ZACTRAN®
(gamithromycin)

BRD STEALS POUNDS

ZACTRAN

POUNDS BACK.
KEEP MORE OF YOUR HARD-EARNED PROFITS WITH ZACTRAN® (ganimithromycin)

ZACTRAN controls and treats BRD so cattle get on feed quickly and keep gaining weight.

ZACTRAN TREATS ALL MAJOR BRD-CAUSING BACTERIA

ZACTRAN is indicated for the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida*, *Histophilus somni* and *Mycoplasma bovis*.  

ZACTRAN REACHES THE SITE OF INFECTION IN JUST 30 MINUTES  

After you administer ZACTRAN, the broad-spectrum antibiotic rapidly reaches the site of infection — the pulmonary epithelial lining fluid (PELF) of the lungs — where it kills bacteria and stops them from replicating.

THE CONVENIENCE OF 10 DAYS OF THERAPY FROM A SINGLE INJECTION

ZACTRAN keeps working for 10 days, reducing the time and labor associated with repulls. With less animal handling, cattle experience less stress and setback so they can put more energy into gaining weight.

WITH ZACTRAN, YOU TYPICALLY SEE IMPROVEMENT WITHIN 24 HOURS*

In a study, cattle treated with ZACTRAN had lower temperatures, were more alert and were breathing easier within 24 hours.  

**LESSEN DEPRESSION**

*Less depression for the ganimithromycin-treated group.
* Denotes a statistically significant difference (p < 0.05).

**LESSEN LABORED BREATHING**

After you administer ZACTRAN, the broad-spectrum antibiotic rapidly reaches the site of infection — the pulmonary epithelial lining fluid (PELF) of the lungs — where it kills bacteria and stops them from replicating.

ZACTRAN IMPORTANT SAFETY INFORMATION: For use in cattle only. Do not treat cattle within 35 days of slaughter. Because a discard time in milk has not been established, do not use in female dairy cattle 20 months of age or older, or in calves to be processed for veal. The effects of ZACTRAN on bovine reproductive performance, pregnancy and lactation have not been determined. Subcutaneous injection may cause a transient local tissue reaction in some cattle that may result in trim loss of edible tissues at slaughter. NOT FOR USE IN HUMANS. KEEP OUT OF REACH OF CHILDREN.
BRD accounts for:

- **75%** of Feedlot Sickness
- **Up to 70%** of Feedlot Deaths
- **$900 Million in Annual Losses**

ZACTRAN® (gamithromycin) targets the site of infection

ZACTRAN travels in cells of the immune system to the site of infection, where it kills bacteria and prevents them from replicating.

Risk of disease increases as a result of:

- Low levels of immunity because calves haven’t been properly vaccinated
- Stressors such as:
  - Recently weaned
  - Commingled with cattle from other herds
  - Transportation
  - Handling and processing
  - Castration and dehorning
  - Adverse or changing weather
  - Age and weight of calves
  - Dietary changes
  - Other immune challenges such as non-respiratory diseases

ZACTRAN Important Safety Information:

- For use in cattle only. Do not treat cattle within 35 days of slaughter.
- Because a discard time in milk has not been established, do not use in female dairy cattle 20 months of age or older, or in calves to be processed for veal. The effects of ZACTRAN on bovine reproductive performance, pregnancy and lactation have not been determined. Subcutaneous injection may cause a transient local tissue reaction in some cattle that may result in trim loss of edible tissues at slaughter. NOT FOR USE IN HUMANS. KEEP OUT OF REACH OF CHILDREN.

Make ZACTRAN a key part of your BRD management plan. Talk to your veterinarian or Boehringer Ingelheim representative. Visit ZACTRAN.com.
DOSE and ADMINISTRATION

Administer ZACTRAN® as a subcutaneous injection in the neck at 6 mg/kg BW (12 ml/kg 100 kg body weight BW). The total dose exceeds 10 ml, divide the dose so that no more than 10 ml is administered at each injection site.

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<th>Body Weight (kg)</th>
<th>Dose Volume (ml)</th>
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<tr>
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Animals should be appropriately restrained to achieve the proper plane of anesthesia. Use sterile equipment. Inject under the skin or fat of the shoulder (see illustration).

CONTRAINDICATIONS

As with all drugs, the use of ZACTRAN® is contraindicated in animals previously known to be hypersensitive to this medication.

WARNING:

DO NOT USE IN CATTLE ONLY.

DO NOT USE IN HUMANS.

KEEP THIS AND ALL DRUGS OUT OF REACH OF CHILDREN.

DO NOT USE IN COWS FOR TURKEYS.

The material safety data sheet (MSDS) contains more detailed occupational safety information. To report adverse effects, obtain an MSDS or for assistance, contact Merial at 1-800-354-3627.

RESIPE REASIONS:

DO NOT TREAT CATTLE WITHIN 32 DAYS OF Slaughter. Because a diseased tissue site has not been established, do not use in female dairy cattle 20 months of age or older. A withdrawal period has not been established for this product in pre-nuiming calves. Do not use in calves to be processed for veal.

PRECAUTIONS

The effects of ZACTRAN® on bovine reproductive performance, pregnancy, and lactation have not been determined. Subcutaneous injection of ZACTRAN® may cause a transient local tissue reaction in some cattle that may result in transient loss of edible tissues at slaughter.

ADVERSE REACTIONS

Transient animal discomfort and mild to moderate injection site swelling may be seen in cattle treated with ZACTRAN®.

CLINICAL PHARMACOLOGY

The pharmacological properties of this drug are characterized by a relatively rapid onset of action and high bioavailability. The maximum plasma concentration is generally occurring within 1 hour after administration.

The effects of ZACTRAN® on bovine reproductive performance, pregnancy, and lactation have not been determined. Subcutaneous injection of ZACTRAN® may cause a transient local tissue reaction in some cattle that may result in transient loss of edible tissues at slaughter.

INDICATIONS

ZACTRAN® is indicated for the treatment of bovine respiratory disease (BRD) associated with Mannheimia haemolytica, Pasteurella multocida and Histophilus somni. It is also indicated for the control of respiratory disease in beef and non-lactating dairy cattle at high risk of developing BRD associated with Mannheimia haemolytica and Pasteurella multocida.

The minimum inhibitory concentrations (MIC’s) of gamithromycin determined for BRD isolates obtained from calves enrolled in the study. Cattle were administered ZACTRAN® (6 mg/kg BW) in an equivalent volume of sterile saline as a subcutaneous injection once on Day 0. Cattle were observed daily for clinical signs of BRD and were evaluated for clinical success on Day 10. The percentage of successes in cattle treated with ZACTRAN® (58%) was statistically significantly higher (p < 0.05) than the percentage of successes in the cattle treated with saline (19%).

The effectiveness of ZACTRAN® for the treatment of BRD associated with Mannheimia haemolytica and Pasteurella multocida was demonstrated in a field study conducted at four geographic locations in the United States. A total of 457 cattle exhibiting clinical signs of BRD were enrolled in the study. Cattle were administered ZACTRAN® (6 mg/kg BW) in an equivalent volume of sterile saline as a subcutaneous injection once on Day 0. Cattle were observed daily for clinical signs of BRD and were evaluated for clinical success on Day 10. The percentage of successes in cattle treated with ZACTRAN® (58%) was statistically significantly higher (p < 0.05) than the percentage of successes in the cattle treated with saline (19%).

The effectiveness of ZACTRAN® for the treatment of BRD associated with M. haemolytica was demonstrated independently at two U.S. studies. A total of 562 cattle exhibiting clinical signs of BRD were enrolled in the study. Cattle were administered ZACTRAN® (6 mg/kg BW) in an equivalent volume of sterile saline as a subcutaneous injection once on Day 0. At each site, the percentage of successes in cattle treated with ZACTRAN® on Day 10 was statistically significantly higher than the percentage of successes in the cattle treated with saline (74% vs. 46%, p = 0.001). In addition, in the group of cattle treated with ZACTRAN® as compared to saline treatment, the percentage of calves surviving at 4 weeks post-treatment was higher in the ZACTRAN® group than in the saline treated group (94% vs. 78%, p = 0.001).

The effectiveness of ZACTRAN® for the treatment of BRD associated with M. haemolytica at high risk of developing BRD associated with Pasteurella multocida was demonstrated in two independent studies conducted in the United States. A total of 467 cows administered ZACTRAN® at high risk of developing BRD were enrolled in the study. Cattle were administered ZACTRAN® (6 mg/kg BW) in an equivalent volume of sterile saline as a subcutaneous injection once on Day 0. Cattle were observed daily for clinical signs of BRD and were evaluated for clinical success on Day 10 post-treatment. In each of the two studies, the percentage of successes in cattle treated with ZACTRAN® (76% and 78%) was statistically significantly higher (p < 0.05) than the percentage of successes in the cattle treated with saline (54% and 56%).

ANIMAL SAFETY

In a target animal safety study in healthy, six-month-old beef cattle, ZACTRAN® was administered by subcutaneous injection at 6, 10, and 30 mg/ kg body weight (1, 3, and 5 times the labeled dosage) on Day 0, 5, and 10 (three times the labeled administration frequency). Injection site discomfort (neck twisting, attempts to scratch or lick the injection site, and pawing at the ground) was observed in calves in the 10 mg/kg BW and 30 mg/kg BW groups on 10 minutes post-treatment following each injection. Milk from injection site swelling and pathology changes consistent with inflammation were observed in the gamithromycin treated groups. Other than injection site reactions, no clinically relevant treatment-related effects were observed.

STORAGE CONDITIONS

Store at least below 77°F (25°C) with excipients between 59°F-60°F (15°C-16°C). Use within 18 months of first purchase.

HOW SUPPLIED

ZACTRAN® Injection for Cattle is available in three ready-to-use to bottle sizes. The 100, 250 and 500 ml bottles contain sufficient solution that will treat 10, 25 and 50 head of 550 lb (250 kg) cattle, respectively.

Marketed by Merck 1239 Satellite Blvd., Duluth, GA 30096-4640 U.S.A. Made in Austria

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4 Chirase NK, Greene WR. Dietary zinc and manganese sources administered from the fetal stage onward affect immune response of transit stressed and virus-infected orphaning steer calves. Anim Feed Sci Technol 2001;93:217-228.
5 ZACTRAN product label.

* A small percentage of cattle may have already suffered lung damage and may be too far gone or will require a little longer to turn around.

** Clinical relevance has not been determined.

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