

Breeding Strategies for Mares Inseminated with Frozen Semen

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Posted by [Paul Loomis](#) in [Breeding With Frozen Semen](#)



ultrasound:

Administer Deslorelin acetate at 8 PM

On Day 1 ultrasound at 8am, 6pm, 12am (midnight)

On Day 2 ultrasound at 7am and 11am, if mare has not ovulated then repeat ultrasound every 2 hours.

Expect ovulation between 7am and 11am

Inseminate using a deep horn technique immediately post-ovulation

Consider post-breeding lavage and/or infusion of broad-spectrum antibiotics

Ultrasound 12 hours post-insemination to check for retention of fluid. If present, administer 20 IU of oxytocin IM 4 times 12-24 hours post AI.

If the dose is of known good quality, contains adequate sperm numbers and is in a multi-straw dose, another approach is to split the dose. This means one would thaw and inseminate half of the dose, deep horn at 7am on Day 2 after Deslorelin and then thaw and inseminate the other half once ovulation is detected. There is some

Timed artificial insemination (AI), programmed AI, one dose, two doses, deep horn insemination... what's best for your mare? With the increased use of frozen semen and the trend towards commodity sales (by the dose with no guarantee) veterinarians have developed a variety of strategies when managing mares being bred with frozen semen. In this article, we discuss several options and which ones might be most appropriate for your situation.

Scenario 1

If **a.)** only a single dose of frozen semen is available per cycle and especially if semen quality, quantity and fertility is poor or unknown or **b.)** if a partial dose of good quality semen is being used. (Note: before considering splitting a dose of semen read our article [Splitting Doses of Frozen Semen](#).)

Once the mare has developed a dominant follicle of 35-40 mm and has marked uterine edema visible on

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evidence that having sperm present at the time when the oocyte enters the oviduct may result in higher pregnancy rates.

Scenario 2

There are two strategies that can be used if two doses of good quality semen are available per cycle and the semen is provided as part of a guaranteed breeding contract. Once the mare has developed a dominant follicle of 35-40 mm and has marked uterine edema visible on ultrasound:

Option 1: This option eliminates the midnight ultrasound.

Administer Deslorelin at 8 AM

On Day 1 ultrasound at 8am and 6-8pm

Inseminate the first dose (body or deep horn) at 6-8pm (32-36 hrs post Deslorelin)

Day 2 ultrasound at 8am and inseminate second dose if mare has ovulated, if not then check every 4-6 hours and inseminate second dose immediately after ovulation is detected.

Option 2: When only 1 examination per day is practical

Administer Deslorelin at 4 PM

On Day 1 ultrasound and inseminate the first dose at 6-8 pm

On Day 2, ultrasound and inseminate second dose at 8-10 am. If mare has not ovulated at morning exam consider holding second dose and re-examine every 4-6 hours until ovulation is detected and inseminate immediately post ovulation.

It is very important that mare owners and veterinarians communicate and develop a plan in advance concerning the options for the breeding management of a given mare. For example, the reproductive history of the mare and the particulars of the breeding contract such as the number of straws per dose, number of doses provided, and any guarantees or previous history of the frozen semen may greatly influence the protocol selected.

You may also be interested in:

[The Pros and Cons of 1 or 2 Dose Insemination Protocols](#)

[The History of the Timed Insemination Protocol](#)

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