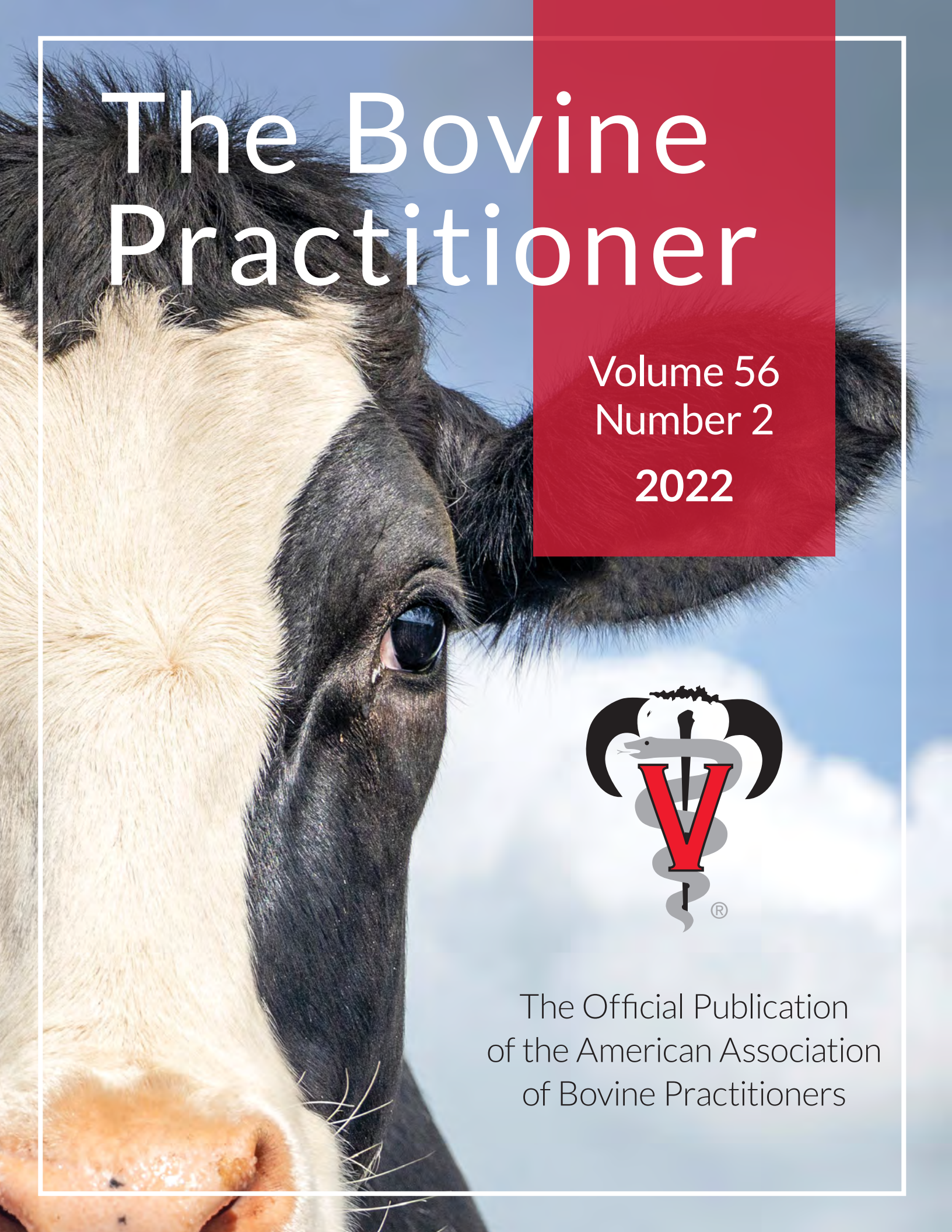

The Bovine Practitioner

Volume 56
Number 2
2022

The Official Publication
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of Bovine Practitioners

Pinkeye Problem?
Pinkeye Solution!

MAXI/GUARD®

delivers twice the pinkeye protection with single dose convenience

Broad coverage
8 different M. bovis isolates
Over 90% efficacy

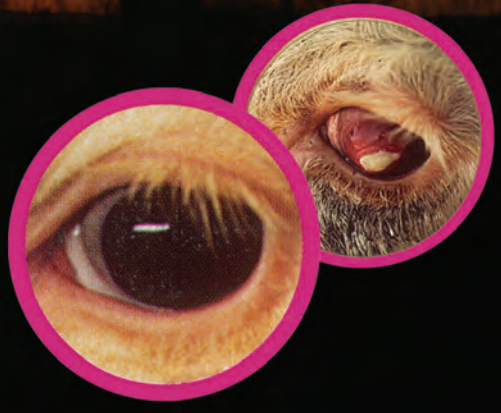
Easy syringeability

Approved for subcutaneous administration

Minimal injection site reactions

Strong safety record
Extremely low endotoxin levels

Single dose protection



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Boehringer Ingelheim Cattle First.

LONGRANGE® (eprinomectin)

INVESTING IN LONGRANGE® [EPRINOMECTIN] DOESN'T JUST TIP THE SCALES IN YOUR FAVOR.

IT DARN NEAR BREAKS THEM.

PROVEN TO PAY OFF IN POUNDS AND DOLLARS.
CALCULATE THE RETURN FOR YOUR HERD.

Getting more from your dewormer starts with a proven investment. LONGRANGE is the first and only dewormer that provides up to 150 days of parasite control.[1] It's how top producers help their herds pack on the pounds, and in turn, bank more bucks. LONGRANGE is the difference between being average and being at the top of your game. So, next time you're deworming cattle, don't just get the job done.
Get it outdone.

thelongrangelook.com/longrange-calculator

OUTLAST. OUTPERFORM. OUTDO.

LONGRANGE IMPORTANT SAFETY INFORMATION: Do not treat within 48 days of slaughter. Not for use in female dairy cattle 20 months of age or older, including dry dairy cows, or in veal calves. Post-injection site damage (e.g., granulomas, necrosis) can occur. These reactions have disappeared without treatment. Not for use in breeding bulls, or in calves less than 3 months of age. Not for use in cattle managed in feedlots or under intensive rotational grazing.

[1] Dependent upon parasite species, as referenced in FOI summary and LONGRANGE product label.

LONGRANGE® (eprinomectin)

Extended-Release Injectable Parasiticide

5% Sterile Solution

For the Treatment and Control of Internal and External Parasites of Cattle on Pasture with Persistent Effectiveness

Not for use in female dairy cattle 20 months of age or older, including dry dairy cows. Not for use in calves to be processed for veal.

Not for use in breeding bulls, or in calves less than 3 months of age.

Not for use in cattle managed in feedlots or under intensive rotational grazing.

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

INDICATIONS FOR USE

LONGRANGE, when administered at the recommended dose volume of 1 mL per 110 lb (50 kg) body weight, is effective in the treatment and control of the following internal and external parasites of cattle:

Gastrointestinal Roundworms	**Lungworms**
Bunostomum phlebotomum – Adults and L_4	*Dictyocaulus viviparus* – Adults
Cooperia oncophora – Adults and L_4	
Cooperia punctata – Adults and L_4	
Cooperia surnabada – Adults and L_4	**Grubs**
Haemonchus placei – Adults	*Hypoderma bovis*
Oesophagostomum radiatum – Adults	
Ostertagia lyrata – Adults	**Mites**
Ostertagia ostertagi – Adults, L_4 and inhibited L_4	*Sarcoptes scabiei* var. *bovis*
Trichostrongylus axei – Adults and L_4	
Trichostrongylus colubriformis – Adults	

Parasites	Durations of Persistent Effectiveness
Gastrointestinal Roundworms	
Bunostomum phlebotomum	150 days
Cooperia oncophora	100 days
Cooperia punctata	100 days
Haemonchus placei	120 days
Oesophagostomum radiatum	120 days
Ostertagia lyrata	120 days
Ostertagia ostertagi	120 days
Trichostrongylus axei	100 days
Lungworms	
Dictyocaulus viviparus	150 days

DOSAGE AND ADMINISTRATION

LONGRANGE® (eprinomectin) should be given only by subcutaneous injection in front of the shoulder at the recommended dosage level of 1 mg eprinomectin per kg body weight (1 mL per 110 lb body weight). Each mL of LONGRANGE contains 50 mg of eprinomectin, sufficient to treat 110 lb (50 kg) body weight. Divide doses greater than 10 mL between two injection sites to reduce occasional discomfort or site reaction.

Body Weight (lb)	Dose Volume (mL)
110	1
220	2
330	3
440	4
550	5
660	6
770	7
880	8
990	9
1100	10

Do not underdose. Ensure each animal receives a complete dose based on a current body weight. Underdosing may result in ineffective treatment, and encourage the development of parasite resistance.

LONGRANGE is to be given subcutaneously only. Animals should be appropriately restrained to achieve the proper route of administration. Inject under the loose skin in front of the shoulder (see illustration) using a 16 or 18 gauge, ½ to ¾ inch needle.

Sanitize the injection site by applying a suitable disinfectant. Clean, properly disinfected needles should be used to reduce the potential for injection site infections.

Withdrawal Periods and Residue Warnings

Animals intended for human consumption must not be slaughtered within 48 days of the last treatment. This drug product is not approved for use in female dairy cattle 20 months of age or older, including dry dairy cows. Use in these cattle may cause drug residues in milk and/or in calves born to these cows. A withdrawal period has not been established for pre-ruminating calves. Do not use in calves to be processed for veal.

Animal Safety Warnings and Precautions

The product is likely to cause tissue damage at the site of injection, including possible granulomas and necrosis. These reactions have disappeared without treatment. Local tissue reaction may result in trim loss of edible tissue at slaughter.

Observe cattle for injection site reactions. If injection site reactions are suspected, consult your veterinarian. This product is not for intravenous or intramuscular use. Protect product from light. LONGRANGE® (eprinomectin) has been developed specifically for use in cattle only. This product should not be used in other animal species.

When to Treat Cattle with Grubs

LONGRANGE effectively controls all stages of cattle grubs. However, proper timing of treatment is important. For the most effective results, cattle should be treated as soon as possible after the end of the heel fly (warble fly) season.

Environmental Hazards

Not for use in cattle managed in feedlots or under intensive rotational grazing because the environmental impact has not been evaluated for these scenarios.

Other Warnings: Parasite resistance may develop to any dewormer, and has been reported for most classes of dewormers.

Treatment with a dewormer used in conjunction with parasite management practices appropriate to the geographic area and the animal(s) to be treated may slow the development of parasite resistance.

Fecal examinations or other diagnostic tests and parasite management history should be used to determine if the product is appropriate for the herd/flock, prior to the use of any dewormer. Following the use of any dewormer, effectiveness of treatment should be monitored (for example, with the use of a fecal egg count reduction test or another appropriate method).

A decrease in a drug's effectiveness over time as calculated by fecal egg count reduction tests may indicate the development of resistance to the dewormer administered. Your parasite management plan should be adjusted accordingly based on regular monitoring.

Macrocyclic lactones provide prolonged drug exposure that may increase selection pressure for resistant parasites. This effect may be more pronounced in extended-release formulations.

TARGET ANIMAL SAFETY

Clinical studies have demonstrated the wide margin of safety of LONGRANGE® (eprinomectin). Overdosing at 3 to 5 times the recommended dose resulted in a statistically significant reduction in average weight gain when compared to the group tested at label dose. Treatment-related lesions observed in most cattle administered the product included swelling, hyperemia, or necrosis in the subcutaneous tissue of the skin. The administration of LONGRANGE at 3 times the recommended therapeutic dose had no adverse reproductive effects on beef cows at all stages of breeding or pregnancy or on their calves.

Not for use in bulls, as reproductive safety testing has not been conducted in males intended for breeding or actively breeding. Not for use in calves less than 3 months of age because safety testing has not been conducted in calves less than 3 months of age.

STORAGE

Store at 77° F (25° C) with excursions between 59° and 86° F (15° and 30° C). Protect from light.

Approved by FDA under NADA # 141-327
Made in Canada.
Manufactured for Boehringer Ingelheim Animal Health USA Inc., Duluth, GA 30096

1050-2889-08, Rev. 01/2019, BLON016E US-BOV-0597-2021A

Boehringer Ingelheim

ONE DOSE. 30 MINUTES.

Knock out BRD in one dose with Zactran® (gamithromycin). ZACTRAN reaches the lungs in 30 minutes to start fighting BRD at the site of infection,*[1] compared to 3 hours for tulathromycin.[2] It works fast, hitting peak concentration in just 12 hours,** with cattle health typically improving in 24 hours.***[3] But the fight doesn't stop there: One dose of ZACTRAN delivers 10 days of treatment.[4] Make the quick treatment choice, and get your cattle healthy fast.

Treat BRD quickly at ZACTRAN.com

IMPORTANT SAFETY INFORMATION: For use in cattle only. Do not treat cattle within 35 days of slaughter. Do not use in female dairy cattle 20 months of age or older, or in calves to be processed for veal. Subcutaneous injection may cause a transient local tissue reaction in some cattle that may result in trim loss of edible tissues at slaughter.

*Clinical relevance has not been determined. **Time to T_{max} in the lung. ***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. [1]Giguere S, Huang R, Malinski TJ, et al. Disposition of gamithromycin in plasma, pulmonary epithelial lining fluid, bronchoalveolar cells and lung tissue in cattle. *Am J Vet Res* 2011;72(3):326–330. [2]Cox SR, McLaughlin C, Fielder AE, Yancey MF. Rapid and prolonged distribution of tulathromycin into lung homogenate and pulmonary epithelial lining fluid of holstein calves following a single subcutaneous administration of 2.5mg/kg body weight. *J Appl Res Vet Med* 2010; 8(3):129–137. [3]Sifferman RL, Wolff WA, Holste JE, et al. Field efficacy evaluation of gamithromycin for treatment of bovine respiratory disease in cattle at feedlots. *Intern J Appl Res Vet Med* 2011;9(2):166–175. [4]ZACTRAN product label.

Cattle First. Boehringer Ingelheim

ZACTRAN®
(gamithromycin)

150 mg/mL ANTIMICROBIAL

NADA 141-328, Approved by FDA

For subcutaneous injection in beef and non-lactating dairy cattle only. Not for use in female dairy cattle 20 months of age or older or in calves to be processed for veal.

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

READ ENTIRE BROCHURE CAREFULLY BEFORE USING THIS PRODUCT.

INDICATIONS

ZACTRAN is indicated for the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida*, *Histophilus somni* and *Mycoplasma bovis* in beef and non-lactating dairy cattle. ZACTRAN 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*.

CONTRAINDICATIONS

As with all drugs, the use of ZACTRAN is contraindicated in animals previously found to be hypersensitive to this drug.

WARNING: FOR USE IN CATTLE ONLY. NOT FOR USE IN HUMANS. KEEP THIS AND ALL DRUGS OUT OF REACH OF CHILDREN. NOT FOR USE IN CHICKENS OR TURKEYS.

DOSAGE AND ADMINISTRATION

Administer ZACTRAN one time as a subcutaneous injection in the neck at 6 mg/kg (2 mL/110 lb) body weight (BW). If the total dose exceeds 10 mL, divide the dose so that no more than 10 mL is administered at each injection site.

Body Weight (lb)	Dose Volume (mL)
110	2
220	4
330	6
440	8
550	10
660	12
770	14
880	16
990	18
1100	20

Animals should be appropriately restrained to achieve the proper route of administration. Use sterile equipment. Inject under the skin in front of the shoulder (see illustration).

The Safety Data Sheet (SDS) contains more detailed occupational safety information. To report suspected adverse drug events, for technical assistance, or to obtain a copy of the SDS, contact Boehringer Ingelheim Animal Health USA Inc. at 1-888-637-4251. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS, or online at www.fda.gov/reportanimalae.

RESIDUE WARNINGS: 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. A withdrawal period has not been established for this product in pre-ruminating 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 trim 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.

EFFECTIVENESS

For information on effectiveness, the product label in full can be found at https://www.zactran.com/sites/default/files/pdfs/Zactan_Label.pdf.

Marketed by Boehringer Ingelheim Animal Health USA Inc.
Duluth, GA 30096
Made in Austria

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