INSTRUCTIONS
for Use of the Veterinary Drug Ceftilum

1. General Information

1.1. The veterinary drug Ceftilum.

International Nonproprietary Name of the Active Pharmaceutical Ingredient: Ceftiofur.

1.2. The product appears as a suspension ranging in color from white to cream; separation may occur during storage.

Dosage form – suspension for intramuscular injection.

1.3. Each 1.0 ml of the product contains 50 mg of ceftiofur as the active ingredient. Excipients include sunflower oil, butyl alcohol, and distilled water.

1.4. The product is available in glass vials of 10, 50, and 100 ml, sealed with rubber stoppers and aluminum caps.

1.5. Store the product in the manufacturer's packaging, in a dry, light-protected place at temperatures between +5°C and +25°C. Keep out of reach of children.

1.6. Shelf life is 2 (two) years from the manufacturing date under proper storage and transportation conditions. After opening, the contents of the vial may be stored at +2°C to +8°C for up to 24 days. Do not use the product after the expiration date.

2. Pharmacological Properties

2.1. Ceftiofur is a third-generation cephalosporin antibiotic with a broad spectrum of bactericidal activity against both Gram-negative and Gram-positive bacteria, including *Escherichia coli, Pasteurella multocida, Mannheimia haemolytica, Actinobacillus pleuropneumoniae, Salmonella spp., Streptococcus spp., Staphylococcus spp., Proteus spp., Fusobacterium necrophorum,* and other ceftiofur-sensitive pathogens.

2.2. The product acts by inhibiting the enzyme transpeptidase, thereby disrupting the synthesis of peptidoglycan (muropeptide) in the bacterial cell wall, which leads to impaired cell wall formation and bacterial lysis.

2.3. After administration, ceftiofur is rapidly metabolized into desfuroylceftiofur, which retains antimicrobial activity equivalent to that of ceftiofur. The active metabolite reversibly binds to plasma proteins and accumulates in tissues affected by pathogens. Maximum plasma concentrations are reached within 0.5–2 hours and remain at therapeutic levels for up to 24 hours post-injection. The product remains active even in the presence of necrotic tissues. Ceftiofur and its metabolites are primarily excreted in the urine.

3. Directions for Use

3.1. The product is prescribed for cattle and pigs for the treatment of respiratory diseases, endometritis, mastitis, and other infections caused by ceftiofur-sensitive microorganisms.

3.2. The drug is administered to cattle once daily by subcutaneous injection at a dose of 1.0 ml per 50 kg of body weight (1 mg of ceftiofur per 1 kg of body weight) for 3–5 days in cases of respiratory diseases; for 3 days in cases of necrobacillosis; and for 5 days in cases of endometritis and mastitis.

3.3. When used according to the prescribed dosage, side effects are generally not observed.

3.4. If allergic reactions occur, discontinue treatment and administer antihistamines and calcium preparations.

3.5. Do not administer the product concurrently with tetracyclines, macrolides, or lincosamides, and do not mix with other medications in the same syringe.

3.6. Avoid missing scheduled doses, as this may reduce the therapeutic effectiveness. If a dose is missed, resume treatment using the original dosage and schedule.

3.7. Cattle may be slaughtered for meat no earlier than 8 days, and pigs no earlier than 6 days after the last administration of the drug. Meat from animals slaughtered before the specified withdrawal

period may be used for feeding carnivorous animals. Milk from treated cattle may be used for human consumption no earlier than 48 hours after the last administration of the drug.

4. Precautionary Measures

4.1. Follow general hygiene and safety protocols when handling the product.

4.2. If the product or its components come into contact with skin or mucous membranes, rinse thoroughly with water.

5. Claims Procedure

5.1. If complications arise after use, discontinue the product and contact the state veterinary institution in your area. Veterinary specialists will verify proper usage in accordance with the instructions. If adverse effects are confirmed, samples (at least 3 unopened packages from the same batch) will be collected and sent for laboratory testing. An official sample collection report will be submitted to the State Institution "Belarusian State Veterinary Center" for compliance verification at: 220005, Minsk, Krasnaya Street, 19A, Tel.: 290-42-75.

6. Manufacturer Information

6.1. Production Cooperative "Biogel", Republic of Belarus, 220035, Minsk, Timiryazev Street, 65, Office 313, on behalf of the Private Production and Trade Unitary Enterprise "Letyal", Republic of Belarus, 220075, Minsk, Inzhenernaya Street, 1E.

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