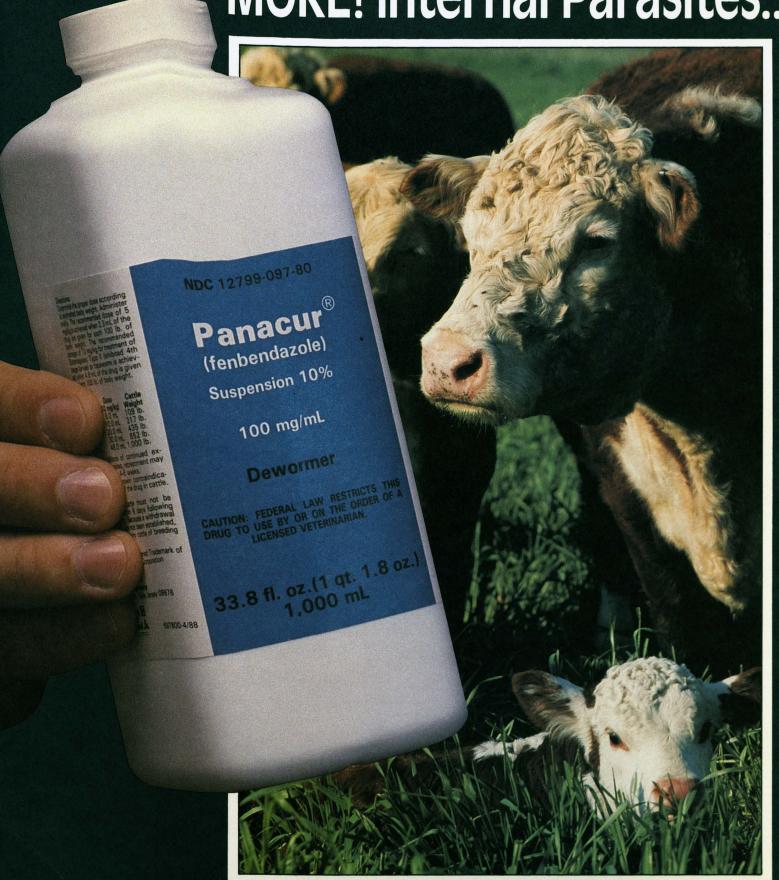


Say Goodbye to MORE! Internal Parasites...



...with NEW Approved



(fenbendazole)

The Veterinarian's Solution.

Panacur® (fenbendazole) is the veterinarian's solution to internal parasitism in cattle! 9 significant new indications give Panacur the broadest spectrum of activity against internal parasites of any over-the-counter or prescription dewormer. That means a great new opportunity to market your deworming programs directly to producers. And Panacur is a better value than other dewormers... delivering safe, effective results economically, with no known contraindications.

Panacur is now approved for the treatment of *Moniezia benedeni* and the inhibited 4th stage larvae of *Ostertagia ostertagi*, plus the 4th stage larvae of most currently indicated parasites – for a total of 18 internal parasites in all!*

For your clients' deworming needs, get Panacur – The veterinarian's solution to internal parasites!

*Please refer to the label for dosing instructions.

Panacur® (fenbendazole)
Anthelmintic Comparison Chart



† At 10 mg/kg. All others at 5 mg/kg.

Hoechst-Roussel Agri-Vet Company Route 202-206 North ● Somerville, New Jersey 08876

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Panacur® (fenbendazole) Suspension 10% 100 mg/mL Dewormer

CAUTION: FEDERAL LAW RESTRICTS THIS DRUG TO USE BY OR ON THE ORDER OF A LICENSED VETERINARIAN.

Directions:

Determine the proper dose according to estimated body weight. Administer orally. The recommended dose of 5 mg/kg is achieved when 2.3 mL of the drug are given for each 100 lbs. of body weight. The recommended dosage of 10 mg/kg for treatment of Ostertagiasis Type II (inhibited 4th stage larvae) or tapeworm is achieved when 4.6 mL of the drug are given for each 100 lbs. of body weight.

EXAMPLES:

Dose (5 mg/kg)	Dose (10 mg/kg)	Cattle Weight
5.0 mL	10.0 mL	217 lbs.
10.0 mL	20.0 mL	435 lbs.
15.0 mL	30.0 mL	652 lbs.
23.0 mL	46.0 mL	1,000 lbs.

Under conditions of continued exposure to parasites, retreatment may be needed after 4-6 weeks

There are no known contraindications to the use of the drug in cattle.

WARNINGS: Cattle must not be slaughtered within 8 days following last treatment. Because a withdrawal time in milk has not been established, do not use in dairy cattle of breeding age.

CAUTION: Keep this and all medication out of the reach of children.

DOSAGE:

Cattle -5 mg/kg (2.3 mg/lb) for the removal and control of:

Lungworm: (Dictyocaulus viviparus)

Stomach worm (adults): Ostertagia ostertagi (Brown stomach worm)

Stomach worm (adults & 4th stage larvae): Haemonchus contortus/placei (barberpole

Maemonchus contorius/piacei (barberpole worm)

Trichostrongylus axei (small stomach worm)

Intestinal worm (adults & 4th stage larvae): Bunostomum phlebotomum (hookworm) Nematodirus helvetianus (thread-necked intestinal worm)

Cooperia punctata and C. oncophora (small intestinal worm)

Trichostrongylus colubriformis (bankrupt worm)

Oesophagostomum radiatum (nodular worm)
Cattle – 10 mg/kg (4.6 mg/lb) for the removal

and control of: Stomach worm (4th stage inhibited larvae):

Ostertagia ostertagi (type II ostertagiasis)
Tapeworm: Moniezia benedeni

NDC 12799-097-80 697800-4/88

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Manufactured for:

Hoechst-Roussel Agri-Vet Company Somerville, New Jersey 08876



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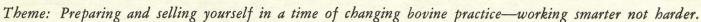
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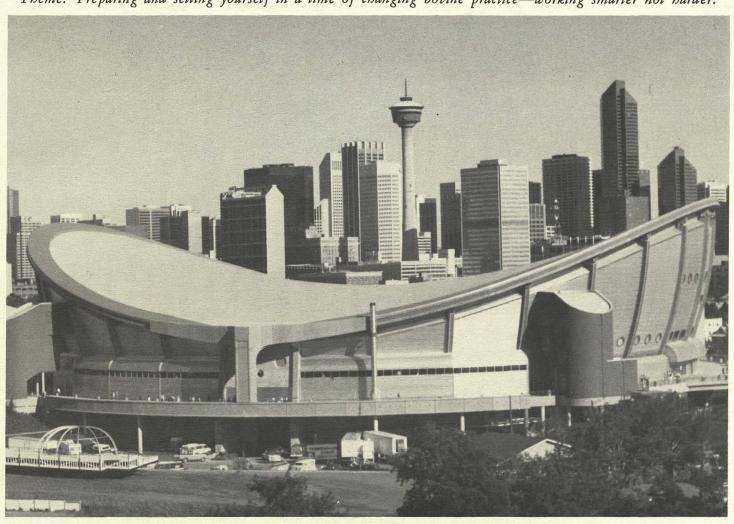
PROCEEDINGS

of the

TWENTY-FIRST ANNUAL CONVENTION AMERICAN ASSOCIATION OF BOVINE PRACTITIONERS

September 28-October 1, 1988 Calgary, Alberta, Canada





Edited by:

ERIC I. WILLIAMS, F.R.C.V.S., M.S.

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Equivalent to 250 mcg cloprostenol/ml **Prostaglandin Analogue for Cattle**

Estrumate (cloprostenol sodium) is a synthetic prostaglandin analogue structurally related to prostaglandin $F_{2\alpha}$ (PGFa₂). Each ml of the colorless aqueous solution contains 263 meg of cloprostenol sodium (equivalent to 250 meg of cloprostenol) in a sodium citrate, anhydrous citric acid and sodium chloride buffer containing 0.1% w/v chlorocresol B.P. as a bactericide. PH is adjusted, as necessary, with sodium hydroxide or citric acid.

ACTION Estrumate causes functional and morphologi-ACTION Estrumate causes functional and morphologi-cal regression of the corpus luteum (lutelysis) in cattle. In normal, non-pregnant cycling animals this effect on the life span of the corpus luteum usually results in estrus two to five days after treatment. In animals with prolonged luteal function (pyometra, mummified fetus, and luteal cysts) the induced luteolysis usually results in resolution of the condition and return to cyclicity. Pregnant animals may abort depending on the stage of gestation.

INDICATIONS For intramuscular use to induce luteolysis in beef and dairy cattle. The luteolytic action of Estrumate can be utilized to manipulate the estrous cycle to better fit certain management practices, to terminate pregnancies resulting from mismatings and to treat certain conditions associated with prolonged luteal function.

RECOMMENDED USES Unobserved or Non-Detected Estrus. Cows which are not detected in estrus although ovarian cyclicity continues can be treated with Estrumate if a mature corpus luteum is present. Estrus is expected to occur two to five days following injection, at which time animals may be inseminated. Treated cattle should be inseminated at the usual time following detection of estrus. If estrous detection is not desirable or possible, treated animals may be inseminated twice at about 72 and 96 hours post injection.

Pyometra or Chronic Endometritis Damage to the reproductive tract at calving or post partum retention of the placenta often leads to infection and inflammation of the uterus (endometritis). Under certain circumstances, this may progress into chronic endometritis with the this may progress into chronic endometritis with the uterus becoming distended with purulent matter. This condition, commonly referred to as pyometra, is charac-terized by a lack of cyclical estrous behavior and the pres-ence of a persistent corpus luteum. Induction of luteolysis with Estrumate usually results in evacuation of the uterus and a return to normal cyclical activity within 14 days after treatment. After 14 days post treatment, recovery rate of treated animals will not be different than that of untreated cattle.

Mummified Fetus Death of the conceptus during gesta tion may be followed by its degeneration and dehydration. Induction of luteolysis with Estrumate usually results in expulsion of the mummified fetus from the uterus. (Manual assistance may be necessary to remove the fetus from the vagina). Normal cyclical activity usually follows.

Luteal Cysts A cow may be non-cyclic due to the presence of a luteal cyst (a single, anovulatory follicle with a thickened wall which is accompanied by no external signs and by no changes in palpable consistency of the uterus).

Treatment with Estrumate can restore normal ovarian activity by causing regression of the luteal cyst.

Pregnancies from Mismating Unwanted pregnancies can be safely and efficiently terminated from one week after mating until about five months of gestation. The induced abortion is normally uncomplicated and the fetus and placenta are usually expelled about four to five days after the injection with the reproductive tract returning to normal soon after the abortion. The ability of Estrumate to induce abortion decreases beyond the fifth month of gestations with the right about a single production and the state of the state tation while the risk of dystocia and its consequences increases. Estrumate has not been sufficiently tested under feedlot conditions therefore recommendations cannot be made for its use in heifers placed in feedlots.

Controlled Breeding The luteolytic action of Estrumate can be utilized to schedule estrus and ovulation for an individual cycling animal or a group of animals. This allows control of the time at which cycling cows or heifers can be breed.

SAFETY AND TOXICITY At 50 and 100 times the recom-mended dose, mild side effects may be detected in some cattle. These include increased uneasiness, slight frothing, and milk let-down

CONTRAINDICATIONS Estrumate should not be administered to a pregnant animal whose calf is not to be abort-

PRECAUTIONS There is no effect on fertility following the single or double dosage regimen when breeding occurs at induced estrus or at 72 and 96 hours post treat-

ment. Conception rates may be lower than expected in those fixed time breeding programs which omit the second insemination (i.e., the insemination at or near 96 hours). This is especially true if a fixed time insemination is used following a single Estrumate injection. As with all parenteral products, careful aspectic techniques should be employed to decrease the possibility of post injection bacterial infection. Antibiotic therapy should be employed at the first sing of infection. the first sign of infection.

DOSAGE AND ADMINISTRATIONS 2 ml of Estrumate (500 mcg of cloprostenol) should be administered by INTRAMUSCULAR INJECTION for all indications in both beef and dairy cattle

WARNINGS For veterinary use only.

Women of child-bearing 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. Estrumate is readily absorbed through the skin and may cause abortion and/or bronchiospasms. Direct contact with the skin should therefore be avoided. Accidental spillage on the skin should be washed off immediately with soap and water.

STORAGE CONDITIONS Protect from light. Store in container. Store at controlled room temperature 59^0 - 86^0 F. $(15^0$ - 30^0 C.).

CAUTION Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

HOW SUPPLIED 10 ml and 20 ml multidose vials.



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Bovine "Give-Away"

The AABP again sponsored a "Bovine Give-Away" in the form of ten \$50.00 prizes. The drawing was made by AABP President, Dr. Don Hudson and the event was organized by Dr. Samuel Hutchins 3rd, Exhibits Manager in collaboration with the exhibitors.

The winners and exhibitors who had the winning milk bottles were the following:

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