Figure 3

Dairy Cattle Reproduction Council (DCRC) Updated Dairy Cow Synchronization Protocols – 2016 – cont'd

Resynch methods

Any cow that is diagnosed open at pregnancy diagnosis (**PD**) can be resynchronized. Methods can be used with or without estrous detection and AI after observed estrus (**EDAI**).

A. Start Ovsynch method after PD.

Start TAI program on cows not re-inseminated
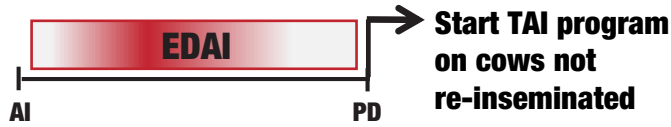
Example: Ovsynch56 Starting after PD

PGF	GnRH	TAI	PD

The orange rectangle denotes PD. PGF is administered to cows diagnosed open (not pregnant). Pregnant cows are not treated. A CIDR can be used in a resynch program according to the instructions on Figure 2.

The intensity of red color within EDAI denotes periods to expect most cows in estrus during EDAI. Open cows are typically observed in estrus on days 18 to 25 after AI.
Nomenclature: The interval in days from previous AI to the start of the Resynch program (first GnRH) is denoted in front of the program (d32Ovsynch56, etc.).

B. Started timed AI method before PD.

Start TAI program on cows not re-inseminated
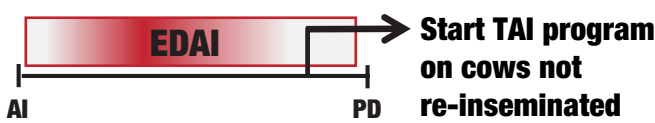
Example: Ovsynch56 Starting before PD

Example: 5dCosynch72 Starting before PD

*PGF is given to open cows (not pregnant). Pregnant cows are not treated after PD.

C. 1xPGF/Ovsynch

Start TAI program on cows not re-inseminated

PGF is administered to cows that have not been inseminated and are diagnosed open at PD.

The intensity of red color within EDAI denotes periods to expect most cows in estrus during EDAI. Open cows are typically observed in estrus on days 20 to 25 after AI or 2 to 7 days after PGF.

Example: 1XPGF/Ovsynch56

The 1XPGF/Ovsynch program can be used with any Ovsynch method.

D. GnRH/Ovsynch

Start TAI program on cows not re-inseminated

GnRH is administered to cows that have not been re-inseminated at 32 +/- 3 days after previous AI. Cows do not usually come into estrus within one week after a GnRH injection.
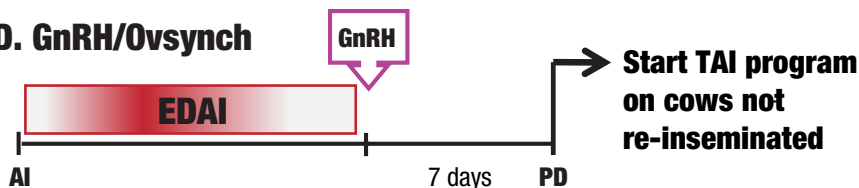
Example: GnRH/Ovsynch56

The GnRH/Ovsynch program can be used with any Ovsynch method.

Sample Calendars for Resynch Programs

Calendars are examples of resynch programs. Any resynch program can be used after an initial AI. Any cow observed in estrus before or during the Resynch can be inseminated.

Example: d32 Ovsynch56 Starting after PD

Example: d32 Ovsynch56 Starting before PD

Synchronization efficiency and fertility may differ among the listed programs. Specific research data should be evaluated to determine the program that is optimal for use on a particular dairy.

Compliance table

The following table is provided for reference. It shows the percentage of cows that receive all injections (yellow boxes) as a function of compliance at an individual injection. As an example, if 95 of 100 cows receive their injection on any given day, then the herd has a 95% compliance. The greatest P/AI are achieved with 100% compliance so that all cows receive every injection. Farms should have a method to monitor compliance before they start a program.

Compliance	3-injection program	5-injection program
100%	100%	100%
95%	86%	77%
90%	73%	59%

This protocol sheet was assembled by members of the Dairy Cattle Reproduction Council (DCRC). Programs are intended to promote sustainable food production by the dairy industry through sound reproductive management practices. The DCRC recommends working with a licensed veterinarian for proper use and administration of all reproductive hormones.

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