**LIVESTOCK SKILLATHON**

**Quality Assurance Exercise #3– Reading a Medication Label**

***Directions:*** Look at the following medication label and complete the questions that follow.

**Baytril 100 (enrofloxacin)**

**100 mg/mL Antimicrobial Injectable Solution**

This page contains information on Baytril 100 (enrofloxacin) 100 mg/mL Antimicrobial Injectable Solution for **veterinary use**.

**(enrofloxacin)**

**100 Mg/ml Antimicrobial Injectable Solution**

Manufacturer: Bayer Animal Health

For Subcutaneous use In Beef Cattle, Non-Lactating Dairy Cattle And Swine Only

Not For Use In Female Dairy Cattle 20 Months Of Age Or Older Or In Calves To Be Processed For Veal

**Baytril 100 (enrofloxacin) 100 mg/mL Antimicrobial Injectable Solution Caution**

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

Federal (U.S.A.) law prohibits the extra-label use of this drug in food-producing animals.

**Product Description**

Baytril® 100 is a sterile, ready-to-use injectable antimicrobial solution that contains enrofloxacin, a broad-spectrum fluoroquinolone antimicrobial agent.

Each mL of Baytril® 100 contains 100 mg of enrofloxacin. Excipients are L-arginine base 200 mg, n-butyl alcohol 30 mg, benzyl alcohol (as a preservative) 20 mg and water for injection q.s.

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**Indications**

**Cattle - Single-dose Therapy**

Baytril® 100 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; and for the control of BRD in beef and non-lactating dairy cattle at high risk of developing BRD associated with *M. haemolytica, P. multocida, H. somni* and *M. bovis*.

**Cattle - Multiple-day Therapy**

Baytril® 100 is indicated for the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica, Pasteurella multocida* and *Histophilus somni* in beef and non-lactating dairy cattle.

**Swine**

Baytril® 100 is indicated for the treatment and control of swine respiratory disease (SRD) associated with *Actinobacillus pleuropneumoniae, Pasteurella multocida, Haemophilus parasuis* and *Streptococcus suis*.

**Cattle**

**Single-dose Therapy (brd Treatment)**

Administer once, a subcutaneous dose of 7.5-12.5 mg/kg of body weight (3.4-5.7 mL/100 lb).

**Multiple-day Therapy (brd Treatment)**

Administer daily, a subcutaneous dose of 2.5-5 mg/kg of body weight (1.1-2.3 mL/100 lb). Treatment should be repeated at 24-hour intervals for three days. Additional treatments may be given on Days 4 and 5 to animals that have shown clinical improvement but not total recovery.

Single-Dose Therapy (BRD Control): Administer once, a subcutaneous dose of 7.5 mg/kg of body weight (3.4 mL/100 lb). Examples of conditions that may contribute to calves being at high risk of developing BRD include, but are not limited to, the following:

● Transportation with animals from two or more farm origins.

● An extended transport time with few to no rest stops.

● An environmental temperature change of >30°F during transportation.

● A >30°F range in temperature fluctuation within a 24-hour period.

● Exposure to wet or cold weather conditions.

● Excessive shrink (more than would be expected with a normal load of cattle).

● Stressful arrival processing procedures (e.g., castration or dehorning).

● Exposure within the prior 72 hours to animals showing clinical signs of BRD.

Administered dose volume should not exceed 20 mL per injection site.

**Table 1 - Baytril® 100 Dose And Treatment Schedule For Cattle\***

|  |  |  |  |
| --- | --- | --- | --- |
| Weight (lb) | Treatment | | Control |
| Single-Dose Therapy  7.5 - 12.5 mg/kg  Dose Volume (mL) | Multiple-Day Therapy  2.5 - 5.0 mg/kg  Dose Volume (mL) | Single-Dose Therapy  7.5 mg/kg  Dose Volume (mL) |
| 100 | 3.5 - 5.5 | 1.5 - 2.0 | 3.5 |
| 200 | 7.0 - 11.0 | 2.5 - 4.5 | 7.0 |
| 300 | 10.5 - 17.0 | 3.5 - 6.5 | 10.5 |
| 400 | 14.0 - 22.5 | 4.5 - 9.0 | 14.0 |
| 500 | 17.0 - 28.5 | 5.5 - 11.5 | 17.0 |
| 600 | 20.5 - 34.0 | 7.0 - 13.5 | 20.5 |
| 700 | 24.0 - 39.5 | 8.0 - 16.0 | 24.0 |
| 800 | 27.5 - 45.5 | 9.0 - 18.0 | 27.5 |
| 900 | 31.0 - 51.0 | 10.0 - 20.5 | 31.0 |
| 1000 | 34.0 - 57.0 | 11.0 - 23.0 | 34.0 |
| 1100 | 37.5 - 62.5 | 12.5 - 25.0 | 37.5 |

**\*Dose volumes have been rounded to the nearest 0.5 mL within the dose range.**

**Swine**

Administer once, behind the ear, a subcutaneous dose of 7.5 mg/kg of body weight (3.4 mL/100 lb).

Administered dose volume should not exceed 5 mL per injection site.

**Table 2 - Baytril® 100 Dose And Treatment Schedule For Swine**

|  |  |
| --- | --- |
| Weight (lb) | Dose Volume (mL) |
| 50 | 1.7 |
| 100 | 3.4 |
| 150 | 5.1 |
| 200 | 6.8 |
| 250 | 8.5 |

|  |  |  |
| --- | --- | --- |
| http://images.ddccdn.com/vet/images/1040007_arrow_left_04.png | **Residue Warnings**  **Cattle**  Animals intended for human consumption must not be slaughtered within 28 days from the last treatment. This product is not approved for 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 this product in pre-ruminating calves. Do not use in calves to be processed for veal.  **Swine**  Animals intended for human consumption must not be slaughtered within 5 days of receiving a single-injection dose. | http://images.ddccdn.com/vet/images/1040007_arrow_right_04.png |

**Precautions**

The effects of enrofloxacin on cattle or swine reproductive performance, pregnancy and lactation have not been adequately determined.

The long-term effects on articular joint cartilage have not been determined in pigs above market weight.

Subcutaneous injection can cause a transient local tissue reaction that may result in trim loss of edible tissue at slaughter.

Baytril® 100 contains different excipients than other Baytril® products. The safety and efficacy of this formulation in species other than cattle and swine have not been determined.

Quinolone-class drugs should be used with caution in animals with known or suspected Central Nervous System (CNS) disorders. In such animals, quinolones have, in rare instances, been associated with CNS stimulation which may lead to convulsive seizures.

Quinolone-class drugs have been shown to produce erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species. See Animal Safety section for additional information.

**Adverse Reactions**

No adverse reactions were observed during clinical trials.

**Storage Conditions**

Protect from direct sunlight. Do not refrigerate, freeze or store at or above 40°C (104°F). Precipitation may occur due to cold temperature. To redissolve, warm and then shake the vial.

**How Supplied**

Baytril® 100: 100 ml, 250 ml, 500 ml bottles

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**LIVESTOCK SKILLATHON**

**Quality Assurance Exercise #3– Reading a Medication Label**

1. What is the name of the medication?

2. Name the active ingredient(s)

3. What specie(s) may this product be used on?

4. What condition is this approved to treat?

5. What is the dosage for a 200 lb. animal?

6. How long may this medication be used for treatment?

7. What is the route of administration?

a. subcutaneous injection b. intramuscular injection c. oral

8. What are storage requirements for this medication?

9. What is the withdrawal time for this medication?

10. What is the size availability for this product?

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**Quality Assurance Exercise #3– Reading a Medication Label**

1. What is the name of the medication?

Baytril 100

2. Name the active ingredient(s)

enrofloxacin

3. What specie(s) may this product be used on?

Cattle, Swine

4. What condition is this approved to treat?

Respiratory disease (bovine or swine)

5. What is the dosage for a 200 lb. animal?

Cattle - 7.0-11.0 ml Swine - 6.8 ml

6. How long may this medication be used for treatment?

Cattle – may be repeated at 24 hour intervals for 3 days Swine – one time administration

7. What is the route of administration?

a. subcutaneous injection b. intramuscular injection c. oral

8. What are storage requirements for this medication?

Protect from direct sunlight. Do not refrigerate, freeze or store at or above 40°C (104°F).

9. What is the withdrawal time for this medication?

Cattle – 28 days Swine – 5 days

10. What is the size availability for this product?

100 ml, 250 ml, 500 ml