



## Synchronisation protocol options for EU accredited beef properties



The protocols presented are designed from the most recent research in beef cattle fixed time artificial insemination (FTAI) that do not require the use of oestradiol benzoate\*. These protocols feature an extended length between removal of the Cue-Mate® device and the time of ovulation, which has been associated with optimal fertility.

## Simple FTAI

Protocols for those that wish to take the simple approach to enable FTAI.

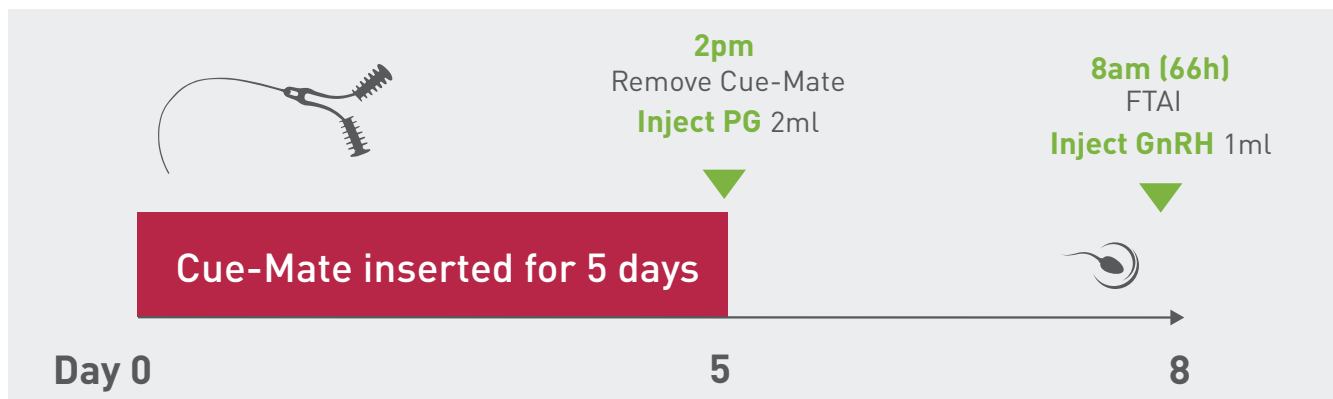
### Features:

- Morning AI activities for all types of cattle.
- Cows require two injections of PG on Day 5 (at least 8 hrs apart) to ensure full regression of the CL, which is necessary for ovulation to occur.
- Protocols are appropriate for both *Bos taurus* and *Bos indicus* cattle.
- eCG may be administered at Day 5 if desired.
- No requirement for heat detection.

### Purpose:

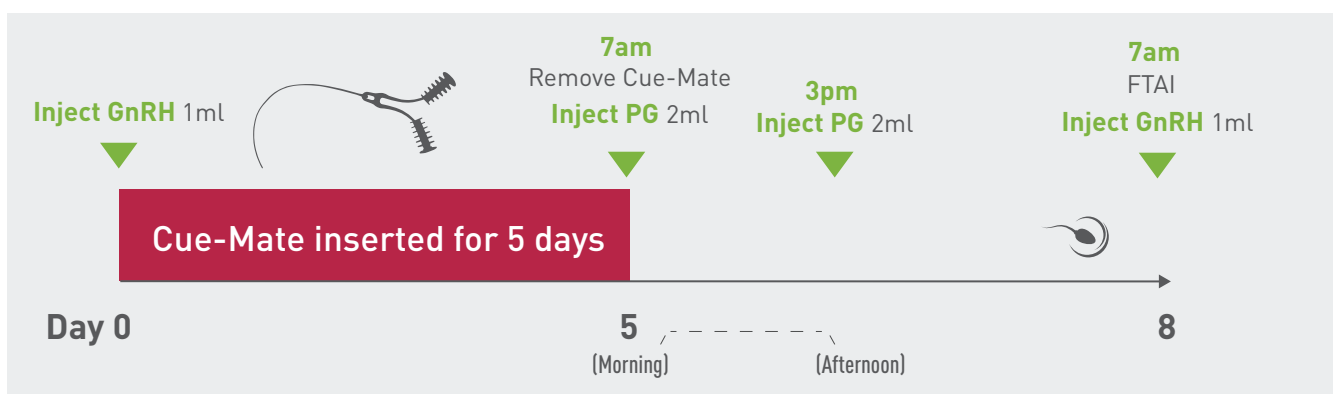
- Synchronisation of cows/heifers for FTAI
- Synchronisation of recipient cows/heifers for transfer of either ET or IVF embryos.

## Heifers



Note: For *Bos indicus* heifers, use a 1-pod Cue-Mate

## Cows



## FTAI with heat detection

Protocols for those that want to enjoy the benefits of FTAI, but are happy to spend a little more time to get the best result per straw of semen used.

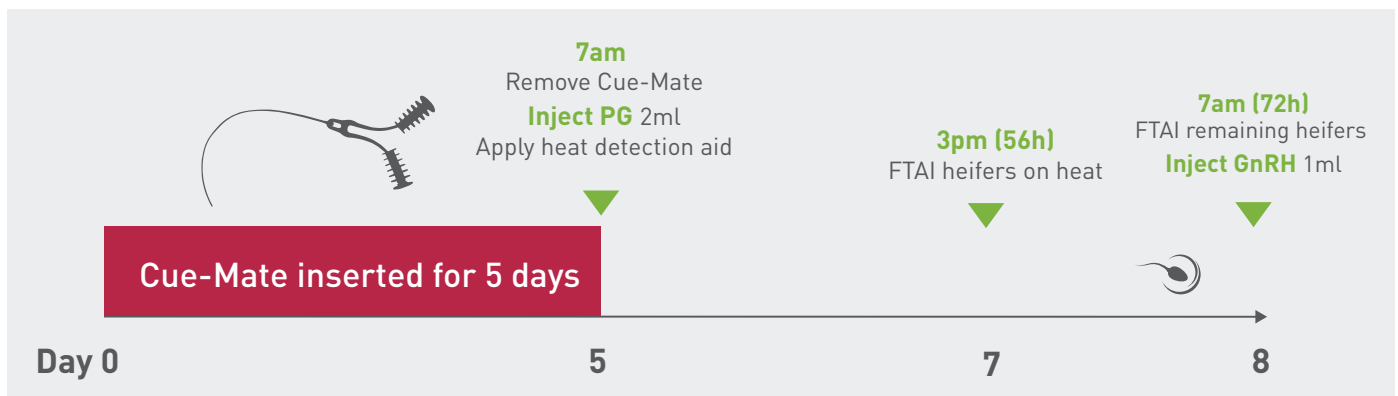
### Features:

- Cows require two injections of PG on Day 5 (at least 8 hrs apart) to ensure full regression of the CL, which is necessary for ovulation to occur.
- Protocols are appropriate for both *Bos taurus* and *Bos indicus* cattle.
- eCG may be administered at Day 5 if desired.
- Heat detection aids (Tail Paint, Estroprotect or Kamar) are used to select heifers/cows for first round of FTAI. No need to visually observe heifers/cows in standing heat.
- Option to use sexed, rare, or more expensive semen in heifers/cows that have been identified on heat, by heat detection aids for first round of FTAI. These animals are likely to have a higher pregnancy rate to AI.

### Purpose:

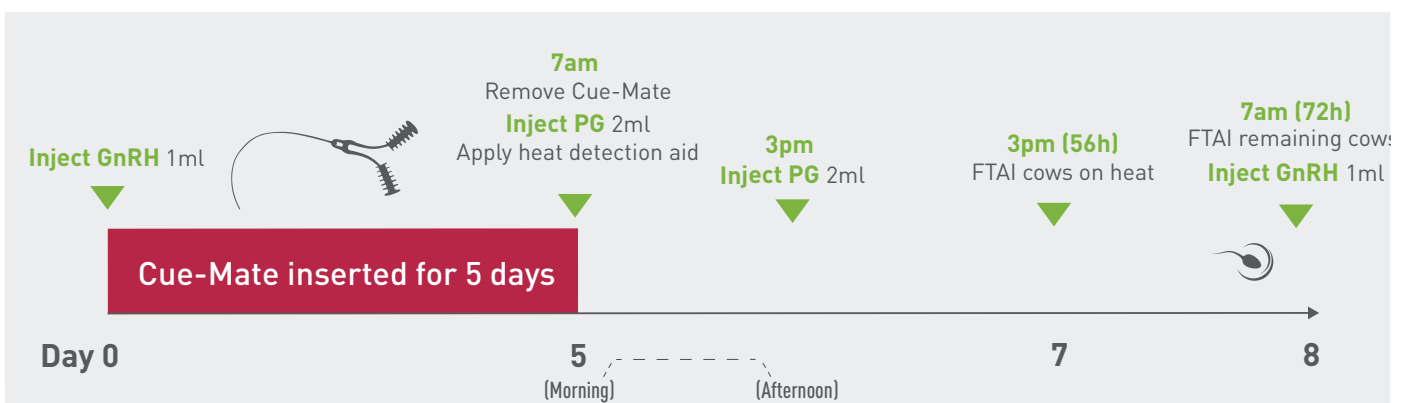
- Synchronisation of cows/heifers for FTAI where resources are sufficient to handle the cattle more frequently.
- When breeders are seeking a higher pregnancy rate per straw of semen.

## Heifers



Note: For *Bos indicus* heifers, use a 1-pod Cue-Mate

## Cows



## References:

Colazo, M.G., Whittaker, P., Macmillan, K., Bignell, D., Boender, G. deCarvalho Guimaraes, R. and Mapletoft, R.J. Evaluation of a modified GnRH-based timed-AI protocol associated with estrus detection in beef heifers insemination with sex-selected or conventional semen. *Theriogenology* 2018; 118: 90 – 95

Day, M.L. State of the art of GnRH-based timed AI in beef cattle. *Anim. Reprod.* 2015; 12(3): 473-478

Bo, G.A., Javier de la Mata, J., Baruselli, P.S. and Menchaca, A. Alternative programs for synchronizing and resynchronizing ovulation in beef cattle. *Theriogenology* 2016; 86: 388-396

Ferraz Junior, M.V.C., Pires, A.V., Biehl, M.V., Santos, M.H., Barroso, J.P.R., Goncalves, J.R.S., Sartori, R., and Day, M.L. Comparison of two timed artificial insemination system schemes to synchronize estrus and ovulation in Nelore cattle. *Theriogenology* 2016; 86: 1939-1943.

Bo, G.A., Huguenine, E., Javier de la Mata, J., Nunez-Olivera, R., Baruselli, P., and Menchaca, A. Programs for fixed-time artificial insemination in South American beef cattle. *Proceedings of the 10th International Ruminant Reproduction Symposium (IRRS 2018)*; Foz do Iguacu, PR Brazil, September 16th to 20th. *Anim. Reprod.* 2018; 15(Suppl 1): 952-962.

## Authors:

Dr Gabriel Bo M.V.Sc. PhD



Dr Sophia Edwards BScAgr (Hons) MBA PhD



Unit 302.2 6-12 Boronia Road  
Da Vinci Business Park, Brisbane Airport  
PO Box 112 Pinkenba Queensland 4008  
ABN 6400 6949 480

**Head Office: 1800 032 355**  
**Repro360 Help Line: 1300 163 056**

360australia@vetoquinol.com

vetoquinol.com.au | repro360.com.au | vetoquinol-contact.com.au

