**Theriogenology Drugs**

**Lutalyse Injection (dinoprost injection)**

**INDICATIONS:**

Prostaglandin F2 alpha for intramuscular use in cattle,swine and mares.

**In Cattle:** used for estrus synchronization in beef cattle and non-lactating diary heifers; for unobserved (silent) estrus in lactating dairy cows with a corpus leutum; for treatment of pyometra (chronic endometritis); for abortion of feedlot and other non-lactating cattle; for use with FACTREL (gonadorelin injection) Injection to synchronize estrous cycles to allow fixed-time artificial insemination (FTAI) in lactating diary cows; for use in estrus synchronization with EAZI-Breed CIDR in lactating diary cows and in suckled beef cows and replacement beef and dairy heifers, advancement of first postpartum estrus in suckled beef cows and advancement of first pubertal estrus in beef heifers.

**In Swine:** for parturition induction

**In Mares:** for controlling the timing of estrus in estrous cycling mares and clinically anestrous mares that have a corpus luteum and for difficult to breed mares.

**DOSEAGE:**

**Cattle:**

1. For Estrus Synchronization in Beef Cows, Beef Heifers and Replacement Dairy Heifers.

LUTALYSE Injection is used to control the timing of estrus and ovulation in estrous cycling cattle that have a corpus luteum. Inject a dose of 5 mL LUTALYSE Injection (25 mg dinoprost) intramuscularly either once or twice at a 10 to 12 day interval. With the single injection, cattle should be bred at the usual time relative to estrus. With the two injections cattle can be bred after the second injection either at the usual time relative to detected estrus or at about 80 hours after the second injection of LUTALYSE Injection. Estrus is expected to occur 1 to 5 days after injection if a corpus luteum was present. Cattle that do not become pregnant to breeding at estrus on days 1 to 5 after injection will be expected to return to estrus in about 18 to 24 days.

2. For Unobserved (Silent) Estrus in Lactating Dairy Cows with a Corpus Luteum. Inject a dose of 5 mL LUTALYSE Injection (25 mg dinoprost) intramuscularly. Breed cows as they are detected in estrus. If estrus has not been observed by 80 hours after injection, breed at 80 hours. If the cow returns to estrus, breed at the usual time relative to estrus.

3. For Treatment of Pyometra (chronic endometritis) in Cattle. Inject a dose of 5 mL LUTALYSE Injection (25 mg dinoprost) intramuscularly.

4. For Abortion in Beef Cows, Beef Heifers and Replacement Dairy Heifers. LUTALYSE Injection is indicated for its abortifacient effect in beef cows, beef heifers and replacement dairy heifers during the first 100 days of gestation. Inject a dose of 25 mg dinoprost (5 mL) intramuscularly. Cattle that abort will abort within 35 days of injection.

5. For use with FACTREL® (gonadorelin injection) Injection to synchronize estrous cycles to allow fixed-time artificial insemination (FTAI) in lactating dairy cows: Administer 2 to 4 mL FACTREL Injection (100-200 mcg gonadorelin) per cow as an intramuscular injection in a treatment regimen with the following framework:

• Administer the first dose of FACTREL Injection (2-4 mL) at Day 0

• Administer LUTALYSE (25 mg dinoprost, as dinoprost tromethamine) Injection by intramuscular injection 6-8 days after the first dose of FACTREL Injection.

• Administer a second dose of FACTREL Injection (2-4 mL) 30 to 72 hours after the LUTALYSE injection.

• Perform FTAI 0 to 24 hours after the second dose of FACTREL Injection, or inseminate cows on detected estrus using standard herd practices.

6. For use with EAZI-BREED™ CIDR® (progesterone intravaginal insert) Cattle Insert for Synchronization of Estrus in Lactating Dairy Cows:

• Administer one EAZI-BREED CIDR Cattle Insert per animal and remove 7 days later (for example if administered on a Monday remove the following Monday).

• Administer 5 mL LUTALYSE Injection at the time of removal of the EAZI-BREED CIDR Cattle Insert.

• Observe animals for signs of estrus on Days 2 to 5 after removal of the EAZI-BREED CIDR Cattle Insert and inseminate animals found in estrus following normal herd practices.

7. For use with EAZI-BREED™ CIDR® (progesterone intravaginal insert) Cattle Insert for synchronization of estrus in suckled beef cows and replacement beef and dairy heifers, advancement of first postpartum estrus in suckled beef cows, and advancement of first pubertal estrus in beef heifers:

• Administer one EAZI-BREED CIDR Cattle Insert per animal for 7 days (for example, if administered on a Monday remove on the following Monday).

• Inject 5 mL LUTALYSE Injection (equivalent to 5 mg/mL dinoprost) 1 day prior to EAZI-BREED CIDR Cattle Insert removal, on Day 6 of the 7 day administration period.

• Observe animals for signs of estrus on Days 1 to 3 after removal of the EAZI-BREED CIDR Cattle Insert and inseminate animals about 12 hours after onset of estrus.

**Swine:**

For Parturition Induction in Swine: For intramuscular use for parturition induction in swine.

LUTALYSE Injection is indicated for parturition induction in swine when injected within 3 days of normal predicted farrowing. The response to treatment varies by individual animals with a mean interval from administration of 2 mL LUTALYSE Injection (10 mg dinoprost) to parturition of approximately 30 hours.

**Mares:** LUTALYSE Injection is indicated for its luteolytic effect in mares. Administer a single intramuscular injection of 1 mg per 100 lbs (45.5 kg) body weight which is usually 1 mL to 2 mL LUTALYSE Injection. This luteolytic effect can be utilized to control the timing of estrus in estrous cycling and clinically anestrous mares that have a corpus luteum in the following circumstances:

**CONTRADICTIONS:**

For animal use only

Drug must only be used by or on order of a licensed veterinarian.

Store at controlled room temperature 20o to 250C

Protect from freezing.

Keep ot of reach of children. Pregnant women, asthmatics or persons with bronchial and other respiratory problems should avoid contact with dinoprost tromethamine.

Spills of LUTALYSE Injection on the skin should be immediately washed off with soap and water.

**Fertiline**

Manufacturer: Vetoquinol

Gonadorelin Acetate Sterile Injectable Solution (50 μg/mL).

Synthetic Hypothalamic Luteinizing Hormone-Releasing Hormone (LHRH)

**INDICATIONS:**

Fertiline is highly effective in bovine estrous synchronization programs. Fertiline fits perfectly with Bioestrovet for better management of the estrous cycle and breeding.

• Convenient 20 mL and 50 mL formats
• Fertiline is approved for IM injection in cattle.
• Room-temperature storage
• Zero milk withholding
• CQM approved

**DOSEAGE:**

The recommended intramuscular dose of FERTILINE is 100 µg per cow (2 mL of a solution containing 50 µg/mL) but can be administered intramuscularly to cows at doses up to 400 µg per cow.

**Storage**

Store at controlled room temperature (15°C - 25°C), in the dark.

**CONTRADICTIONS:**

No meat withdrawal period and no milk withholding time are required when used according to the label. Keep out of reach of children.

Treated animals should not be slaughtered for use in food for at least 7 days after treatment with this drug.