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## SHORT CO-INCUBATION TIME IN BOVINE IVF WITH OPU OOCYTES AND SEX-SORTED/UNSORTED SPERMATOZOA



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<u>Objectives</u>: Investigate the effects of reducing the duration of gamete co-incubation time on the performance of bovine IVF with OPU oocytes and sex-sorted/unsorted frozen-thawed semen.

### Materials and Methods

# Sex-Sorting Bovine OPU oocytes Capacitation IVM

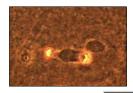
IVF

### Results

| Coincubation time/<br>/Sorted-Unsorted | % PEN<br>(sem)      | % MON<br>(sem)       | % MPF<br>(sem)       | % PERF<br>(sem)     |
|--|---------------------|----------------------|----------------------|---------------------|
| 4 h<br>Sorted                          | <b>9.09</b> (9.87)  | 100<br>(32.15)       | <b>50.0</b> (27.1)   | <b>50.0</b> (26.03) |
| 4 h<br>Unsorted                        | <b>25.0</b> (11.57) | <b>50.0</b> (22.73)  | <b>50.0</b> (27.1)   | 25.0<br>(18.41)     |
| 8 h<br>Sorted                          | <b>44.44</b> (8.91) | <b>50.0</b> (13.13)  | 0                    | 0                   |
| 8 h<br>Unsorted                        | <b>55.56</b> (8.91) | <b>73.33</b> (11.74) | 0                    | 0                   |
| 12 h<br>Sorted                         | <b>65.38</b> (9.07) | <b>82.35</b> (11.03) | <b>78.57</b> (10.24) | <b>64.71</b> (8.93) |
| 12 h<br>Unsorted                       | <b>69.57</b> (9.65) | <b>75.00</b> (11.37) | <b>33.33</b> (11.07) | <b>25.0</b> (9.20)  |

PEN (Penetration): From matured oocytes, MON (Monospermy). MPF (Male Pronucleus Formation): Monospermic oocytes from total penetrated oocytes.

PERF (Performance): Monospermic oocytes from total matured oocytes.





Evaluation

### **Conclusions**

- 1. No differences were found in bovine IVF with OPU oocytes and sex-sorted/unsorted spermatozoa.
- 2. For OPU oocytes, the reducing of gamete coincubation time during IVF affected adversely PEN, MPF and PERF.
  - 3. Regardless sperm treatment used, best results were obtained for 12 hpi.



