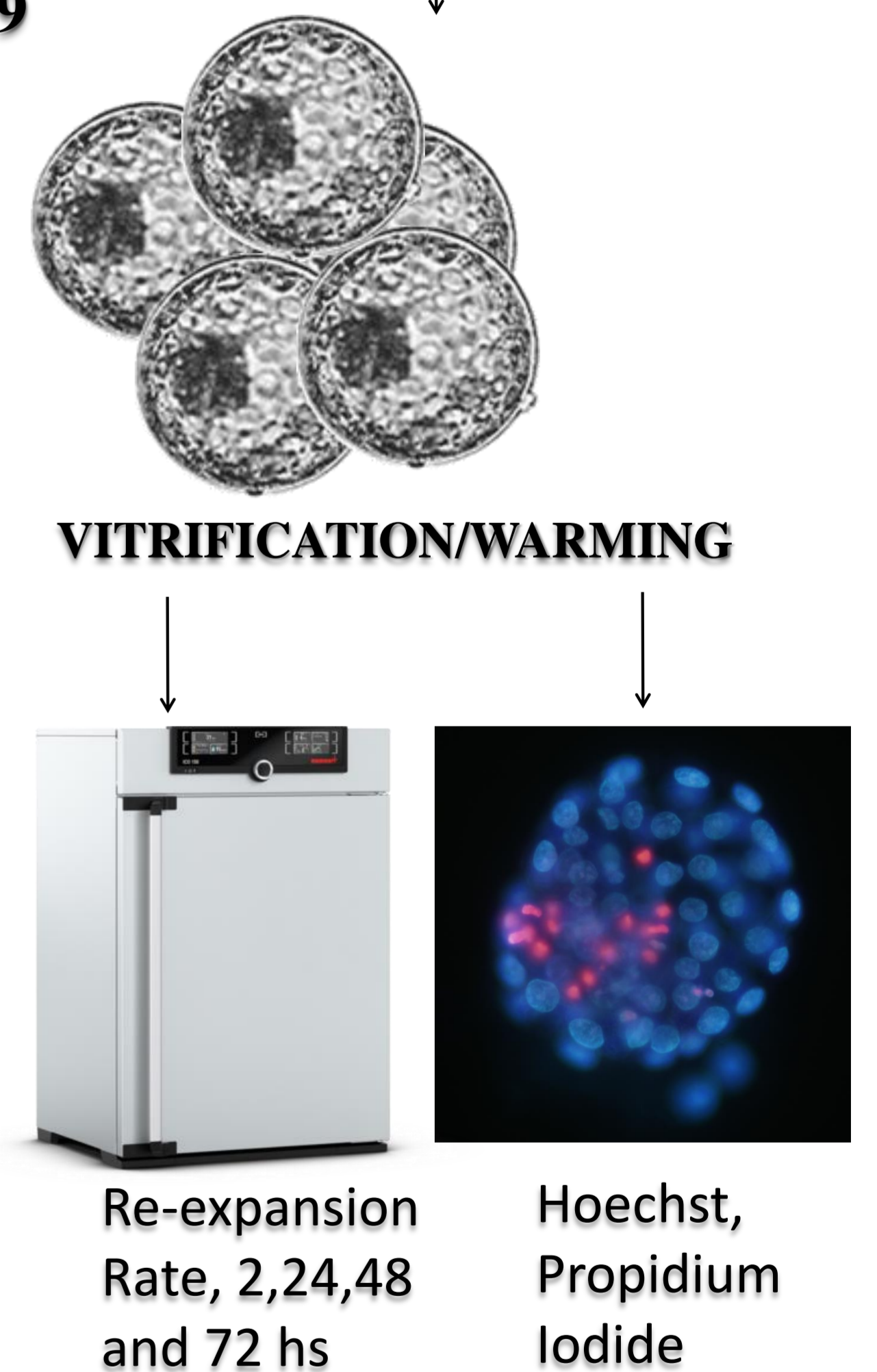


Results



| Treatments | Reexpansion (%) | | | | Hatched (%) | | |
|---------------|-----------------|------|------|------|-------------|------|------|
| | 2hs | 24hs | 48hs | 72hs | 24hs | 48hs | 72hs |
| Control(n=10) | 100.0 | 90.0 | 90.0 | 90.0 | 40.0 | 90 | 90.0 |
| rbST (11) | 90.0 | 72.7 | 81.8 | 72.7 | 45.4 | 54.5 | 72.7 |

| Treatments | Embryos (n) | Blastomeres (n) | | |
|------------|-------------|-----------------|-------------------------|-------------------------|
| | | Total | Altered | Intact |
| Control | 10 | 95.4 ± 5.1 | 10.0 ± 1.5 ^a | 89.2 ± 1.6 ^a |
| rbST | 11 | 93.1 ± 4.8 | 5.1 ± 1.4 ^b | 94.5 ± 1.4 ^b |



Conclusion

Administration of two doses of rbST to superovulation protocol of Pelibuey sheep did not affect rates re-expansion and hatching at 2, 24, 48, and 72 hours, but reduced plasma membrane damage in blastomeres after embryo vitrification/warming.