DongBang.Co.,ltd. makes best quality hormones
No. 1 Market share in hormones of korean animal health market

For the Improvement of Conception Rate

DINORIN

PGF_{2a}

NO.1

Take advantage of proposed programs!

DONG BANG CO., LTD.
www.DongBangAH.com

PGF2*a*

DINORIN

1. Ingredients : Each ml contains;

Cloprostenol sodium (B.P.)	100 ug
Chlorocresol (B.P.)	0.38 mg
Citric acid anhydrous (B.O.)	3.63 mg
Sodium hydroxide (B.P.)	2.10 mg
Water for injection (B.P.)	q.s.

2. Appearance : Colorless aqueous solution

3. Indication :

* Cattle : Control the time of oestrus and ovulation. Synchronization of the oestrus cycle. Treat cattle which have a functional corpus luteum but do not express behavioural oestrus. Termination of abnormal pregnancy. Treatment of chronic metritis and pyometra. Routine use in the early postpartum period. Luteal cysts.
* Pigs : Induction of parturition.

4. Dosage & Administration :

* Cattle : Single or repeated doses of 5 ml (500 ug) by intramuscular injection.
* Pigs : Administer 1.75 ml(175 ug) intramuscularly to induce parturition in swine within three days of the normal predicted farrowing date.

5. Application :

The indications for use of DINORIN in cows are as follows:

1. Control the time of oestrus and ovulation in oestrus cycling cattle.
2. Synchronization of the oestrus cycle for controlled breeding
3. Treat cattle which have a functional corpus luteum but do not express behavioural oestrus, (suboestrus or not visible oestrus)
4. Terrnination of unwanted normal pregnancies (e.g. following mismating)
5. Terrnination of abnormal pregnancy.(e.g. expulsion of mummified foetus)
6. Treatment of chronic metritis and pyometra in cattle.
7. Routine use in the early postpartum period to improve reproductive performance
8. Luteal cysts

Direction for Use : Single or repeated doses of 5ml (500ug) of Cloprostenolted by intracellular injection.

As in other species, $PGF_{2\alpha}$ and its synthetic analogues such as cloprostenol cause luteolysis of the active corpus luteum in cows. $PGF_{2\alpha}$ also has a direct stimulatory effect on uterine smooth muscle causing contraction, and a relaxant effect on the cervix. All indications for use of DINORIN in cows are essentially a physiological function of either the luteolytic effect or myometrial stimulatory activity of cloprostenol, or a combination of both.

1) Control the time of oestrus and ovulation in oestrus cycling cattle :

Individual cows treated during dioestrus will normally return to oestrus and ovulate within 2-5 days after treatment.

2) Synchronization of the oestrus cycle for controlled breeding :

DINORIN is indicated for its luteolytic effect in cattle. This luteolytic effect can be utilized to control the timing of oestrus in oestrus cycling cattle that have a corpus luteum. The identified activity of DINORIN permits a wide range of oestrus control programs. For normally-cycling animals. at least 35 days after calving.
Heat detection is applied the first 5-7 days of the mating period. All cows observed in oestrus during that period are mated as usual.
Those are not observed in oestrus are given a single injection of DINORIN at the end of the 5-7 day period. Oestrus should commence in most treated cows 2-4 days following DINORIN treatment. This approach can be used to synchronize oestrus in whole dairy herds as part of a planned mating strategy.
Among cows injected with DINORIN, those which exhibit oestrus are mated as observed. Individuals which fail to respond to the first injection are given a second treatment 11-14 days later.
Among cows given two injections of DINORIN, mating is commenced as cows exhibit oestrus after the second injection. Those which fail to respond to the second injection may be inseminated 72-84 hours after the second DINORIN treatment.

3) Treat cattle which have a functional corpus luteum but do not express behavioural oestrus (suboestrus or not visible oestrus).

Individual cattle may have normal cyclical ovarian activity without detectable behavioural oestrus. this occurs most frequently in the winter months, at peak lactation in high producing dairy cow, and in suckled beef cows. If a corpus luteum is present and ovulation has not occured in the previous four days, administration of DINORIN will result in corpus luteum regression followed by return to oestrus and ovulation.
Oestrus should commence 2-4 days following treatment. Breeding of cattle treated with DINORIN for the above injection may be by natural service, artificial insemination at the usual time in relation to observed oestrus. Failure of oestrus induction may result if the treatment is given during the refractory period of the corpus luteum and will necessitate a further injection 11-14 days after the first.

4) Termination of unwanted normal pregnancies (e.g. following mismating)

Pregnancy can be terminated by treatment with DINORIN from days 7-150 following conception. Between days 7 and 100 abortion is rapidly and reliably induced within 3-5 days of treatment. Between days 100-150 results may be less reliable due to the decreasing role of luteral progesterone and increasing role of placental progesterone in the maintenance of pregnancy. If abortion has not occurred by the eight days following treatment, a repeat injection should be given. Treated animals should be closely observed until expulsion of the foetus and placental membranes is complete, Abortion should not be induce with DINORIN alone after day 150 of gestation.

5) Termination of abnormal pregnancy (e.g. expulsion of mummified foetues)

Fetal death may result in the mummification of the foetus in utero. Treatment with DINORIN at any stage of gestation will result in luteolysis and expulsion of the mummified foetus from the uterus. Occasionally manual removal of the foetus from the vagina is necessary.
Pathological accumulation of placental fluids (hydramniosis or hydrallantois) can be a tife threatening condition, and is rarely resolved by surgical drainage. Termination of pregnancy by DINORIN is often the preferred treatment option.

6) Treatment of chronic metritis and pyometra in cattle.

In the cow, chronic metritis frequently occurs as a sequel to an acute or subacute endometritis in the first two or three weeks post-partum. typically, there is an intermittent purulent or discharge. Pyometra is characterized by the retention of purulent fluid within the uterus.
Luteal regression through the administration of DINORIN is followed by oestrus, during which the uterine environment is relatively unfavourable to the bacteria in the infection. Treatment may have to be repeated after 10-12 days where the condition is longstanding.

7) Routine use in the early postpartum period to improve reproductive performance.

Routine treatment with cloprostenol in the early postpartum period can reduce the calving to conception interval in dairy herds. A number of factors are to be involved in this response; the myometrial stimulatory effect of PG resulting in more rapid uterine involution; a sparing effect on uterine infection; and the luteal effect providing more prompt treatment of cows with sub or silent oestrus or prplonged luteal phases. One or two treatments can be given between 12 and 40 days post partum.

8) Luteal cysts

Cystic ovaries may be associated with persistent tuteal tissue, and treatment with DINORIN may effectively resolve such conditions and allow a return to normal cyclical activity.

*** The indications for use of DINORIN in cows are as follows:**

1) Induction of Parturtion

Directions for Use : Administer 1.75ml (175ug of Cloprostenol) intramuscularly to induce parturition in swine within three days of the normal predicted farrowing date.

In the cow the production of progesterone by the corpus luteum is responsible for maintaining gestation. Changes in uterine motility which initiate parturition are related to an abrupt decline in the level of progesterone, brought about by an initial increase in the level of $PGF_{2\alpha}$ resulting in luteolysis.

Conclusion :

DINORIN containing the active constituent cloprostenol 100ug/ml is effective for the induction of farrowing in cows at the recommended dose rate of 175ug intramuscular injection.

6. Packing unit : 5ml, 10ml, 30ml

7. Storage & Shelf life :
Store at room termperature protected from direct sunlignt and heat sources.
Good for 2 years.

8. Cautions :

a. Withdrawal period-None
Meat : Do not use less than 1 day before slaughter.
Milk withholding period : NIL (zero day)

b. Others
- Veterinary use only
- Do not use in pregnant animals when abortion of induced parturition is not the objective.
- Do not administer intravenously.
- Do not allow asthmatics, persons with bronchial or other respiratory problems, of pregnant women to administer as the drug may induce acute bronchoconstriction or abortion.
- Cloprostenol is readily absorbed through the skin, spills of DINORIN on the skin should immediately be washed off with soap and water.
- Gloves should be worn when administering the drug.
- Pregnant status should be determined prior to injection since DINORIN has been demonstrated to result in abortion or parturition induction when administered at suffciently high doses to many animal species.
- DINORIN is ineffective when adminstered prior to day-5 after ovulation.
- Parturition induction in swine earlier than 3 days prior to predicted farrowing date may result in reduce piglet viability.

Take time  **Observe label Directions**

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KVGMP

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