

# **ESTRUS SYNCHRONIZATION**

## **Lecture 5**

**Progesterone protocols, synchronization of ovulation and summary**

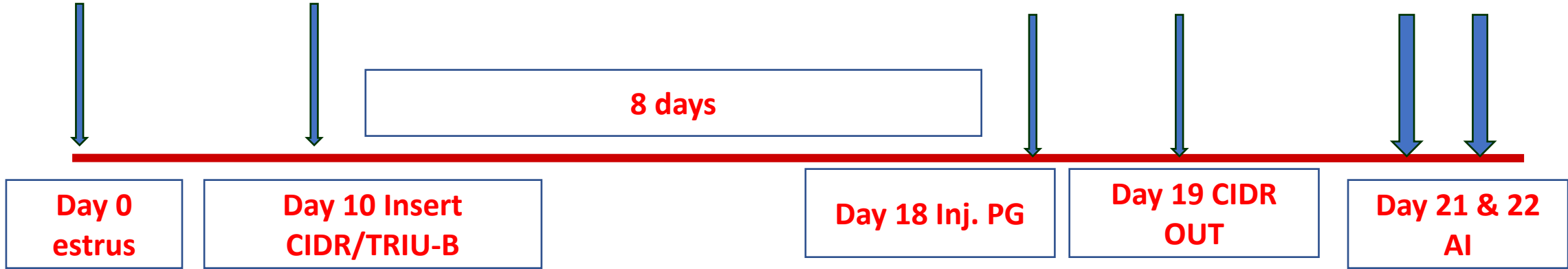
***Content Creator***

**Dr. M. Selvaraju, Ph.D.,  
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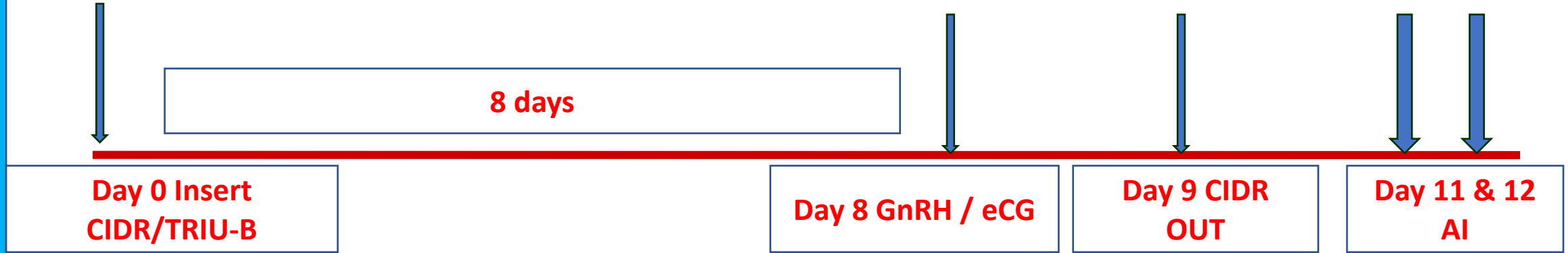
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# CIDR/TRIU-B & PGF2 $\alpha$



# CIDR- B & PGF<sub>2</sub> $\alpha$



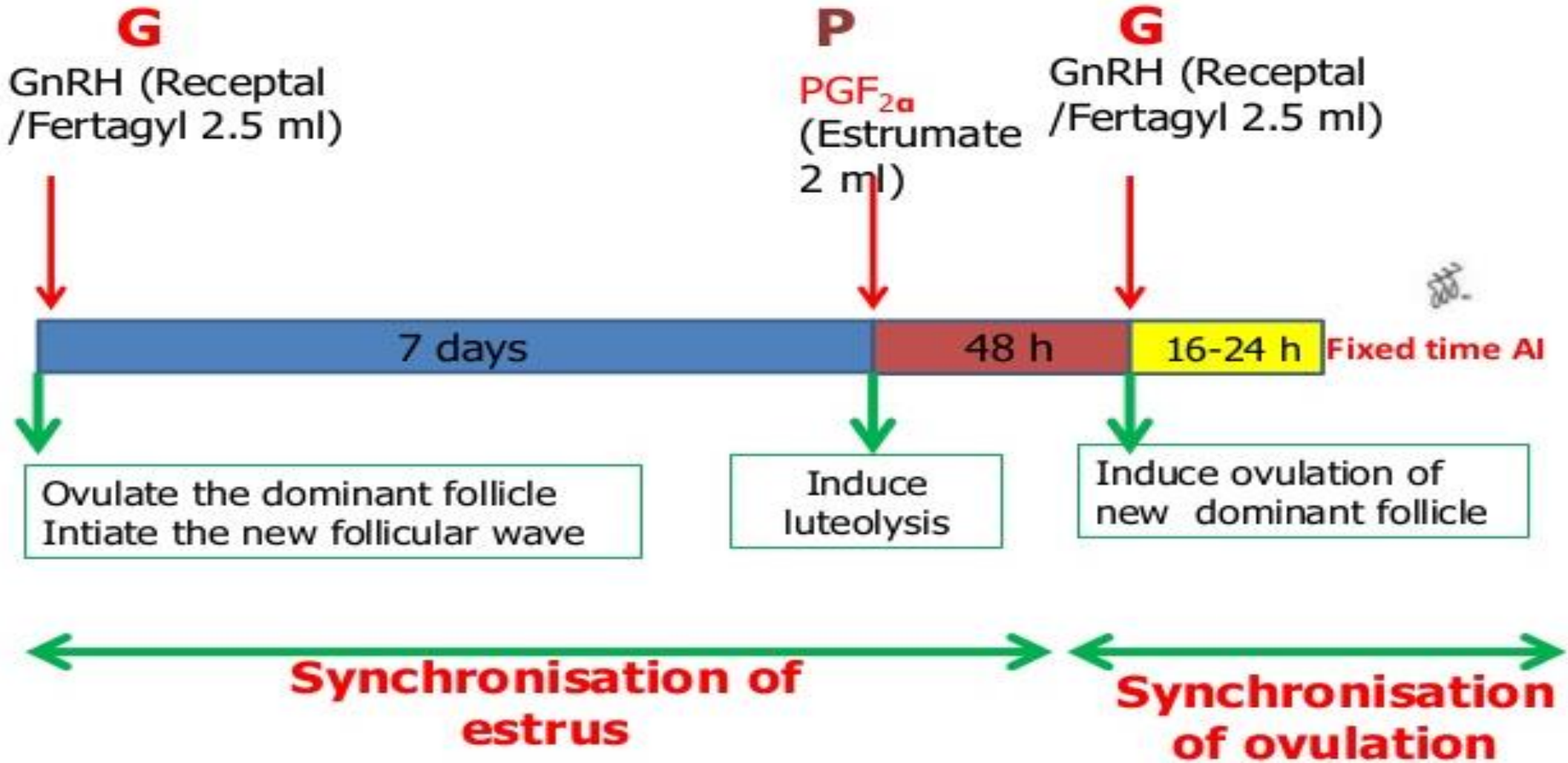
# **SYNCHRONIZATION OF OVULATION**

# Synchronization of ovulation

Ovsynch protocol

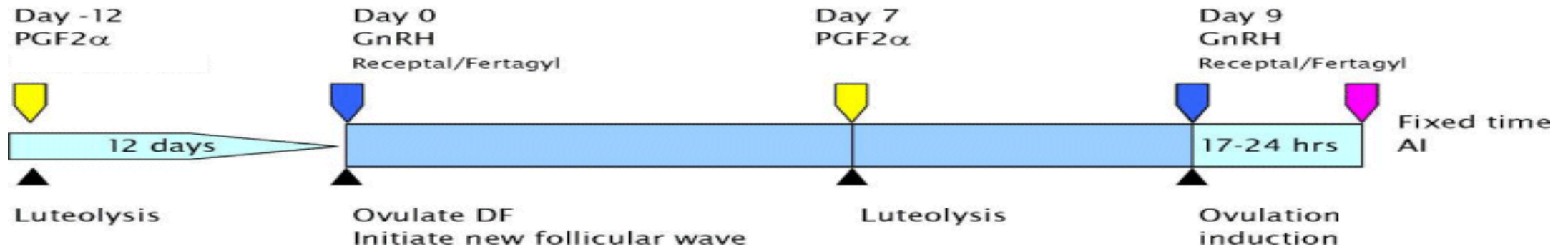


# Ovsynch protocol (GPG)

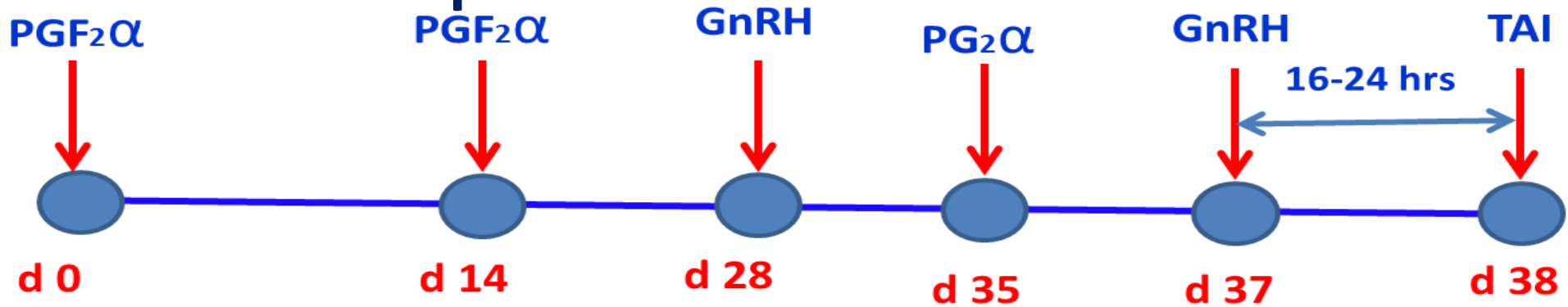


## Improvisation in ovsynch

- **“Presynch-Ovsynch”**: Presynchronization with PG is commonly used in dairy herds to ensure that cows are at the most appropriate stage of the oestrous cycle at the time of the first GnRH treatment.



Pre-synchronization with 2 doses of PG, 14 days apart, and administration of the first GnRH 12 days after the second PG increase the probability that a LH-responsive follicle will be present at the time of the first GnRH

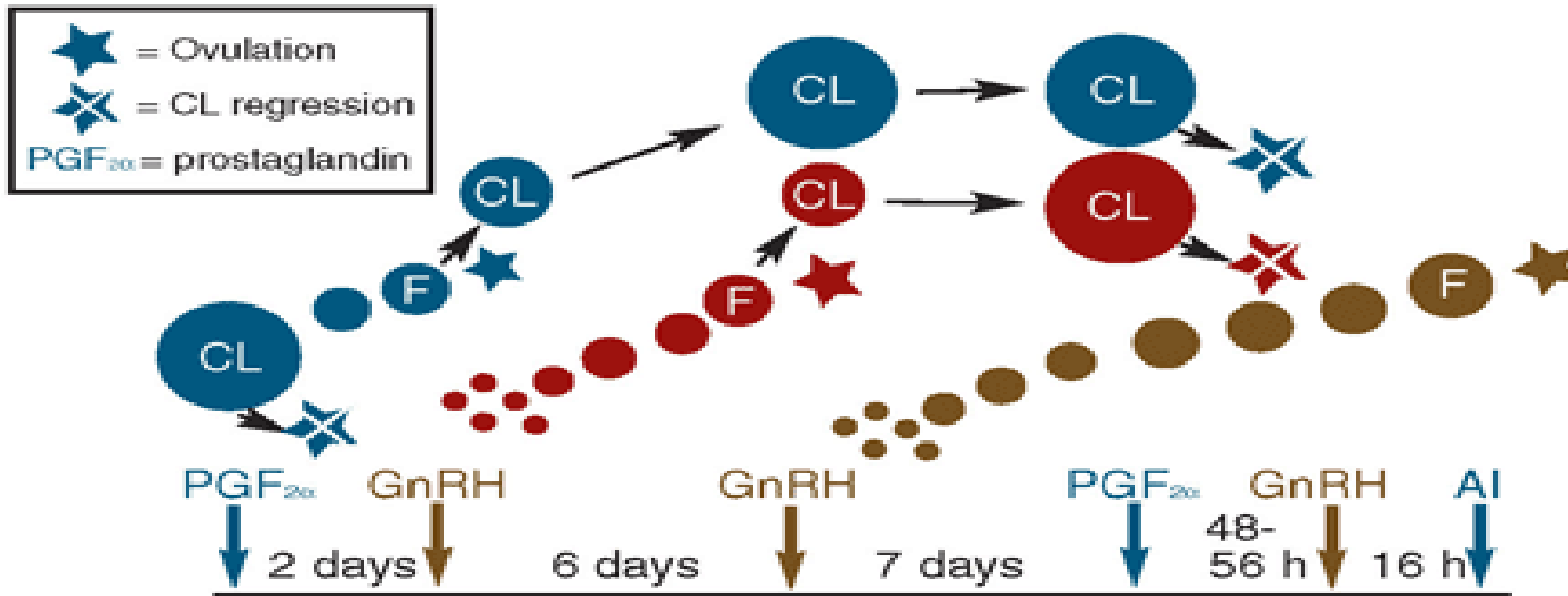




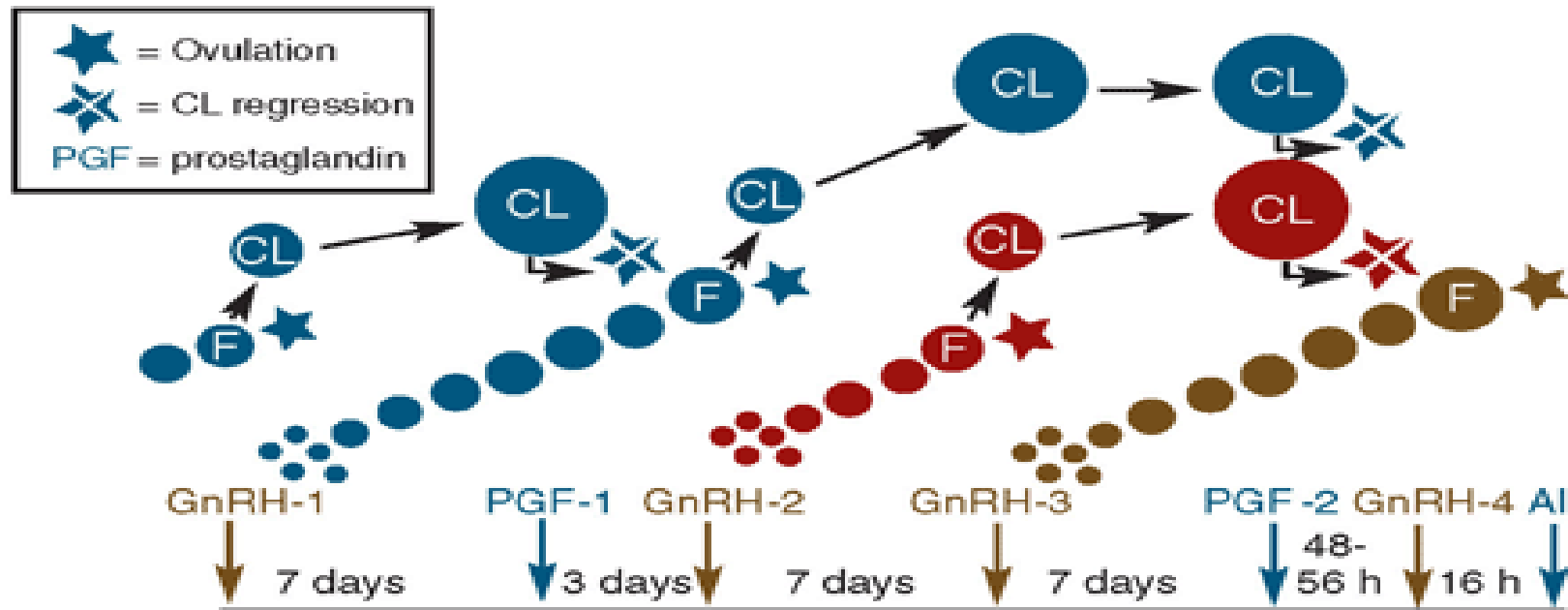
# G6G

- “G6G”: Animals were treated with PG, followed 2 days later with GnRH administered at 6 days before the first GnRH in the Ovsynch protocol.

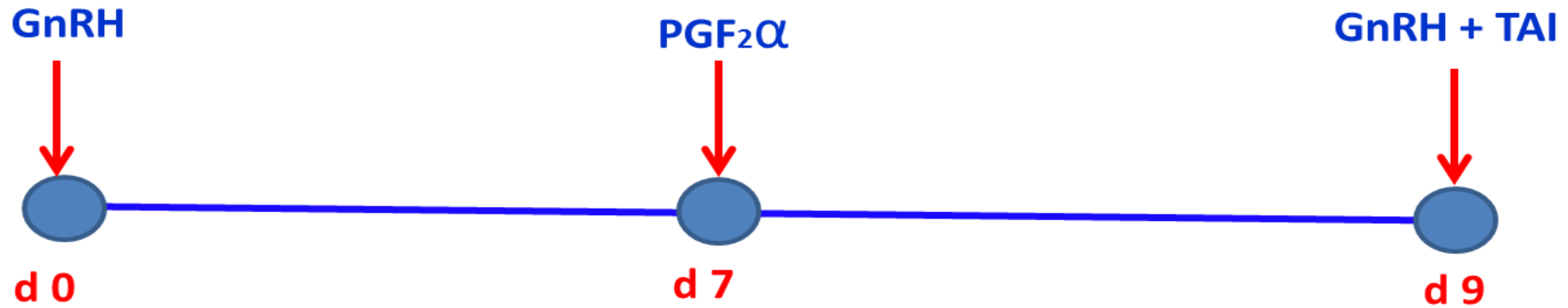
(Bello *et al.*, 2006)



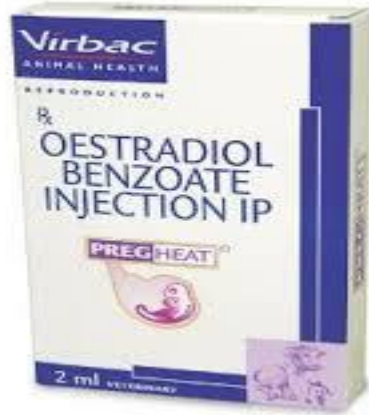
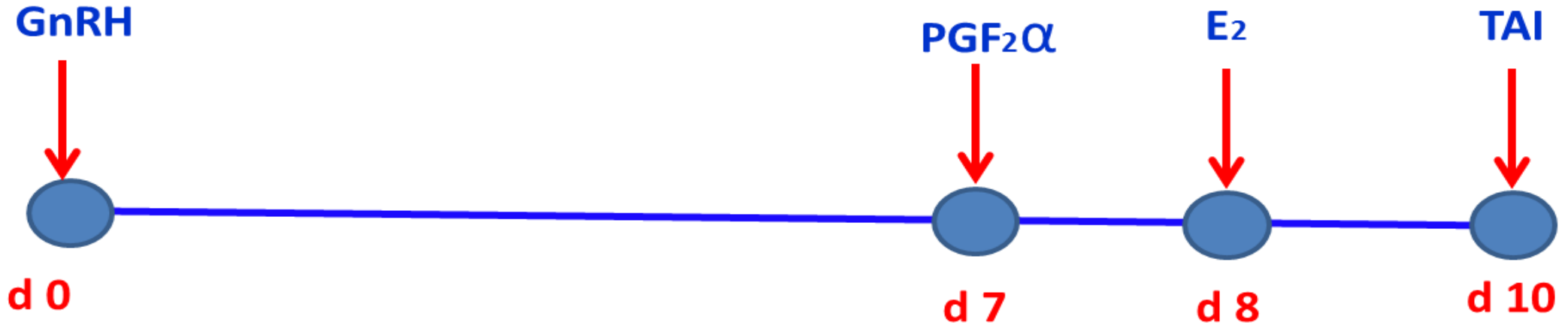
- **“Double Ovsynch”**: Involves two Ovsynch protocols following one after the other, with the third GnRH treatment administered 7 days after the second.



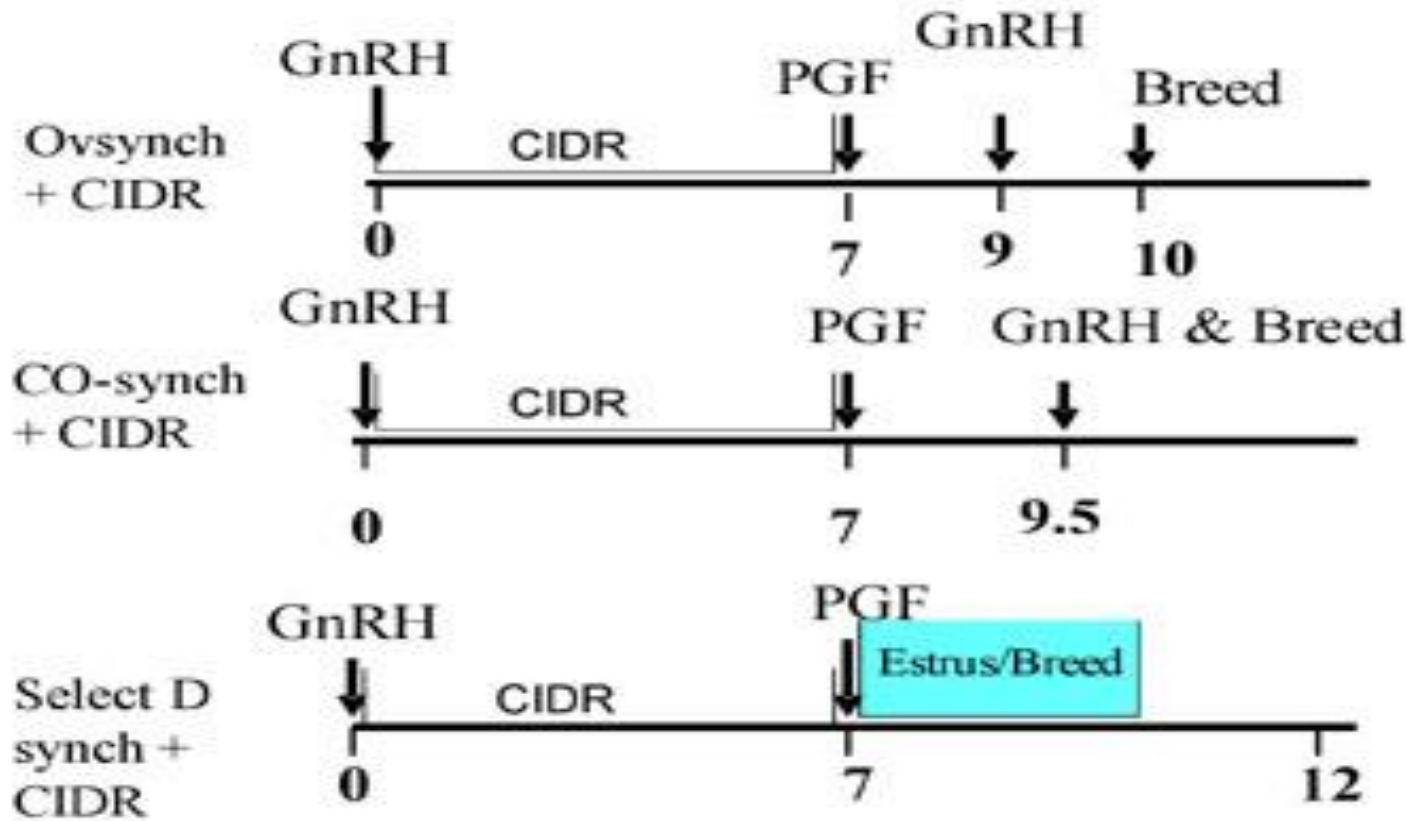
# Cosynch protocol



# Heatsynch protocol



# CIDR protocols

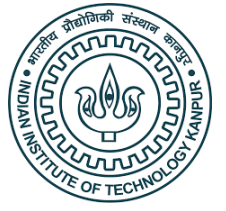


## **Infertility**

- **Repeat breeder**
- **Anestrus**
- **Cystic ovary**

## **Summary**

- **Observe the cyclicity pattern of the animal**
- **Select the appropriate protocol: Prostaglandin for cyclic and Progesterone for cyclic and non-cyclical animals**
- **Ensure the ovulation by adding GnRH in the selected protocol**
- **Recommended to perform two AI at 24 hrs interval in controlled breeding protocol**



**THANK YOU**