A multi-site research study demonstrated that the EAZI-BREED™ CIDR® Cattle Insert can help induce estrous cycles in anestrous lactating dairy cows.¹

Summary
- The EAZI-BREED™ CIDR® Cattle Insert, an exogenous source of progesterone, is approved for induction of estrous cycles in anestrous lactating dairy cows.
- A multi-site field study¹ evaluated the effectiveness and safety of EAZI-BREED CIDR when used for induction of estrous cycles in postpartum dairy cows housed at 9 commercial dairies (California, Florida, Idaho, Illinois, Michigan, Minnesota, Wisconsin):
  - 426 anestrous cows received EAZI-BREED CIDR for 7 days;
  - 430 anestrous control cows received no treatment.
- During a 42-day observation period, the rate of estrous cycle induction averaged 62.0% for cows that received EAZI-BREED CIDR vs 45.1% for controls, representing a significant ($P < 0.0001$) relative improvement of 37.5% for EAZI-BREED CIDR. Of the cows inseminated in the EAZI-BREED CIDR group, 78.3% were observed in estrous 2 to 3 days following EAZI-BREED CIDR removal.
- Though conception rates within 2 weeks of EAZI-BREED CIDR removal were lower for treated cows (27.7% vs 36.2% for controls, $P < 0.083$), overall pregnancy rates did not differ between treatment groups ($P = 0.32$). [Conception can be reduced by: 1) an older, unknown-aged egg being ovulated after an extended progesterone period; 2) vaginitis, so cleanliness and proper insertion technique are important factors.²]
- The approval of EAZI-BREED CIDR for induction of estrous cycles in anestrous cows offers an on-label opportunity for dairy managers to further optimize herd efficiency and productivity.

Controlled internal drug release (CIDR) inserts are intravaginal progesterone-containing products typically used to synchronize estrus in cattle. After placement in a cow, progesterone hormone is released at a controlled rate into the bloodstream. When the CIDR is removed after 7 days, the concentration of systemic progesterone rapidly drops and estrus in non-pregnant cows is usually observed 3 to 4 days later. CIDRs are also widely used for treatment of anestrous cows, a costly condition that can delay or preclude breeding and, thus, the timing of future calving and milk production. The prevalence of anestrous lactating cows (~50-60 days in milk) in US dairy herds has been estimated to range from 20% to more than 40%.³ The ability of CIDRs to help induce cyclicity in anestrous cows has been reported by several researchers,
with estrous-induction improvements ranging from 41% to 50% compared with nontreated cows. A 2007 US Department of Agriculture survey of dairy practices found that about one-third of US dairy operations (32.4%) had used CIDR inserts during the previous year, and nearly 66% of these operations used CIDR inserts to treat anestrous females. However, the use of CIDRs for induction of estrous cycles in anestrous lactating dairy cows has only recently received official FDA approval.

**Eazi-Breed™ CIDR® Use**

The Eazi-Breed™ CIDR® Cattle Insert, from Zoetis, can help improve the timing and efficiency of dairy breeding programs by providing an exogenous source of progesterone steroid hormone. Each insert is impregnated with 1.38 g of progesterone and is designed for intravaginal insertion in cows for a 7-day administration period. Removal of the Eazi-Breed CIDR on treatment day 7 results in a rapid fall in plasma progesterone levels.

**Eazi-Breed CIDR is now approved for:**

- **Induction of estrous cycles in anestrous lactating dairy cows.**
  This new claim is in addition to previously approved label indications:
  - Synchronization of estrus in lactating dairy cows, suckled beef cows, and replacement beef and dairy heifers;
  - Synchronization of the return to estrus in lactating dairy cows inseminated at the immediately preceding estrus;
  - Advancement of first postpartum estrus in suckled beef cows;
  - Advancement of first pubertal estrus in replacement beef heifers.

**Use in Anestrous Lactating Dairy Cows —**

The new label indication for induction of estrous cycles in anestrous lactating dairy cows represents a valuable tool to help optimize dairy efficiency. Anestrous dairy cows can be identified using any of the following methods:

- Cows not observed in estrus since calving;
- Cows diagnosed twice without a corpus luteum (CL) on either ovary via ultrasonography at a 7 to 14 day interval, such as on day 35 and day 42 post-calving;
- Cows with low concentration of progesterone in 2 blood or milk samples collected at a 7- to 14-day interval, such as samples collected on day 35 and 42 post-calving.

If insemination is intended, observe cows on days 2 to 5 after removal of the Eazi-Breed CIDR and inseminate animals found in estrus following typical herd practices.

**Factors that can reduce conception when using CIDRs:**

- **Physiology** — Progesterone from the Eazi-Breed CIDR extends the life of follicles and the oocytes within the follicles. As the life of a follicle is extended beyond its normal duration, the aging oocyte becomes less fertile.

- **Vaginitis** — Prior research has documented the importance of cleanliness and proper insertion technique to reduce the possibility of vaginitis (inflammation, discharge) which can adversely impact conception.

**A summary of research conducted to support the new label indication for induction of estrous cycles in anestrous lactating dairy cows follows.**

*New cross-labeling on use directions for Lutalyse® Injection (dinoprost injection), the only prostaglandin product approved for concurrent use with Eazi-Breed CIDR in synchronization protocols of lactating dairy cows.*
A multi-site field study was conducted to evaluate the effectiveness and reproductive safety of the EAZI-BREED CIDR Cattle Insert when used for induction of estrous cycles in postpartum dairy cows. The study involved 856 cows housed at 9 commercial dairies in California, Wisconsin, Florida, Idaho, Illinois, Michigan, and Minnesota, thus representing a broad range of management and environmental conditions typical of the US dairy industry. Though 1132 cows were originally enrolled in the study, 276 were subsequently excluded post-enrollment primarily due to the detection of elevated progesterone levels (>1 ng/mL, indicating the animals were already estrous-cycling at study initiation on day 0). Study cows were predominantly Holstein (some Jersey and Holstein-Jersey crossbreeds also included), healthy, free of reproductive disorders, and had appropriate body condition scores (BCS 2-4). All cows had calved at least once and were at least 42 days in lactation prior to study initiation (≥40 and ≤80 days post-calving). To qualify as anestrous, cows could not have a functional CL, show signs of estrus, or have a plasma progesterone value >1 ng/mL either 1 week before or at study initiation (days -7 and 0, respectively).

At each of the 9 sites, cows were allotted to 2 treatment groups on study day 0 (Figure 1). Cows had already been assigned to pens according to routine farm management (e.g., high-production group, first-lactation group, etc.). On day 0, cows were randomized to treatment in blocks of 2 within a pen. Thus, pens contained animals from both treatment groups and study cows were co-housed with non-study cows. The 2 treatment groups were:

- Control (no treatment); n=430 across the 9 dairies;
- EAZI-BREED CIDR; cows received 1 insert on study day 0 which was removed on day 7; n=426 across the 9 dairies.

Cows were observed daily beginning 1 week before study initiation for general health and signs of estrus according to typical herd procedures. Cows were bred on observed estrus. The primary effectiveness variable was rate (percent %) of successful induction of estrous cycles in the study population. Cows were examined by transrectal ultrasound for presence of a CL on days 7, 14, 21, 28, 35, and 42. Demonstration of induction of estrous cycles was based on ultrasound observations and defined as identification of a functional CL by day 21 plus any of the 6 criteria listed in Appendix 1. The majority of personnel involved in the study were masked to treatment, and persons aware of treatment assignments were not allowed to collect study data.

Estrous induction outcomes (days 1-42 after EAZI-BREED CIDR insertion) were statistically evaluated by appropriate standard methods, including back-transformed least squares (LS) means and back-transformed 95% confidence intervals (CI), using each cow as an experimental unit. The model included treatment and parity (covariate, 1st vs ≥ 2nd parity) as fixed effects; random effects included site, site by treatment, and cohort within site. Probabilities ≤ 0.05 were considered significant (2-sided test). Because the 2 Wisconsin dairies were under the same management, they were treated as a single site in the statistical analysis.

Reproductive safety was assessed simultaneously with the field efficacy evaluation. Conception rate (% diagnosed pregnant to inseminations on days 1 to 21, relative to cows inseminated and included through day 21) and pregnancy rate (% diagnosed pregnant to inseminations on days 1 to 21, relative to total cows enrolled per treatment group) were computed. Results were analyzed similar to the effectiveness variable, except 80% confidence intervals were generated and probabilities ≤ 0.10 were considered significant (1-sided test).

Appendix 1: Six additional criteria for demonstration of induction of estrous cycles.

1. Continued estrous cycles based on ultrasound evaluation of ovaries and the following observations:
   a. Regression of the original CL detected on study day 7, 14, or 21; and
   b. Presence of at least 1 new CL by study day 42; and
   c. During study days 7 to 42 at least 1 incidence of a CL detected on the same ovary for a minimum of 2 consecutive ultrasound observations.

2. Evidence of continued estrous cycles based on ultrasound evaluation of ovaries defined as presence of at least 1 new CL on the ovary opposite the initial CL by study day 42 without evidence of regression of initial CL.

3. For cows inseminated during days 1 to 21, either:
   a. Continued presence of the original CL with pregnancy determined at 30±3 days post-insemination; or
   b. Continued estrous cycles as defined in Criterion 1 for animals not conceiving to the initial insemination; or
   c. Continued presence of the original CL for 4 or more weeks, without subsequent estrus and found to be not pregnant at 30±3 days post-insemination. These animals were considered to have early embryo mortality with extension of luteal lifespan.

4. Animals with consistent detection of a CL on the same ovary for 4 or more weeks with an estrus detected during this interval. These animals were considered to have developed a new CL on the same ovary as the initial CL, without detection of regression of the initial CL.

5. Animals with consistent detection of a CL on the same ovary for 4 or more weeks, without detected estrus during this 4 or more week interval. These cows were assumed to have had a silent heat. (This is consistent with incidence of a CL detected on the same ovary for several weeks and appearance of a new CL on the opposite ovary without an intervening week with no CL detected.)

6. Animals with 2 detected estrous periods, occurring at an 18- to 25-day interval, with at least 2 observations of functional CL on the same ovary within the interval of the 2 detected estruses.
Results

Study outcomes summarized in Figure 2 show that the rate of estrous cycle induction in controls averaged 45.1% across the various dairies (range 30.5-69.7; CI 5.3). In contrast, 62.0% of cows that received Eazi-Breed CIDR returned to estrous cycling within 35 days following Eazi-Breed CIDR removal (range 49.0-78.6; CI 5.0). This favorable outcome represented a significant ($P < 0.0001$) improvement of 16.9 percentage points compared with controls, and a relative increase of 37.5% vs controls in the percent of cows detected in estrus.

Of all cows inseminated in the Eazi-Breed CIDR group during days 1 to 21, most (78.3%) were inseminated 2 to 3 days following removal of the insert (study days 9 and 10). Results of the reproductive safety evaluations (Figure 3) revealed that conception rate fell ($P < 0.083$) for Eazi-Breed CIDR cows inseminated during the 14 days following insert removal (27.7% Eazi-Breed CIDR, 36.2% controls). However, overall pregnancy rates were low and no differences between treatment groups were detected (9.0% Eazi-Breed CIDR, 8.2% controls; $P = 0.32$). The low pregnancy rates were likely due to a number of factors, including management, environment, and reproductive physiology of the cow (Note: see sidebar on page 2). Because of the reduced conception rates but lack of effect on pregnancy rates in cows receiving Eazi-Breed CIDR, package labeling includes the following statement: “You May Notice: Reduced conception rates to inseminations conducted immediately following removal of the Eazi-Breed CIDR Cattle Insert when used for induction of estrous cycles in anestrous lactating dairy cows. Such reductions in conception rate are not expected to result in reduced pregnancy rates.”

Relatively few cows developed any health problems during the study. Reported health abnormalities were considered typical for dairy cattle (e.g., mastitis, lameness, pneumonia) and not related to treatment. The Eazi-Breed CIDR was successfully retained for the full 7-day treatment period in 96.7% of cows, with the majority of insert losses occurring at a single site (Jersey herd).

**Eazi-Breed CIDR**

improved the rate of estrous cycle induction by 37.5% vs controls.

Eazi-Breed CIDR offers a new opportunity for dairy managers to further optimize herd efficiency and productivity.

![Figure 2](image)

**Figure 2** – Rates of successful estrous cycle induction achieved (days 1-42); least squares means.

![Figure 3](image)

**Figure 3** – Conception rates (days 1-21) and overall pregnancy rates (days 1-21); least squares means.
Conclusions

The EAZI-BREED CIDR offers dairy managers and veterinarians a new approved strategy for inducing estrus in anestrous lactating dairy cows. Results of this large multi-site study demonstrated that EAZI-BREED CIDR, administered once intravaginally for a duration of 7 days, was effective and safe for estrous induction in postpartum cows, and thus supported FDA approval of adding “for induction of estrous cycles in anestrous lactating dairy cows” to the product label. As a result, EAZI-BREED CIDR can now be included in yet another reproductive management protocol that helps dairy producers optimize the efficiency and productivity of their herds.

IMPORTANT SAFETY INFORMATION FOR EAZI-BREED CIDR: Avoid contact with skin by wearing protective gloves when handling EAZI-BREED CIDR inserts. Do not use in heifers of insufficient size or age for breeding or in cattle with abnormal, immature, or infected genital tracts. Do not use inserts more than once.

IMPORTANT SAFETY INFORMATION FOR LUTALYSE: Women of childbearing age and persons with respiratory problems should exercise extreme caution when handling LUTALYSE. LUTALYSE is readily absorbed through the skin and may cause abortion and/or bronchospasms, therefore spillage on the skin should be washed off immediately with soap and water. Aseptic technique should be used to reduce the possibility of post-injection clostridial infections. Do not administer LUTALYSE in pregnant cattle unless cessation of pregnancy is desired. See full Prescribing Information, attached.
**LUTALYSE® Injection (dinoprost injection) 5 mg dinoprost/mL as dinoprost tromethamine**

**Caution:** Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

**DESCRIPTION**

LUTALYSE® Injection (5 mg dinoprost/mL) is a sterile solution containing the naturally occurring prostaglandin F2 alpha (dinoprost) as the tromethamine salt. Each mL contains dinoprost tromethamine equivalent to 5 mg dinoprost: also, benzyl alcohol, 16.5 mg added as preservative. When necessary, pH was adjusted with sodium hydroxide and/or hydrochloric acid. Dinoprost tromethamine is a white or slightly off-white crystalline powder that is readily soluble in water at room temperature in concentrations to at least 200 mg/mL.

**INDICATIONS FOR USE**

**Cattle:** LUTALYSE Injection is indicated as a luteolytic agent. LUTALYSE Injection is effective only when the corpus luteum is present. LUTALYSE Injection is used to control the timing of estrus and ovulation in estrous cycling cattle that have a corpus luteum. Treatment of such mares with LUTALYSE Injection usually results in increased piglet mortality. It is important that adequate records be maintained on (1) the average length of gestation period for the animals on a specific location, and (2) the breeding and projected farrowing dates for each animal. This information is essential to determine the appropriate time for administration of LUTALYSE Injection.

**Mares:** LUTALYSE Injection is indicated for its luteolytic effect in mares. Administer a single intramural 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 mares. Treatment of such mares with LUTALYSE Injection usually results in increased piglet mortality. It is important that adequate records be maintained on (1) the average length of gestation period for the animals on a specific location, and (2) the breeding and projected farrowing dates for each animal. This information is essential to determine the appropriate time for administration of LUTALYSE Injection.

**Swine:** For Parturition Induction in Swine: For intramural 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 will vary, and individual animals may require a mean interval from administration of 2 mL LUTALYSE Injection (10 mg dinoprost) to parturition of approximately 30 hours. This can be employed to control the time of farrowing in sows and gilts in late gestation.

**Animal Safety Warnings:**

To report suspected adverse events, for technical assistance or to obtain a copy of the Material Safety Data Sheet (MSDS) contact Zoetis Inc. at 1-888-963-8471. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at http://www.fda.gov/AnimalVeterinary/SafetyHealth. For Treatment of Pyometra (chronic endometritis) in Cattle: Administer a dose of 5 mL LUTALYSE Injection (25 mg dinoprost) intramuscularly. Treatment of such mares with LUTALYSE Injection usually results in recession of the corpus luteum followed by estrus and/or ovulation. Treatment of “anestrous” mares which abort subsequent to 36 days of pregnancy may not result in return to estrus due to presence of functional endometrial cups.

**User Safety:** Not for human use. Keep out of the reach of children. Women of childbearing age, asthmatics, and persons with bronchial and other respiratory problems should exercise extreme caution when handling this product. In the early stages, women may be unaware of their pregnancies. Dinoprost tromethamine is readily absorbed through the skin and can cause abortion and/or bronchospasms. Accidental spillage on the skin should be washed off immediately.

**Below are three examples of treatment regimens for FTAI that fit within the dosage regimen framework described immediately above:**

<table>
<thead>
<tr>
<th>Example 1</th>
<th>Example 2</th>
<th>Example 3</th>
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<tbody>
<tr>
<td>Day 0 (Monday)</td>
<td>1st FACTREL</td>
<td>1st FACTREL</td>
</tr>
<tr>
<td>Day 7 (the following Monday)</td>
<td>LUTALYSE</td>
<td>LUTALYSE</td>
</tr>
<tr>
<td>Day 9 (Wednesday)</td>
<td>2nd FACTREL + FTAI at 48 hours after LUTALYSE</td>
<td>2nd FACTREL</td>
</tr>
<tr>
<td>Day 10 (Thursday)</td>
<td>FTAI 24 hours after 2nd FACTREL</td>
<td>FTAI 18 hours after 2nd FACTREL</td>
</tr>
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6. For use with EAZI-BREED™ CIDR® (progesterone intravaginal insert) Cattle Injection 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 Injection 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 postpartum estrus in beef heifers:

- Administer one EAZI-BREED CIDR Cattle Insert per animal for 7 days (for example, if administered on a Monday remove the following Monday).
- Inject 5 mL LUTALYSE Injection (equivalent to 5 mg 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.

**User Safety:** Not for human use. Keep out of the reach of children. Women of childbearing age, asthmatics, and persons with bronchial and other respiratory problems should exercise extreme caution when handling this product. In the early stages, women may be unaw...
Swine: of parturition or abortion with any exogenous compound may precipitate dystocia, fetal death, retained fetus at this early stage of gestation should not lead to complications at abortion. However, induction did not result in dystocia, retained placenta or death of heifers in the field studies. The smallness of the or clinical chemistry parameters measured. Clinically, a slight transitory increase in heart rate was urinalysis, organ weights, and gross plus microscopic measurements following treatment with various α-dinoprost/kg/day respectively. This was due to the expected luteolytic properties of the drug. 8-18 of gestation. A slight and marked embryo lethal effect was observed in dams given 1.0 and 5.0 mg at 0.5 and 1.0 mg/kg/day on gestation days 6, 7 and 8 or 9, 10 and 11, or 12, 13 and 14. Dinoprost and 20.0 mg dinoprost/kg/day from day 6th-15th of gestation or when administered subcutaneously Laboratory Animals: have been assayed by RIA for dinoprost and the 15-keto metabolites. These data support previous reports work done in the cow. Cattle serum collected during 24 hours after doses of 0 to 250 mg dinoprost have been reported to cause in the process of ovulation and gamete transport. Also PGF2 release of pituitary tropic hormones. Data suggest prostaglandins, especially PGE's and PGF's, may have been involved in the process of ovulation and gamete transport. Also PGF2α α-dinoprost/kg/day respectively. This was due to the expected luteolytic properties of the drug. 3H PGF2α Tham and 3H PGF2α free acid administered intravenously to rats demonstrated no significant differences in blood concentration of dinoprost. An interesting observation in the above study was that the radioactive dose of 1H PGF2α rapidly distributed in tissues and dissipated in tissues with almost the same curve as it did in the serum. The half-life of dinoprost in bovine blood has been reported to be on the order of minutes. A complete study on the distribution of decline of 1H PGF2α alpha Tham in the tissue of rats was well correlated with the work done in the cow. Cattle serum collected during 24 hours after doses of 0 to 250 mg dinoprost have been assayed by RIA for dinoprost and the 15-keto metabolites. These data support previous reports that dinoprost has a half-life of minutes. Dinoprost is a natural prostaglandin. All systems associated with dinoprost metabolism exist in the body; therefore, no new metabolic, transport, excretory, binding or other systems need be established by the body to metabolize injected dinoprost.

Mares: Dinoprost tromethamine was administered to adult mares (weighing 320 to 485 kg; 2 to 20 years old), at the rates of 0.1, 0.2, 0.4, and 0.8 mg per mare per day for 8 days. Route of administration for each dose group was both intramuscularly (2 mares) and subcutaneously (2 mares). Changes were detected in all treated groups for clinical (reduced sensitivity to pain; lomocortic incoordination; hypergastromotility; sweating; hyperthermia, labored respiration), blood chemistry (elevated cholesterol, total bilirubin, LDH, and glucose), and hematology (decreased eosinophils; increased hemoglobin, hematocrit, and erythrocytes) measurements. The effects in the 100 mg dose, and to a lesser extent, the 200 mg dose groups were transient in nature, lasting for a few minutes to several hours. Mares did not appear to sustain adverse effects following termination of the side effects.

Mares treated with either 400 mg or 800 mg exhibited more profound symptoms. The excessive hyperstimulation of the gastrointestinal tract caused a protracted diarrhea, slight electrolyte imbalance (decreased sodium and potassium), dehydration, gastrointestinal irritation, and slight liver malfunction (elevated SGOT, SGPT at 800 mg only). Heart rate was increased but pH of the urine was decreased. Other measurements evaluated in the study remained within normal limits. No mortality occurred in any of the groups. No apparent differences were observed between the intramuscular and subcutaneous routes of administration. Luteolytic doses of dinoprost tromethamine are on the order of 5 to 10 mg administered on one day, therefore, LUTALYSE Injection was demonstrated to have a wide margin of safety. Thus, the 100 mg dose gave a safety margin of 10 to 20X for a single injection or 80 to 160X for the 8 daily injections. Additional studies investigated the effects in the mare of single intramuscular doses of 0.25, 1.0, 2.5, 3.0, 5.0, and 10.0 mg dinoprost tromethamine. Heart rate, respiration rate, rectal temperature, and sweating were measured at 0.25, 0.50, 0.75, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0, and 6.0 hr. after injection. Neither heart rate nor respiration rates were significantly altered (P > 0.05) when compared to contemporary control values. Sweating was observed for 0 of 9, 2 of 9, 7 of 9, 9 of 9, and 8 of 9 mares injected with 0.25, 1.0, 2.5, 3.0, 5.0, or 10.0 mg dinoprost tromethamine, respectively. Sweating was temporary in all cases and was mild for doses of 3.0 mg or less but was extensive (beads of sweat over the entire body and dripping) for the 10 mg dose. Sweating after the 5.0 mg dose was intermediate from that seen for mares treated with 3.0 and 10.0 mg. Sweating began within 15 minutes after injection and ceased by 45 to 60 minutes after injection. Rectal temperature was decreased during the interval 0.5 until 1.0, 3 to 4, or 5 hours after injection for 0.25 and 1.0 mg, 2.5 and 3.0, and 5.0 and 10.0 mg dose groups, respectively. Average rectal temperature during the 15 minute period following injection was on the order of 97.5 to 98.6, with the greatest decreases observed in the 10 mg dose group.

Mares: For Difficult-to-Breed Mares: In one study with 122 Standardbred and Thoroughbred mares in clinical anestrus for an average of 58 days and treated during the breeding season, behavioral estrus was detected in 81 percent at an average time of 3.7 days after injection with 5 mg LUTALYSE injection; ovulation occurred an average of 7.0 days after treatment. Of those mares bred, 59% were pregnant following an average of 1.4 services during that estrus.

HOW SUPPLIED
LUTALYSE Injection is available in 30 and 100 mL vials.

STORAGE, HANDLING, AND DISPOSAL
Store at controlled room temperature 20° to 25°C (68° to 77°F). Protect from freezing.
NADA 108-901, Approved by FDA

Zoetics
Distributed by: Zoetis Inc.
Kalamazoo, MI 49007

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References


