SPELIMIX® FORTE
Powder for oral administration

Description
Yellow-grey powder.
Composition
1 g of the drug contains:
active ingredients: florfenicol – 40 mg; lincomycin (lincomycin hydrochloride) – 44 mg; spectinomycin (spectinomycin sulfate) – 44 mg;
excipient: wheat groats
Pharmacological properties
ATCvet: ***QJ01***. Antibacterials for systemic use.
Spelimix® Forte is a complex drug with a broad spectrum of anti-bacterial effect. The combination of florfenicol, lincomycin and spectinomycin makes potentiated synergistic effect upon bacteria.
Florfenicol is a broad-spectrum synthetic antibiotic, which is the derivative of thiamfenicol. It is effective against *Pasteurella spp., Actinobacillus pleuropneumoniae, Bordetella bronchiseptica, Salmonella spp., Escherichia coli, Proteus spp., Haemophilus spp., Staphylococcus spp., Streptococcus spp., Shigella spp., Klebsiella spp., Enterobacter spp., Aeromonas salmonicida, Campylobacter spp., Edwardsiella ictaluri, Edwardsiella tarda, Flexibacter spp., Vibrio spp*. and makes effect upon mycoplasma (*Mycoplasma spp.*). The mechanism of action of florfenicol is related to inhibition of activity of peptidiltransferase of microbial cell, particularly – in the section 70S of ribosomal subunit.
Lincomycin is an antibiotic of the lincosamides group. It demonstrates bacteriostatic or bactericidal action depending on concentration. It acts mostly upon gram-positive (*Staphylococcus spp., Streptococcus spp., Bacillus anthracis, Corynebacterium spp*.) and gram-negative microorganisms (*Actinobacillus spp., Bordetella spp.*) and some species of *Nocardia* and *Actinomyces.* It is particularly effective against *Serpulina hyodysenteriae* and *Mycoplasma spp.* Lincomycin inhibit synthesis of protein in microorganisms binding ribosomal 50S subunits of bacterial cells.
Spectinomycin is an antibiotic of tricyclic structure of the aminoglycosides group. It is mostly effective against gram-negative microorganisms, particularly, *E. coli, Pasteurella multocida, Salmonella spp., Clostridium spp., Erysipelothrix rhusiopathiae, Haemophilus spp., Vibrio spp.,* as well as some gram-positive microorganisms and *Mycoplasma spp.* Its efficacy is related to inhibition of synthesis of proteins in microbial cell. It binds ribosomal 30S subunit of microorganisms, which prevents elongation of polypeptide chain at translocation stage.
After oral administration florfenicol is well absorbed (up to 90%) from digestive tract and distributed in organs and tissues of the body, reaching concentration of 4-8 μg/g in lungs, heart, pancreas, skeletal muscles, spleen. Relatively high concentrations are found in bile, kidneys, small intestine, urine. Metabolites, which are eliminated with urine, contain florfenicolamine, florfenicol oxamic acid, monochloroflorfenicol. Florfenicol amine is the metabolite, which presence in liver is the longest. Biotransformation to florfenicolamin makes about 64%. Half-life of florfenicol makes on average 2.6-3.2 hours. Florfenicol is primarily eliminated intact with urine (up to 50%). Florfenicol and its metabolites are also eliminated with feces.
After oral administration lincomycin is well absorbed from digestive tract (almost 60%) and is distributed in organs and tissues, particularly, in bone tissue. It binding to proteins makes 50%. Its concentration in blood serum reaches maximum in 2 hours following administration. Half-life period makes 2.5-4 hours. Major quantities of lincomycin and its metabolites are excreted with urine and bile. Minor quantities are eliminated with feces.
Spectinomycin is poorly absorbed in digestive tract. In 24 hours following oral administration minor concentrations of the antibiotic are observed in kidneys, liver, lungs, muscles, fat tissue. Binding of spectinomycin to proteins does not exceed 10%. Its concentration in serum reaches maximum in 4 hours. Spectinomycin is scarcely biotransformed in the body and is eliminated intact with feces.
Administration

Treatment of swine against enzootic pneumonia, salmonellosis, dysentery, actinobacillary pleuropneumonia, eperythzoonosis, MMA (mastitis-metritis-agalactia) syndrome, necrotic enteritis, colibacillosis, mycoplasmosis and other diseases of digestive tract and respiratory organs caused by lincomycin- and spectinomycin-sensitive microorganisms.

Dosage

Administer orally with feed individually or by group method in a dose of 0.5-1 kg of the drug per 1 t of feed for 5-7 days.

If used with feed, it is necessary to mix the drug with the feed thoroughly. It is recommended that the drug be mixed with 3-10% of total feed quantity first and then blend the obtained mixture with the rest of the feed.

Contraindications

Do not administer to animals with hypersensitivity to lincomycin and spectinomycin. Do not administer to rabbits, horses, cattle and laying hens. Do not administer to pregnant and lactating animals. Do not administer to animals with liver and kidney disorders. Do not administer in combination with erythromycin, antibiotics of the penicillin group, cephalosporins and fluoroquinolones as well as thiamfenicol and chloramfenicol.

Precautions

Do not prescribe the drug in sub-therapeutic doses.

Animal slaughter for meat is possible in 14 days following the last administration of the drug. Meat obtained before the mentioned term shall be utilized or fed to non-productive animals depending on the statement of veterinary physician.

Packaging

Bags of film or foil materials of 1000 g.

Storage

Store in a dark, damp-proof place out of the reach of children at 0-30°C.

Shelf life

1 year.

3 months after being mixed with feed.