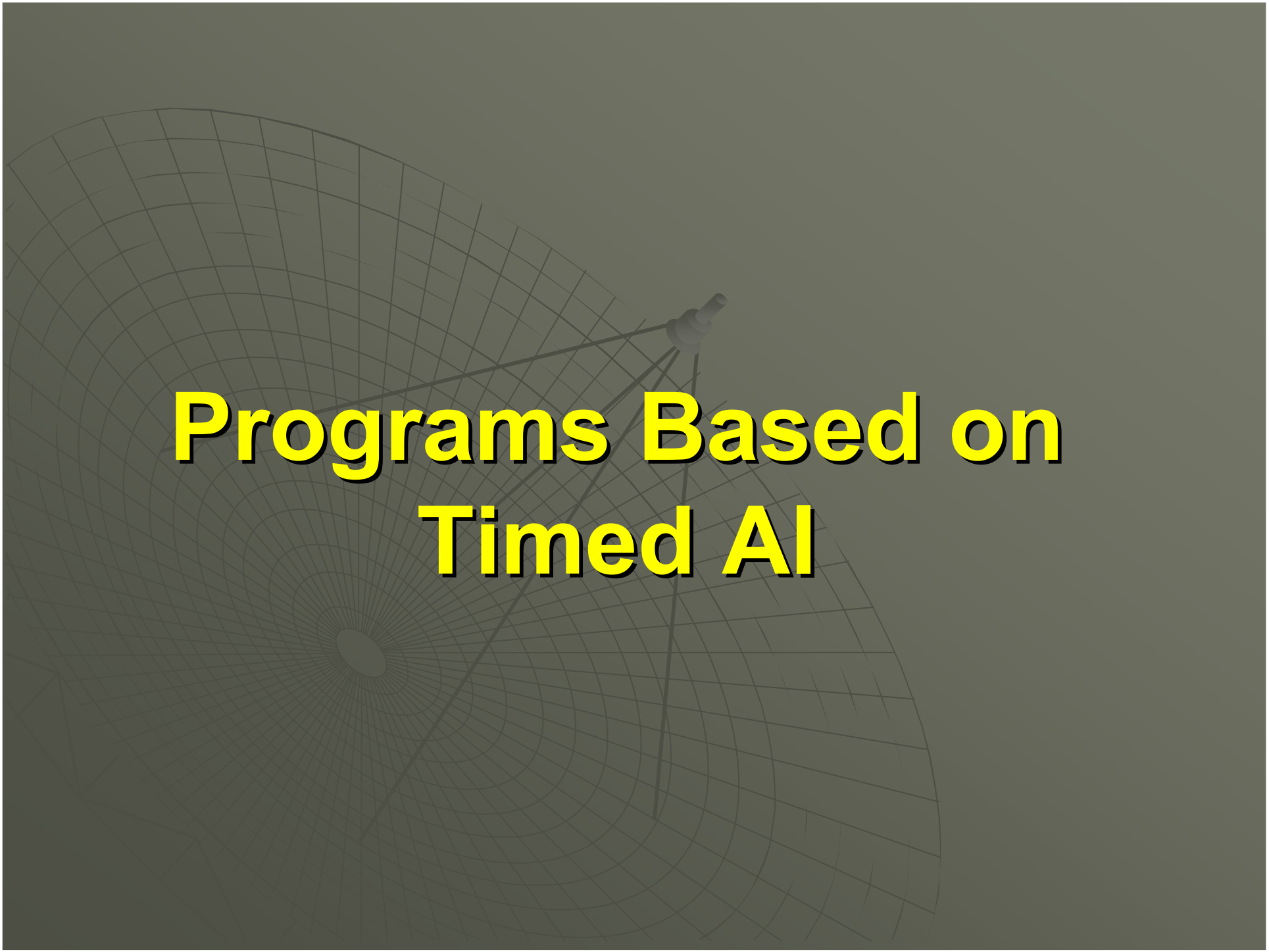

Programs Based on
Timed AI

# Programs Based on Timed AI

## Ovsynch


## Cosynch


## Hybrid Synch

# Ovsynch versus Cosynch

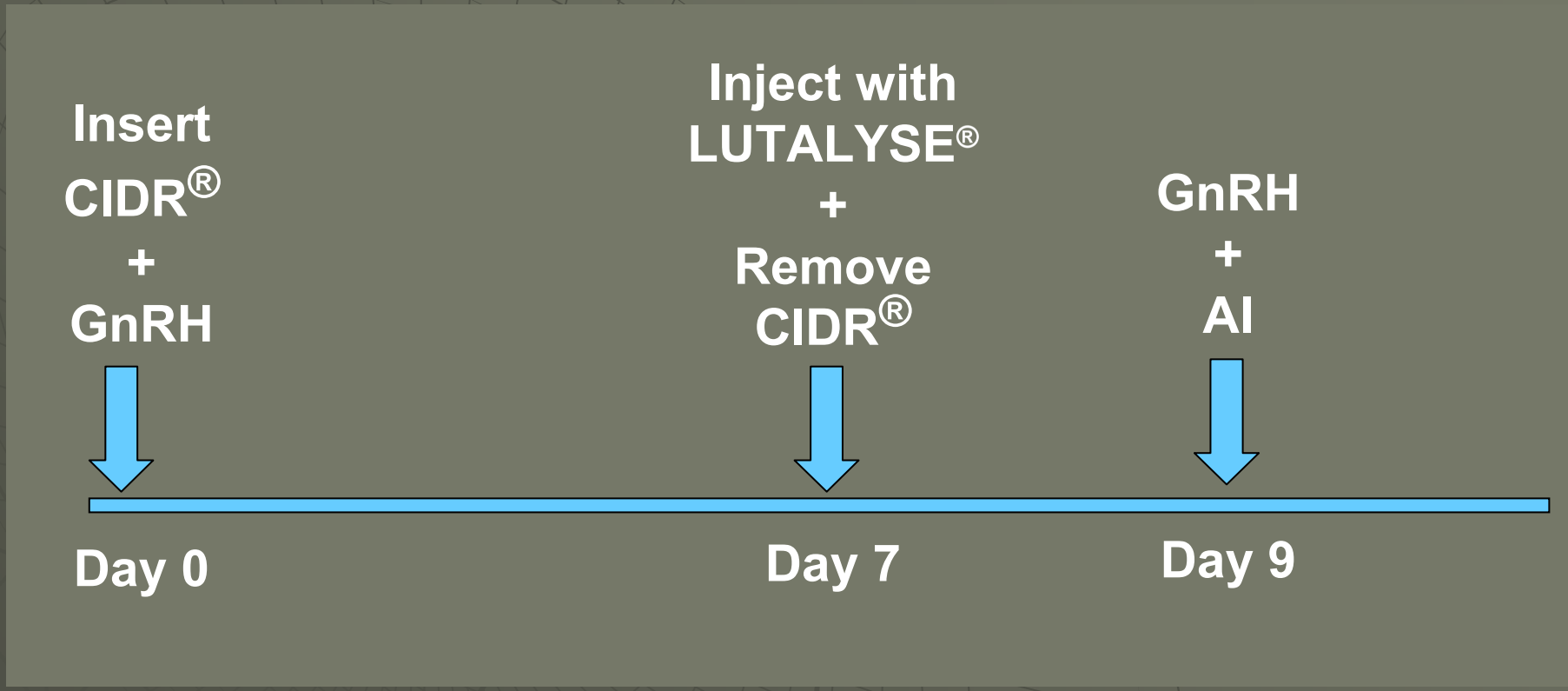
- Timed insemination at GnRH injection (Cosynch) or at 24 h later did not differ in beef cows with calf removal (63% vs 61%) or without calf removal (54% vs 52%; Geary et al., 2001).

- In 1998, Pursley et al. inseminated cows at 0, 8, 16, 24, or 32 h after GnRH. Results indicated a quadratic effect with higher fertility at 16 h.

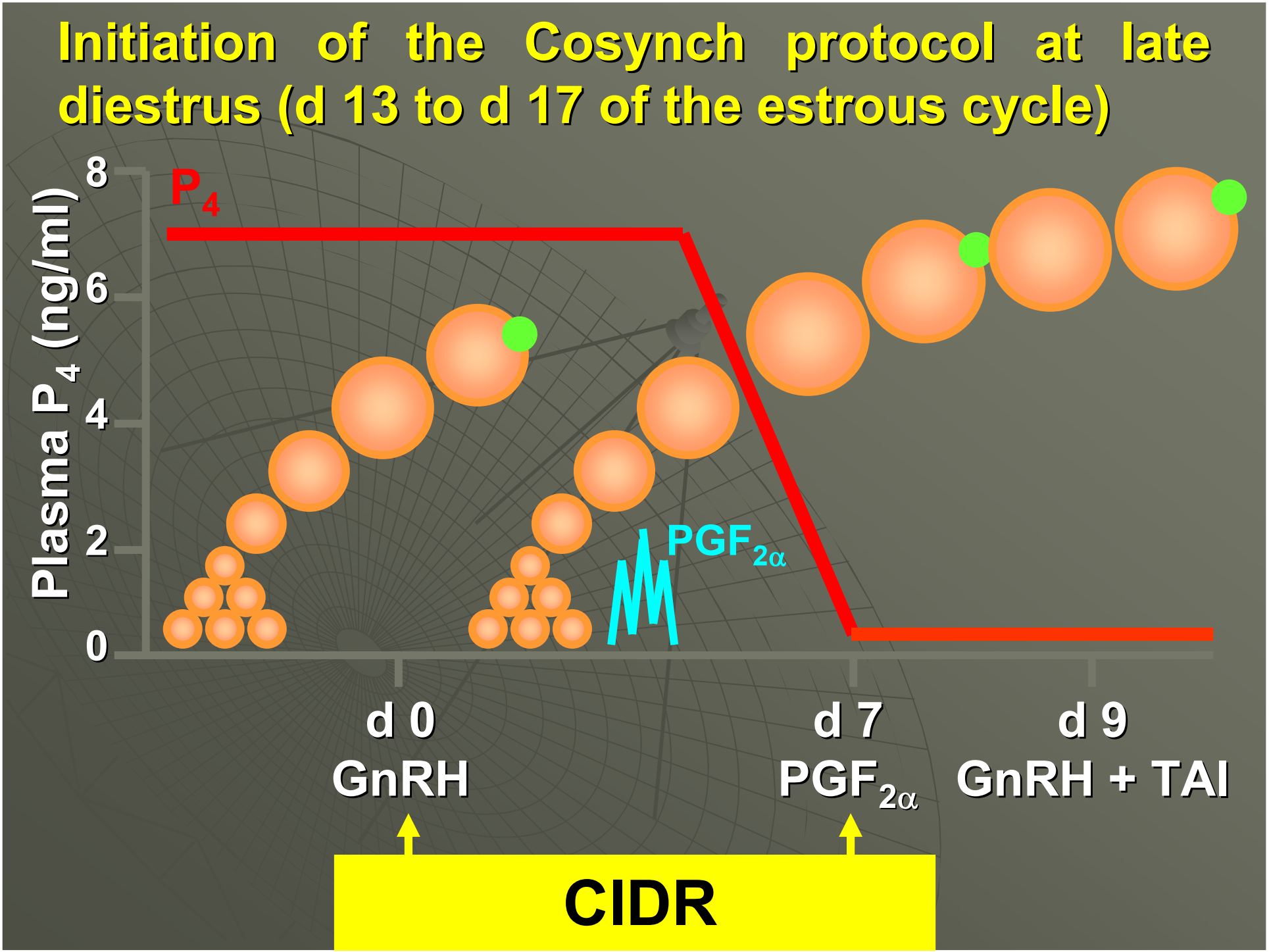
- DeJarnette et al. (2003) did not observe differences between lactating dairy cows TAI 12 h after GnRH (Ovsynch) or TAI at GnRH injection 60-64 h after $PGF_{2\alpha}$ (29% vs 22%).

- No statistical differences in calving rates were observed by Vasconcelos et al. (2000) when lactating dairy cows were TAI at 0 h compared to 24 h after GnRH (20.3% vs 26.0%).

# Cosynch with CIDR



# Initiation of the Cosynch protocol at late diestrus (d 13 to d 17 of the estrous cycle)



# Effect of CIDR on Ovsynch in Lactating Dairy Cows

| | Ovsynch | Ovsynch + CIDR |
|---|---|---|
| No. of Cows | 93 | 91 |
| Pg Rate @ 28 D Post AI | 35.8% | 62.5% |
| Pg Rate @ 56 D Post AI | 20.5% | 50.0% |

El-Zarkouny. 1999. KSU Dairy Report

# Effect of CIDR on Ovsynch in Lactating Dairy Cows

| Status | N | Ovsynch | Ovsynch + CIDR |
|---|---|---|---|
| Cyclic | 477 | 35% | 43% |
| Anestrus | 154 | 22% | 36% |
| Total | 631 | 32% | 42% |

NC113 Project, personal communication

# Pregnancy Rates in Beef Cows and Heifers Submitted to Cosynch (Control) or Cosynch with CIDR (CIDR)

| Reference | | N | Pregnancy Rates Control | CIDR | Diff. |
|---|---|---|---|---|---|
| 1) Lamb et al., 2001. JAS 79:2253. | | 460 | 48% | 58% | 10%* |
| 2) Martinez et al., 2002. JAS 79:2563. | | 204 | 52% | 65% | 13% |
| 3) Stevenson et al., 2003. JAS 81:571. | Exp. 1 | 183 | 61% | 66% | 5%* |
| | Exp. 3 | 596 | 46% | 55% | 9%* |

* Difference was statistically significant

Reference 2: control were fed MGA form day 0 to 6

Reference 3, Exp. 3: controls were fed MGA for 14 d and initiated Cosynch 12 d later

- In lactating dairy cows, pregnancy rates were greater for Ovsynch with CIDR (44%, n=91) compared to Ovsynch alone (20%, n=80) as reported by El-Zarkouny et al., in 2000 (JAS 78(1):217 [Abstr.])

# Pregnancy rates of beef cows according to cyclic status (cyclic or anestrus) and premature CL regression

| | Cosynch | Cosynch+CIDR |
|---|---|---|
| Anestrus | 39% (22/56)[a] | 59% (36/61)[b] |
| Cyclic | 58% (65/112) | 58% (71/122) |
| Cyclic (premature CL regression) | 43% (26/60)[a] | 79% (31/39)[b] |

Lamb et al., 2001

[a,b] $P < 0.05$

# Hybrid Synch with CIDR