FOR VETERINARY USE ONLY
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Enzapros®

Reg. No. C14/11.3/10 (Act 101/1965)
Zambia Reg. No.: 346/718V Act 3/2013

Injectable solution

APPROVED
By Trinette Peterson at 12:35 pm, Jul 02, 2024

South Africa

COMPOSITION:
Each mℓ contains 5 mg dinoprost (as trometamol) as the active ingredient.
The inactive ingredients are: sodium hydroxide and water for injection.
16,5 mg benzyl alcohol as the preservative.

PHARMACOLOGICAL CLASSIFICATION:
C. 11.3 Reproductive system, prostaglandins.

PHARMACOLOGICAL ACTION:
Biological studies: Prostaglandins occur in nearly all mammalian tissues. Prostaglandins, especially PGEs and PGFs have been shown in certain species to:
- Increase at time of parturition in amniotic fluid, maternal placenta, myometrium and blood.
- Stimulate myometrial activity, and
- Induce either abortion or parturition.

INDICATIONS:
For intramuscular use in cattle and swine as follows:
1) To schedule the time of oestrous and ovulation in oestrous cycling cattle;
2) To treat cattle which have a functional corpus luteum but do not express behavioural oestrous (sub-oestrous or silent heat);
3) To treat chronic metritis and pyometra;
4) For controlled breeding;
5) To induce abortion;
6) To induce parturition.

CONTRA-INDICATIONS:
1) Do not administer to pregnant animals unless parturition or abortion is desired.
2) Do not administer intravenously.

WARNINGS:
1) Not for human use.
2) Cattle intended for human consumption must not be slaughtered within 48 hours of last treatment.
3)Swine intended for human consumption must not be slaugtered within 24 hours after last treatment
4) Do not allow pregnant women, women of child-bearing age, asthmatics or persons with bronchial and other respiratory problems to administer this product as this product may cause miscarriage or bronchospasm if absorbed through the skin.
5) Spills of Enzapros® onto the skin should be washed off immediately with soap and water. Accidental spillage of Enzapros® onto the skin or into the eyes must be immediately rinsed with water.
6) Impervious gloves should be worn to avoid skin contact.

A2790-01

DOSAGE AND DIRECTIONS FOR USE:
Enzapros® is supplied at a concentration of 5 mg dinoprost per ml.
As with any other multi-dose vial, practise aseptic techniques in withdrawing each dose. Adequately clean and disinfect the vial closure prior to entry with the sterile needle.

Cattle:
Administer 25 mg dinoprost (5 ml Enzapros®) intramuscularly:

1) To schedule the time of oestrous and ovulation in oestrous cycling cattle:
Individual cows and heifers treated with Enzapros® during di-oestrous will normally return to oestrous and ovulate within 2 to 5 days after treatment. (Note: Administration of Enzapros® to cattle within 4 days after oestrous is unlikely to result in luteolysis of the corpus luteum. Administration within 48 hours before the onset of the next oestrous may not influence the timing of that oestrous after treatment).

2) To treat cattle which have a functional corpus luteum but do not express behavioural oestrous (sub-oestrous/ silent heat):
Individual cattle may have normal cyclical ovarian activity without detectable behavioural oestrous; this occurs most frequently in the winter months, at peak lactation in high-producing dairy cows and in suckled beef cows. If a corpus luteum is present and ovulation has not occurred in the previous 4 days, administration of Enzapros® will result in corpus luteum regression followed by return to oestrous and ovulation.
Breeding of cattle treated with PGF2α for the above indication may be by natural service, artificial insemination at the usual time in relation to observed oestrous, or by fixed time insemination (80 hours or 72 hours and 90 hours post-treatment).

3) To induce abortion in cattle:
Enzapros® has been used successfully to induce abortion in cattle. Stage of gestation is an important factor influencing response. The percentage of animals responding to a single intramuscular injection decreases as the gestation period increases. Approximate percentages of animals aborting within 35 days following Enzapros® injection were 90 % within the first 100 days of gestation, 60 % within 101 to 150 day of gestation and 40 % in animals beyond 150 days of gestation.

4) To induce parturition in cattle and swine:
Cattle: Enzapros® has been used to induce parturition on or after day 270 of gestation. Induction close to term results in fewer calving and post-calving complications and better calf survival. Induction of parturition of cattle is indicated where there is a risk of oversize calves or where early parturition is desired. In addition, induction is indicated where pregnancies are complicated by miscellaneous conditions, such as mummified or macerated foetus, hydrops amnii, hydroallantois, etc. Enzapros® is indicated for the expulsion of a dead foetus.

5) For treatment of chronic metritis and pyometra in cattle:
In the cow, chronic metritis frequently occurs as a sequel to an acute or sub-acute endometritis in the first two- or three-weeks post-partum; typically, there is an intermittent purulent or mucopurulent discharge. Pyometra is characterised by the retention of purulent fluid in the uterus. Luteal regression through the administration of Enzapros® is followed by oestrous, during which time the uterine environment is relatively unfavourable to the bacteria involved in the infection. Treatment may have to be repeated after 10-12 days where the condition is long-standing.

6) For controlled breeding in cattle:
Enzapros® is indicated for its luteolytic effect in cattle. This luteolytic effect can be utilised to control the timing of oestrous in cycling cattle that have a corpus luteum. The identified activity of Enzapros® permits a wide range of oestrous control programs: for normally cycling animals, at least 35 days after calving.

Program I:
1. Inject 5 ml Enzapros® intramuscularly.
2. Repeat the injection in 11 (10 to 12) days.
3. Inseminate 80 (78 to 82) hours after the second Enzapros® injection. No oestrous detection or observation is required if animals were cycling normally when injected.
This program is recommended for most herds with successful A.I. experience and where females are known to be cycling.

Program II:
1. Inject 5 ml Enzapros® intramuscularly.
2. Repeat the injection in 11 (10 to 12) days.
3. Inseminate 72 (70 to 72) hours and 90 (88 to 96) hours after the second Enzapros® injection. No oestrous detection or observation is required if animals were cycling normally when injected.
Double insemination has demonstrated increased pregnancy rates in some herds.

Program III*:
1. Inject 5 ml Enzapros® intramuscularly.
2. Repeat the injection in 11 (10 to 12) days.
3. Inseminate upon detected oestrus.

Program IV*:
1. Inject 5 ml Enzapros® intramuscularly.
2. Inseminate upon detected oestrus.

* If it is unknown whether most animals to be treated are cycling, Programs III and IV calling for oestrous detection should be followed rather than Programs I and II calling for timed insemination. A "clean up bull" may be use following any Enzapros® program or the service may be repeated at next oestrus, one cycle later, in animals that did not conceive at first service.

Practical application of these use-programs will vary depending upon many factors and in many cases these programs may be altered to meet the requirements of a specific operation. For example, some veterinarians may wish to design their own programs for specific situations and schedules. The activity of Enzapros® may be easily adapted for such individualized approach. However, these changes should be carefully evaluated to ensure that they do not detrimentally affect the success of the breeding program.

Considerations in the use of Enzapros® in cows and heifers:

Enzapros® is effective only in those oestrous cycling animals with a functional corpus luteum. Some Enzapros® programs call for two injections 11 (10 to 12) days apart. This avoids the need to consider the animal's precise day of the oestrous cycle at the time of the first injection. Timed insemination should be reserved for groups where all or nearly all animals are known to have oestrous cycles. Selection of one option over another would be dependent on a number of factors such as cost of semen, number of times cattle should be handled, ease and capability of oestrous detection and goal of the AI (artificial insemination) program.

Many factors contribute to the success and failure of reproductive management, and these factors are also important when time of breeding is to be regulated with Enzapros®. Some of these factors are:

a) Cattle must have a corpus luteum on the ovary of about five days or more in age in order for PGF2 alpha to be luteolytic.
b) Semen of high fertility must be inseminated.
c) Semen must be inseminated properly.
d) Oestrous must be detected accurately if timed AI is not employed.
e) Physical activities must be adequate prior to and during the breeding season as this has a direct effect on conception and the initiation of oestrous in heifers or return to oestrous cycle in cows following calving.

A successful AI program can employ Enzapros® effectively, but a poor AI program will continue to be poor when Enzapros® is employed unless other management deficiencies are remedied first.

When used for abortion or parturition induction, response may vary depending on stage of gestation.

Swine:

Administer 10 mg dinoprost (2 ml Enzapros®) intramuscularly to induce parturition in swine within three (3) days of normal predicted farrowing date. Response to treatment varies in individual animals with mean interval from administration to parturition of approximately 33 hours. This can be advantageously employed to control the time of farrowing in sows and gilts in late gestation. Treatment earlier than three days prior to predicted farrowing date might produce weak piglets resulting in reduced survival.

Considerations in the use of Enzapros® in sows and gilts:

A number of factors are important to successful use of Enzapros® for parturition induction in swine.

As the product must be given at a relatively specific time interval during late gestation (treatment earlier than three days prior to the predicted farrowing date may produce weak piglets resulting in reduced survival), it is important that adequate records be maintained on:

a) The average length of gestation period for the animals on specific premises, and
b) The breeding date and projected farrowing date for each animal.

The information is essential to determine appropriate time for product administration.

As potential benefits and objectives may vary by location, the development of specific use programs will be important to successful product usage. Such programs should be designed to meet individual needs consequently functioning as an aid to reproductive management.

SIDE-EFFECTS AND SPECIAL PRECAUTIONS:

Cattle: The most frequently observed side-effect is increased rectal temperature at a 5x or 10x overdose. However, rectal temperature changes have been transient in all cases observed and have not been detrimental to the animal. Limited salivation has been seen in some instances.

Swine: Side-effects consisting of increased body temperature, increased respiratory rate, increased salivation, stimulation of defaecation and urination, flushing of the skin and restlessness (arching of back, pawing and rubbing and gnawing the crate) have been reported following the administration of PGF2 alpha in pregnant sows and gilts. These effects tend to parallel the signs exhibited by sows prior to normal parturition, only they appear to be condensed in time. These effects are usually seen within 15 minutes of injection and disappear within an hour.

PRECAUTIONS:

1) Induction of parturition or abortion with any exogenous compound may precipitate dystocia, foetal death, retained placenta and/ or metritis.
2) Parturition induction in swine earlier than 72 hours prior to the predicted farrowing date may result in piglet mortality.

Appropriate aseptic techniques should be used when administering this product.

INTERACTIONS:

1) As non-steroidal anti-inflammatory drugs may inhibit the endogenous prostaglandin synthesis, concomitant administration of these compounds with Enzapros® may decrease the luteolytic effects of Enzapros®.
2) As oxytocic's stimulate the production of prostaglandins, concomitant administration of these compounds with Enzapros® may exacerbate the luteolytic effects of Enzapros®.

KNOWN SIGNS OF OVERDOSAGE AND PARTICULARS OF ITS TREATMENT:

1) See under "Side-effects and Special Precautions".
2) Treatment in case of overdosage is both symptomatic and supportive.

IDENTIFICATION:

Clear colourless solution. Possible presence of particulate matter may appear after various periods of storage. These particles have not posed biological harm to injected animals and have altered neither the potency nor sterility of the Enzapros®.

PRESENTATION:

Enzapros® is available in four multi-dose presentations:
10 mℓ, 30 mℓ or 50 mℓ Type I colourless glass vial sealed with a red-brown chlorobutyl stopper and crimped with an aluminium and green plastic capsule, enclosed in an outer carton.

STORAGE INSTRUCTIONS:

Store at or below 25 °C. Keep out of reach of children and uninformed persons.
Shelf-life of unopened bottle: 3 years Shelf-life of opened bottle: 28 days. Do not refrigerate the solution.

REGISTRATION NUMBER:

C14/11.3/10 (Act 101 of 1965)

NAME AND BUSINESS ADDRESS OF THE HOLDER OF THE CERTIFICATE OF REGISTRATION

Ceva Animal Health (Pty) Ltd
Office 2, Building 16, Constantia Park, Randjespark
1685
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DATE OF NOTIFICATION OF APPROVAL OF THIS SCIENTIFIC PACKAGE INSERT

24 April 2024.

R0754-04/2024

NOT ENZAPROS 50ML ZA
400x160/35,5x160
Recto Verso
CODE ARTICLE : A2790-01
Black

ENZAPROS 50ML AFRIQUE DU SUD
ID84465

CORPS : 10 Pts

LOUIS 01/07/24