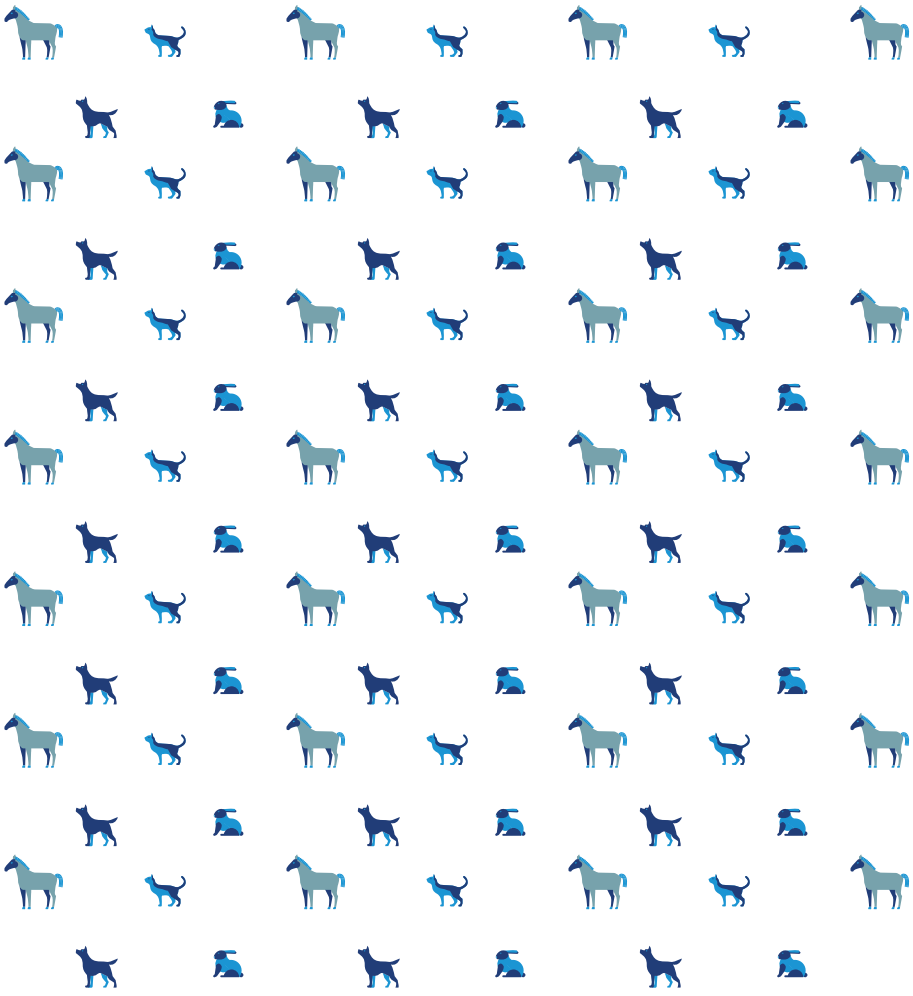
Catalogue
VIC Animal Health



VIC GROUP –

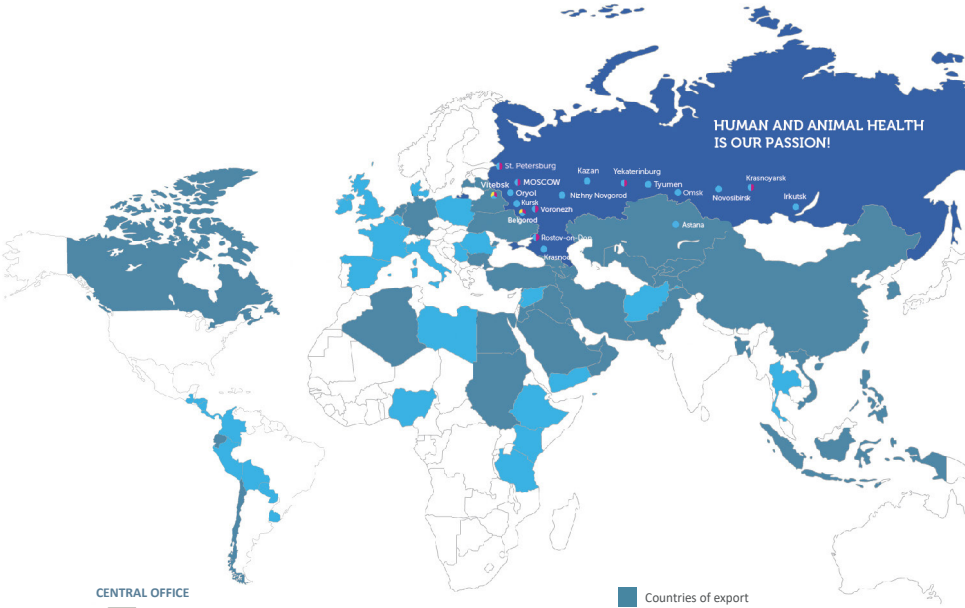
leader in the Russian veterinary pharmaceutical market and largest manufacturer of veterinary drugs in the former USSR

2 manufacturing complexes

3 certified R&D laboratories and own diagnostic center

21 among world's top manufacturers of veterinary pharmaceuticals

16 among pharmaceutical companies in Eastern Europe



Made in Russia «Made in Russia» certification of company products

40+ countries

21 branches in the central cities of Russia, Belarus and Kazakhstan

VIC ANIMAL HEALTH

No. 1 manufacturer of veterinary drugs in the former USSR

MORE THAN 250 TYPES OF PRODUCTS:

- antibacterial drugs
- iron-containing drugs
- hygiene and disinfectant products
- hormones
- nonsteroidal anti-inflammatory drugs
- pet cosmetics
- antiparasitic drugs
- vitamins and feed additives
- cosmetics

10 innovative proprietary drugs

7 regional distribution centers

Certification

VIC Animal Health is the only veterinary pharmaceutical company in the CIS certified to:

GMP GMP-EU ISO 9001 ISO 14001 OHSAS 18001:2007

18 000 m² production area

15 000 m² warehouse premises

TRADING HOUSE VIC

The largest livestock and poultry pharmaceutical company in Russia and CIS countries.

VETMARKET

Professional pet care company.

CleanCosmic

SelfieLab

Perfume and cosmetics company.

Certification

VIC is the only veterinary company in the CIS certified to distribution quality management system, security management system for the supply chain, transportation and storage of veterinary drugs.
Grade A+ Logistics Center in Moscow (certified to GDP).

ISO 28004 ISO 9001 GDP Good Distribution Practice ready

Distribution

ANIMAL HEALTH · zoetis · LALLEMAND · MS SCHIPPERS · NOVUS · BioChek · CCPA · Boehringer Ingelheim · Biochem · rlh HAUPTNER Herbenholz · Virbac · bioveta

CONTENTS

* Products with unique characteristics

CONTENTS

ANTIBACTERIAL DRUGS

ANTIPARASITIC DRUGS

* Products with unique characteristics

CONTENTS

ANTIPARASITIC DRUGS

IRON-CONTAINING DRUGS

HORMONAL DRUGS

NONSTEROIDAL ANTI-INFLAMMATORY DRUGS

OINTMENTS

* Products with unique characteristics

CONTENTS

ADDITIVES

STABILIZERS AND DYES FOR VACCINES

DISINFECTANTS

IMPORTANT INFORMATION

NEW PRODUCTS

* Products with unique characteristics

PRODUCTION TECHNOLOGY OF PRODUCTS OF VIC GROUP

Solutions for injection

Solutions for injection of VIC Group are manufactured under aseptic conditions at the manufacturing site for solutions for injection. The manufacture has been certified in accordance with EU GMP requirements.

High-tech equipment of the world's leading manufacturers is used in the production process.

Pharmaceutical packaging into neutral glass vials of the 2nd hydrolytic class is conducted under unidirectional laminar air flow on the high-tech filling and packaging line in zone A. Hormonal drugs are packaged into neutral glass vials of the 1st hydrolytic class of the European manufacture under sterile inert gas conditions. It prevents drugs from contact with air oxygen and prevents drug oxidation, ensures conservation of properties. Active substances are supplied by the world's leading manufacturers, whose manufacturing sites have been inspected according to EU GMP requirements. All these factors provide stability of qualitative indicators of solutions for injection within the established shelf life and preserve a therapeutic effect.

Oral solutions

Oral solutions are manufactured at the manufacturing sites certified according to GMP requirements. The production is carried out in clean zone D.

High-tech pharmaceutical equipment of domestic and foreign manufacturers is used in the production process. The equipment is made of 316L stainless steel.

The technology utilizes highly purified water with a total organic carbon content of not more than 0.012 g/L and 1.1 μs/cm specific conductivity. The water corresponds to Pharmacopoeia monograph on Water for Injection. A compressor unit with an additional three-stage purification system provides compressed air which is used for the operation of production equipment. After solution is prepared, it is subject to a two-stage filtration with 1.2 and 0.45 μm filters. The filtering system is utilized under laminar flow. Drug packaging is conducted automatically under laminar air flow on a bottling machine. Drugs are packaged into plastic packages of European and domestic manufacturers, the packages are made of materials authorized for use in medical industry.

Non-sterile drugs in powder form

Non-sterile drugs in the form of powder are produced at the manufacturing site that operates in accordance with GMP requirements in clean zone D.
The production technology includes a grinding stage in order to obtain qualitatively homogeneous substances. Reduction of particle sizes increases surface area, and consequently, free surface energy as well. As a result, thoroughly grinded powder is quickly absorbed. At the next stage of technological process, all components are mixed in biconical mixers of pharmaceutical design. The equipment is made of 316L stainless steel. The mixers are also equipped with special rakes developed by the Engineering Services of the enterprise together with the manufacturer of the equipment. It ensures a homogeneous mixture of components. Powder is packaged under laminar air flow in dust-free cabins.

Additives

Additives are produced in the production premises of clean zone D. Technological equipment, intermediate technological containers and pipeline systems, which are in direct contact with the products, are made of AISI 304L stainless steel. All the equipment has conformity certificates. The technological scheme ensures bottling from four dosing devices simultaneously. The requirements to the production and quality of raw materials and finished products are identical to those for medicines.

Semisolid dosage forms (ointments)

Semisolid dosage forms (ointments) are produced at the manufacturing site that operates in accordance with GMP requirements in clean zone C. The dispersion degree of components, temperature, timing, the degree and mechanism of filtration, dosing conditions are important aspects in the production technology of semisolid dosage forms. Therefore, the site is equipped with up-to-date pharmaceutical equipment of the world's leading manufacturers. The technological equipment was produced under the order, taking into account all requirements of VIC Group and the production technology. The reactors are made of 316L stainless steel, equipped with dispersants and temperature control system. The filtration process is multi-stage, the filtering system is utilized under a laminar flow module, filter holders and product pipelines are equipped with adjustable heating, it prevents solutions from staying in the filters and product pipelines and reduces filtration

time. Packaging is carried out under laminar flow in an automatic tube-filling machine. The additional preparation and sterilization of the tubes exclude the risk of contamination of finished products. The material of the tubes has been certified and authorized for medical industry.

Granules

Antibacterial granules manufactured by VIC Animal Health are produced according to the unique granule production technology. Alexanderwerk equipment is used in the production technology. The technology provides for forcedly supplying powder, its passing through zones of compression, trapping and pressing, it ensures homogenous powder supplying and deaeration. These processes lead to less variability of the properties of agglomerates and granules. Mechanical grading in sieves and return of non-targeted fractions to the rolling compaction stage improve the fractional composition of granules.

THE PATENTED SYSTEM ENSURES CONSTANT QUALITY

- 0.8-1.6 mm granules;
- the unique technology of particle activation and formulation ensure high protection and bioavailability of active substances;
- the fillers used in the production have polymer properties, thereby protecting active substances and increasing stability during extrusion;
- granules are homogeneously distributed in feed;
- convenient transportation and storage (3.6-4.0 kg/s strength).

Enroflon® 2.5%, 5%, 10%
(enrofloxacin)

solution for injection
intramuscular and subcutaneous administration

Indications

- treatment of bronchopneumonia, colibacillosis, salmonellosis in calves, lambs and piglets caused by fluoroquinolone-sensitive bacteria;
- treatment of atrophic rhinitis, enzootic pneumonia, mastitis-metritis-agalactia syndrome in pigs.

Composition

1 ml of ENROFLON® 2.5%, 5%, 10% contains 25, 50 or 100 mg of enrofloxacin respectively.

Pharmacological properties

Enrofloxacin belongs to fluoroquinolones, has a wide range of antibacterial effect, inhibits the growth and development of gram-positive and gram-negative microorganisms, including *E. coli, Haemophilus spp., Klebsiella spp., Pasteurella spp., Pseudomonas spp., Bordetella spp., Campylobacter spp., Erysipelothrix spp., Corynebacterium spp., Staphylococcus spp., Streptococcus spp., Actinobacillus spp., Clostridium spp., Bacteroides spp., Fusobacterium spp.*, as well as *Mycoplasma spp*.
ENROFLON® reaches the maximum concentration in the blood in 0.5-1 hours after administration, the maximum concentration persists for 4-6 hours, the therapeutic concentration persists for 24 hours.
Enrofloxacin is mainly excreted in the urine and bile.

Dosage

ENROFLON® 2.5%, 5%, 10% solution for injection is administered to calves and lambs by subcutaneous route, to piglets - by intramuscular route at a dose of 2.5-5 mg of the active substance/kg bw/day for 3-5 days; against mastitis-metritis-agalactia syndrome in sows – 2.5 mg of the active substance/kg bw for 1-2 days.
calves and pigs – not more than 10 ml per one injection site;
lambs – not more than 5 ml per one injection site;
piglets – not more than 2.5 ml per one injection site.

Floricol®

(florfenicol, flunixin meglumine)

solution for injection intramuscular and subcutaneous administration

Indications

FLORICOL® solution for injection is used to treat cattle and pigs for respiratory diseases and other bacterial diseases caused by florfenicol-sensitive bacteria.

FLORICOL® is used to treat pigs for pleuropneumonia caused by Actinobacillus pleuropneumoniae and/or *Haemophilus parasuis, Pasteurella multocida, Mycoplasma hyopneumoniae, M. Horhinis* and for atrophic rhinitis.

FLORICOL® is used to treat cattle for respiratory diseases caused by *Pasteurella multocida, Klebsiella pneumonia, Streptococcus pneumoniae, Haemophilus somnus*, and for necrobacillosis and infectious keratoconjunctivitis caused by *Moraxella bovis*.

Advantages

- two active substances, florfenicol and flunixin meglumine, ensure antibacterial, anti-inflammatory, antipyretic and analgesic effects;
- no local irritant effect after intramuscular and subcutaneous administration;
- therapeutic concentration for 48 hours;
- the efficacy of FLORICOL® is 35% higher in comparison with mono-preparations;
- patent No. 2397753.

Composition

1 ml of FLORICOL® solution for injection contains 300 mg of florfenicol and 16.3 mg of flunixin meglumine.

Pharmacological properties

Florfenicol is a synthetic antibiotic, thiamphenicol derivative. The hydroxyl group is substituted by a fluorine atom. Florfenicol is a broad-spectrum bacteriostatic antibiotic. The antibiotic binds to the 50S ribosomal subunit, blocks peptidyl transferase activity, and as a result it leads to the inhibition of protein synthesis.

Florfenicol is active against gram-positive and gram-negative bacteria, *Staphylococcus spp., Streptococcus spp., Escherichia coli, Salmonella spp., Actinobacillus pleuropneumoniae, Pasteurella multocida, Pasteurella haemolitica, Haemophilus spp., Fusobacterium necrophorum, Proteus spp., Enterobacter spp., Shigella spp., Klebsiella spp., Bordetella spp.*, as well as *Mycoplasma spp.*

Florfenicol is active against bacteria producing acetyltransferase and bacteria resistant to chloramphenicol. After parenteral administration, florfenicol is quickly absorbed and distributed to all organs and tissues. The antibiotic reaches the maximum concentration in 30-90 minutes, the therapeutic concentration persists for 48 hours.

Flunixin meglumine is a nonsteroidal anti-inflammatory drug with antipyretic, analgesic, and anti-inflammatory effects. Flunixin is an inhibitor of cyclooxygenase, as a result, it reduces prostaglandin synthesis.

It reduces the inflammation and pain caused by musculoskeletal disorders and colic. Flunixin meglumine is rapidly absorbed and has a long-lasting effect.

The therapeutic effect is achieved in 2 hours after administration, the maximum concentration is reached in 12-16 hours, the duration of action is 36 hours.

Florfenicol and its metabolites are excreted primarily in the urine and to a lesser extent in the feces.

Flunixin meglumine is mainly excreted by the kidneys.

Dosage

FLORICOL® solution for injection is administered to cattle by intramuscular route, twice with a 48-hour interval at a dose of 1 ml per 15 kg bw (20 mg of florfenicol per 1 kg). It is possible to administer a single subcutaneous injection into the neck region at a dose of 2 ml per 15 kg bw (40 mg of florfencol per 1 kg).

The drug is administered to pigs intramuscularly into the neck region twice with a 48-hour interval at a dose of 1 ml per 20 kg bw (15 mg of florfenicol per 1 kg).

It is not allowed to administer more than 15 ml of the drug per one injection site.

Gentamicin 4%
(gentamicin sulfate)

solution for injection
intramuscular administration

Indications

The drug is used to treat animals for respiratory, gastrointestinal diseases, sepsis, peritonitis, meningitis, pyelonephritis and other diseases caused by gentamicin-sensitive microorganisms.

Composition

1 ml of GENTAMICIN 4% solution for injection contains 40 mg of gentamicin sulfate.

Pharmacological properties

GENTAMICIN belongs to the aminoglycoside class of antibiotics. It has a broad-spectrum antibacterial effect on most gram-positive and some gram-negative bacteria, including *Proteus spp., Escherichia spp., Salmonella spp. and Staphylococcus spp.* The antibiotic has no effect on anaerobic bacteria, viruses and protozoa.
The antibiotic reaches the maximum concentration in an hour after administration. After a single injection the therapeutic concentration persists within 8-12 hours after administration.
GENTAMICIN is excreted intact primarily in the urine.

Dosage

The drug is administered intramuscularly twice a day with a 10-12 hour interval at the following doses:

- cattle – 3 mg/kg bw for 3-5 days;
- horses – 2.5 mg/kg bw for 3-5 days;
- pigs – 4 mg/kg bw for 1-3 days;
- cats and dogs – 2.5 mg/kg bw for 3-7 days.

Klindaspectin®

(clindamycin phosphate, spectinomycin hydrochloride)

solution for injection intramuscular administration

Indications

The solution for injection is used to treat calves, piglets, sheep, lambs, goatlings, cats and dogs for bacterial infections of respiratory and gastrointestinal tract, genitourinary system, skin and soft tissues caused by microorganisms sensitive to clindamycin and spectinomycin.

Composition

1 ml of KLINDASPECTIN® solution for injection contains 50 mg of clindamycin phosphate and 100 mg of spectinomycin hydrochloride.

Pharmacological properties

The combination of clindamycin and spectinomycin has a synergistic effect on gram-positive and gram-negative bacteria, including *Staphylococcus spp., Streptococcus spp., Escherichia coli, Salmonella spp., Pasteurella multocida, Haemophilus spp., Proteus spp., Shigella spp., Klebsiella spp., Bordetella spp.* and *Mycoplasma spp.*
After parenteral administration, the maximum concentration of the drug is detected in 45 minutes, the therapeutic concentration – within a day. Clindamycin and spectinomycin are mainly excreted in the urine and feces.

Dosage

The antibiotic is administered intramuscularly once a day at a dose of 1 ml per 10 kg bw (5 mg of clindamycin/kg bw and 10 mg of spectinomycin/kg bw) for 3-5 days.

Lincovic®
(lincomycin hydrochloride)

solution for injection
intramuscular and intravenous administration

Indications

The drug is used to treat animals for enzootic pneumonia, swine dysentery, respiratory diseases, actinomycosis, osteomyelitis and other diseases caused by lincomycin-sensitive bacteria.

Composition

1 ml contains 100 mg lincomycin hydrochloride.

Pharmacological properties

LINCOVIC® solution for injection is active against most gram-positive bacteria, including *Staphylococcus spp., Streptococcus spp., Pneumococcus spp., Clostridium spp., Corynebacterium spp., Haemophilus spp., Bordetella spp., Actinomyces spp., Treponema hyodysenteriae* and *Mycoplasma spp.*

Dosage

The drug is administered intramuscularly or intravenously once a day at the following doses:

Animal species	Route of administration	Dose		Course of treatment (days)
		ml/kg	mg/kg	
Calves	intramuscular	0.1	10	2-4
Pigs	intramuscular	0.1	10	3-7
Cats, dogs	intramuscular	0.2	20	3-7
	intravenous	0.1	10	3-7

Oxylong® 20% retard
(oxytetracycline dihydrate)

solution for injection
intramuscular administration

Indications

OXYLONG® 20% retard is used to treat cattle, sheep and pigs for diseases of gastrointestinal, urinary and respiratory tract, musculoskeletal system, mastitis, postoperative, wound and other primary and secondary infections caused by oxytetracycline-sensitive bacteria.

Advantages

- high bioavailability, efficiency and stability due to the unique solvent;
- therapeutic efficacy for at least 96 hours;
- tropism to the tissues of uterus and joints;
- no local irritant effect at the injection site.

Composition

1 ml of OXYLONG® 20% retard contains
active substance: 200 mg of oxytetracycline (in the form of dihydrate);
excipients: 15.1 mg of magnesium oxide, 2 mg of rongalite, 300 mg of soluphor, 1-N-methyl-2- pyrrolidone, ascorbic acid kollidon and water for injection – up to 1 ml.

Pharmacological properties

OXYLONG® 20% retard belongs to tetracycline antibiotics.
Oxytetracycline is a broad-spectrum antibiotic. It has a bacteriostatic effect on most gram-positive and gram-negative bacteria, including

Streptococcus spp., Staphylococcus spp., Escherichia coli, Salmonella spp., Pasteurella spp., Clostridium spp., Actinobacillus spp., Mycoplasma spp., Rickettsia spp., Chlamydia spp., Proteus spp., Fusobacterium necrophorum, Bacteroides spp.

Oxytetracycline binds to the 30S subunit of bacterial ribosome, inhibits the binding of tRNA to the mRNA-ribosome complex. It results in the inhibition of protein synthesis and death of bacteria.

After intramuscular administration, oxytetracycline is distributed to the blood, most organs and tissues. The maximum concentration is reached in 30-60 minutes after administration and persists for 12 hours. The therapeutic concentration persists for 96 hours.

Oxytetracycline is metabolized and excreted intact primarily in the bile and urine and partially in the milk of lactating animals.

Dosage

OXYLONG® 20% retard is administered to cattle, sheep and pigs once by intramuscular route at a dose of 1 ml per 10 kg bw (20 mg of the active substance per 1 kg bw).

The maximum dose for piglets weighing less than 10 kg is 1 ml per animal. To treat atrophic rhinitis, the drug is administered at the same dose thrice on 3, 12 and 21 day.

If the drug volume exceeds 20 ml for cattle, 10 ml for pigs and 5 ml for calves and sheep, the antibiotic must be administered to several injection sites.

Solamox®
(amoxicillin trihydrate)

suspension for injection
intramuscular and subcutaneous administration

Indications

SOLAMOX® is used to treat cattle, sheep, pigs and dogs for diseases of gastrointestinal, respiratory, urinary tract, joints, soft tissues, skin, mastitis, postoperative, wounds and other primary and secondary infections caused by amoxicillin-sensitive bacteria.

Composition

1 ml of SOLAMOX® contains 150 mg of amoxicillin trihydrate and excipients – up to 1 ml.

Pharmacological properties

SOLAMOX® belongs to the penicillin class of antibiotics.
Amoxicillin trihydrate is a broad-spectrum antibiotic, has a bactericidal effect on gram-positive and gram-negative bacteria, including *Clostridium spp., Fusobacterium spp., Bacillus antracis, Streptococcus spp., Actynomyces spp., Corynebacterium spp., Salmonella spp., Heamophilus spp., Pausterella spp., Actinobacillus spp., Leptospira spp.* and other amoxicillin-sensitive pathogens. The antibiotic is not active against penicillin-producing strains, *Klebsiella spp., Enterobacter spp.* and *Pseudomonas spp.*
Amoxicillin inhibits bacterial cell wall synthesis, activity of transpeptidase and carboxypeptidases, disrupts osmosis. It causes death of bacteria at the growth stage. Amoxicillin is well absorbed from the injection site and quickly distributed to organs and tissues

after parenteral administration. The maximum concentration is reached in 1-2 hours after administration and persists at the therapeutic level for 48 hours.
Amoxicillin is metabolized and excreted mainly in the urine and to a lesser extent in the milk.

Dosage

SOLAMOX® is administered once by intramuscular or subcutaneous route at a dose of 1 ml per 10 kg bw (15 mg of amoxicillin per 1 kg bw). If necessary, the drug can be administered again in 48 hours.
The maximum allowable volumes to administer to one injection site are 20 ml for cattle, 5 ml for sheep, 10 ml for pigs and 2.5 ml for dogs. If the recommended doses exceed the quantities specified, the drug must be administered to several injection sites.

Tiacyclin®
(doxycycline, tiamulin)

solution for injection intramuscular administration

Indications

TIACYCLIN® solution for injection is used to treat pigs, calves, lambs and goatlings for bacterial diseases caused by bacteria sensitive to tiamulin and doxycycline.

Advantages

- unique synergistic effect due to the combination of doxycycline and tiamulin;
- no resistance after a long-term application;
- the effect is reached in 30 minutes.

Composition

1 ml of TIACYCLIN® solution for injection contains 100 mg of doxycycline, 100 mg of tiamulin and excipients – up to 1 ml.

Pharmacological properties

TIACYCLIN® solution for injection is an antibacterial drug.
Tiamulin is a macrolide antibiotic. It is active against *Mycoplasma spp. (M. hyopneumoniae, M. hyorhinis, M. hyosynoviae, M. synoviae, M. meleagridis), Spirochaetas spp. (Brachyspira hyodysenteriae, B. innocents, B. suis)*, most gram-positive and gram-negative bacteria, including *Streptococcus spp., Staphylococcus spp., Arcanobacterium (Corynebacterium), Actinobacillus pleuropneumoniae, Clostridium perfringens, Lawsonia intracellularis, Mannheimia haemolitica,*

Pasteurella spp., Leptospira spp., Haemophillus spp., Bacterioides spp. Forming a physiologically inactive initiation complex, tiamulin blocks the first peptide-bond formation at the ribosomal level. The molecule of tiamulin is located in the peptidyl transferase center of the 50S ribosomal subunit.

Doxycycline is a tetracycline antibiotic. It is active against gram-positive bacteria *(Staphylococcus spp., Streptococcus spp., Actinomyces spp., Clostridium spp., Bacillus anthracis, Corynebacterium spp., Erysipelothrix spp., Listeria spp.)* and gram-negative bacteria *(Haemophilus influenza, Haemophilus parasuis, Pasteurella multocida, Bordetella spp., Bartonella spp., Actinobacillus pleuropneumoniae, Campylobacter spp.), Mycoplasma spp. (M. hyopneumoniae, M. hyorhinis, M. hyosynoviae, M. synoviae)* and *Spirochaetas spp., Chlamydia spp., Rickettsia spp.*

Disrupting the binding of the aminoacyl-tRNA to the 30S ribosomal subunit, doxycycline inhibits protein synthesis in a bacterial cell.

Due to the inhibition of protein synthesis at different stages, the combination of tiamulin and doxycycline causes a synergistic effect on microorganisms.

After intramuscular administration of TIACYCLIN® solution for injection, tiamulin and doxycycline are absorbed from the injection site and distributed to all organs and tissues, where they provide therapeutic concentration for 24 hours.

Tiamulin is excreted mainly in the bile and to a lesser extent in the urine. Doxycycline is mainly excreted in the bile.

Dosage

TIACYCLIN® solution for injection is administered to pigs, calves, lambs and goatlings at a dose of 1-2 ml per 25 kg bw once a day for 3-5 days.

Tiocefur®
(ceftiofur sodium)

solution for injection
intramuscular and subcutaneous administration

Registration in the EU

Indications

- treatment of respiratory diseases of bacterial etiology and necrobacillosis in cattle;
- treatment of respiratory diseases of bacterial etiology in cattle, pigs and horses;
- treatment of respiratory and genitourinary diseases in dogs caused by ceftiofur-sensitive bacteria;
- prevention of bacterial diseases in chickens and turkey poults.

Advantages

- can be used as a solvent for Flexoprofen®;
- high stability of the working solution;
- high level of safety, recommended for use together with live viral vaccines in poultry industry (VGNKI, GD Deventer);
- no withdrawal period for milk;
- short withdrawal period for meat – 2 days.

Composition

One box with TIOCEFUR® contains a vial with 1 g or 4 g of ceftiofur sodium and a vial with 20 ml or 80 ml of solvent.

Pharmacological properties

Ceftiofur is effective against gram-positive and gram-negative

bacteria, including strains producing beta-lactamase and some anaerobic bacteria, *Pasteurella (Mannheimia) haemolytica, Pasteurella multocida, Haemophilus somnus, Haemophilus parasuis, Streptococcus zooepidemicus, Streptococcus suis, Actinobacillus pleuropneumoniae, Escherichia coli, Salmonella cholerasuis, Salmonella typhimurium, Fusobacterium necrophorum, Bacteroides melaninogenicus (Porphiromonas assacharolytica), Actynomyces pyogenes, Staphylococcus spp., Klebsiella spp., Citrobacter spp., Bacillus spp., Proteus spp.* Depending on animal species the therapeutic concentration persists for 20 hours after parenteral administration. The maximum concentration is detected in an hour after administration. TIOCEFUR® is mainly excreted by the kidneys.

Dosage

TIOCEFUR® powder is dissolved in the solvent preheated to room temperature: 1 g of the powder per 20 ml of the solvent, 4 g of the powder per 80 ml of the solvent (the concentration of the resulting solution is 50 mg of ceftiofur sodium per 1 ml). The resulting solution is stored at 20-25 °C for no longer than 12 hours, or at 2-8 °C for no longer than 7 days, or at 4-18 °C for no longer than 50 days.

TIOCEFUR® is administered intramuscularly or subcutaneously to cattle, sheep and goats, intramuscularly to pigs and horses, subcutaneously to dogs, subcutaneously to poultry at the following doses:

- cattle – 1-2 ml of the solution per 50 kg bw (1-2 mg of ceftiofur per 1 kg), but not more than 15 ml per one injection site, for 3-5 days;
- sheep and goats – 0.1-0.2 ml of the solution per 5 kg bw (1-2 mg of ceftiofur per 1 kg), but not more than 5 ml per one injection site, for 3-5 days;
- pigs – 0.3-0.5 ml of the solution per 5 kg bw (3-5 mg of ceftiofur per 1 kg), but not more than 10 ml per one injection site, for 3 days;
- horses – 2-4 ml of the solution per 50 kg bw (2-4 mg of ceftiofur per 1 kg), but not more than 10 ml per one injection site, until recovery, but for no longer than 10 days;
- dogs – 0.2-0.4 ml of the solution per 5 kg bw (2-4 mg of ceftiofur per 1 kg), but not more than 5 ml per one injection site, until recovery, but for no longer than 10 days;

poultry:

one-day old chickens – once at 0.1-0.2 mg of ceftiofur per chicken;

one-day old turkey poults – once at 0.2-0.5 mg of ceftiofur per chicken.

TIOCEFUR® is administered to poultry subcutaneously into the neck region at a dose of 0.2 ml.

Tylanic® 5% and 20%
(tylosin)

solution for injection
intramuscular administration

Indications

- treatment of bronchopneumonia in cattle, sheep, goats, pigs, cats and dogs;
- treatment of enzootic pneumonia, arthritis, dysentery, atrophic rhinitis in pigs;
- treatment of contagious agalactia in sheep and goats;
- treatment of mastitis in cattle;
- treatment and prevention of secondary infections during viral diseases.

Composition

1 ml of TYLANIC® 5% and 20% solution for injection contains
active substance: 50 or 200 mg of tylosin respectively;
excipients: propylene glycol, benzyl alcohol and water for injection.

Pharmacological properties

Tylosin is a macrolide antibiotic. It is effective against most gram-positive and some gram-negative bacteria, including *Streptococcus spp., Staphylococcus spp., Corynebacterium spp., Clostridium spp., Pasteurella spp, Erysipelothrix spp., Fusiformis spp., Spirochaeta spp., Chalmydia spp., Treponema chiodysenteriae* and *Mycoplasma spp.*
After a single injection of TYLANIC®, the therapeutic concentration persists for at least 20 hours.

Tylosin is excreted primarily in the bile and to a lesser extent in the urine and milk.

Dosage

The drug is administered intramuscularly once a day for 3-5 day at the following doses:

- cattle – 4-10 mg/kg bw;
- pigs – 2-10 mg/kg bw;
- sheep and goats – 5-10 mg/kg bw;
- cats and dogs – 2-10 mg/kg bw.

Zitrex®
(azithromycin)

solution for injection
intramuscular administration

Indications

ZITREX® is used to treat cattle, sheep and goats for necrobacillosis, mycoplasma infections and bacterial infections of respiratory and gastrointestinal tract, genitourinary system, skin and soft tissues caused by microorganisms sensitive to the antibiotic.

Advantages

- prolonged action for at least 240 hours;
- immunostimulating effect;
- broad-spectrum antibiotic;
- high therapeutic efficacy;
- one injection per treatment course;
- no pain syndrome and local irritant effect.

Composition

ZITREX® is a solution for injection.
1 ml contains
active substance: 100 mg of azithromycin;
excipients: N, N-dimethylacetamide, benzoic acid, benzyl alcohol, thioglycerin and water for injection.

Pharmacological properties

ZITREX® belongs to macrolide antibiotics.
Azithromycin is an azalide, a subclass of macrolide antibiotics

with broad-spectrum bacteriostatic activity against gram-negative *(Actinobacillus pleuropneumoniae, Actinobacillus lignieresi, Mannheimia (Pasteurella) haemolytica, Pasteurella multocida, Legionella pneumophila, Haemophilus spp., Moraxella spp., Bordetella spp., Campylobacter spp., Fusobacterium spp., Salmonella spp., Escherichia coli)* and gram-positive bacteria *(Listeria spp., Staphylococcus spp., Streptococcus spp., Clostridium perfringens)* and *Chlamydia spp.* and *Mycoplasma bovis* and *Mycoplasma hyopneumoniae*.

Azithromycin binds to the 50S subunit of the bacterial ribosome, thus inhibiting the peptide translocase on the translation stage. The antibiotic inhibits protein synthesis, growth and reproduction of bacteria. In high concentrations, it has a bactericidal effect. Azithromycin has an effect on extracellular and intracellular pathogens. The concentration in tissues and cells is 10-50 higher than in plasma, and in nidus of infection it is 20-30% higher than in healthy tissues.

Azithromycin has a postantibiotic effect – long-lasting inhibition of bacteria after a short-term contact with the antibiotic. The effect is based on irreversible changes in the bacterial ribosomes, which block the translocation. It enhances and prolongs the antibacterial effect of the drug.

Azithromycin is well absorbed from the injection site and distributed to all organs and tissues after parenteral administration. The antibiotic is transported by phagocytes, polymorphonuclear leukocytes, and macrophages to the infection site. The maximum concentration is reached in 30-60 minutes, the therapeutic concentration persists for at least 72 hours, in lungs and macrophages – for at least 240 hours. Azithromycin is excreted primary intact in the urine and bile.

Dosage

ZITREX® is administered to cattle, sheep, goats and pigs once by intramuscular route at a dose of 1 ml per 20-40 kg bw (5 mg of azithromycin per 1 kg bw). In severe cases, it is recommended to repeat the injection.

If animal weight exceeds 300 kg, the dose must be divided into smaller drug volumes that do not exceed 7.5 ml per one injection site.

Clavuxicin®

(amoxicillin in trihydrate from, clavulanic acid in the form of potassium salt)

oral powder

Indications

CLAVUXICIN® is used for treatment and prevention of gastrointestinal and respiratory diseases, genitourinary infections, skin infections, soft-tissue infections and other bacterial diseases in calves, pig and poultry caused by bacteria sensitive to the drug components.

Advantages

- solubility of the drug is twice as high as that in analogues, long-term stability in the stock solution;
- synergistic effect;
- no resistance during long-term administration;
- short withdrawal period.

Composition

1 g of CLAVUXICIN® oral powder contains
active substances: 500 mg of amoxicillin in trihydrate from, 125 mg of clavulanic acid in the form of potassium salt;
excipients: sodium carbonate, sugar, EDTA – up to 1 g.

Pharmacological properties

CLAVUXICIN® is an antibacterial drug.
Amoxicillin trihydrate has a broad-spectrum bactericidal effect on gram-positive and gram-negative bacteria, *Esherichia coli, Clostridium*

spp., Fusobacterium spp., Erysipilotrix spp., Bordetella spp., Staphylococcus spp., Streptococcus spp., Actynomyces spp., Corynebacterium spp., Salmonella spp., Haemophilus spp., Pasteurella spp., Actinobacillus spp., etc. The antibiotic has no effect on penicillin-producing strains, *Klebsiella spp., Enterobacter spp. and Pseudomonas spp*. Amoxicillin inhibits bacterial cell wall synthesis, activity of transpeptidase and carboxypeptidases, disrupts osmosis. It causes death of bacteria at the growth stage. Clavulanic acid is an irreversible inhibitor of beta-lactamase of bacterial cells, prevents inactivation of amoxicillin by bacterial enzymes.

Due to the synergistic effect of amoxicillin and clavulanic acid, the drug is active against penicillin-resistant bacteria.

After oral administration, the drug is well absorbed in the gastrointestinal tract and distributed to all organs and tissues. The therapeutic concentration persists for 12 hours.

The drug is mainly excreted in the urine.

Dosage

CLAVUXICIN® is administered individually or to groups for 3-5 days.

- poultry: via drinking water, at a dose of 4 g of the drug per 100 kg bw per day. In severe cases, the dose may be doubled. The drug solution must be prepared twice a day with a 12-hour interval, the daily dose must be divided into two doses;
- pigs: via drinking water, milk or feed, at a dose of 0.8-2 g of the drug per 100 kg bw, twice a day with a 12-hour interval;
- calves: via water, milk or milk replacer, at a dose of 0.8 g of the drug per 100 kg bw, twice a day with a 12-hour interval.

Colimixol®
(colistin sulfate)

water-soluble powder
oral administration

Indications

COLIMIXOL® is used to treat poultry, pigs and calves for colibacillosis, salmonellosis and other gastrointestinal diseases caused by colistin-sensitive bacteria.

Composition

1 g of COLIMIXOL® contains
active substances: 12 million IU (500 mg) and 6 million IU (250 mg) of colistin sulfate;
excipients: ascorbic acid, citric acid, glycine and lactose.

Pharmacological properties

COLIMIXOL® belongs to the class of polypeptide antibiotics.
Colistin sulfate is active against gram-negative bacteria, including *E. coli, Pseudomonas aeruginosa, Aerobacter aerogenes, Klebsiella spp., Proteus spp., Salmonella spp.*, etc. The antibiotic disrupts cytoplasmic membrane permeability. It causes death of bacteria.
After oral administration, colistin is hardly absorbed in the gastrointestinal tract, the antimicrobial effect is provided directly in the intestine. Colistin is excreted intact mainly in the urine and feces.

Dosage

COLIMIXOL® is administered individually and to groups via drinking water at the following daily doses:

Drug	Poultry	Pigs and calves
COLIMIXOL® 12 million IU	50-75 g / 1000 L	60-80 mg / 10 kg bw
COLIMIXOL® 6 million IU	100-150 g / 1000 L	120-160 mg / 10 kg bw

The treatment course is 3-5 days.

Enroflon® 5% and 10%
(enrofloxacin)

oral powder

Indications

- treatment and prevention of colibacillosis, salmonellosis mycoplasmosis, bronchopneumonia, enteritis and other diseases in calves, lambs, pigs and poultry caused by fluoroquinolone-sensitive bacteria;
- treatment of atrophic rhinitis, enzootic pneumonia and mastitis-metritis-agalactia syndrome in pigs.

Composition

1 g of ENROFLON® 5% and 10% contains 50 or 100 mg of enrofloxacin, respectively.

Pharmacological properties

Enrofloxacin belongs to the fluoroquinolone class. It is a broad-spectrum antibiotic, effective against gram-positive and gram-negative bacteria, including *E.coli, Haemophilus spp., Klebsiella spp., Pasteurella spp., Pseudomonas spp., Bordetella spp., Campylobacter spp., Erysipelothrix spp., Corynebacterium spp., Staphylococcus spp., Streptococcus spp., Actinobacillus spp., Clostridium spp., Bacteroides spp., Fusobacterium spp.* and *Mycoplasma spp*. The resistance of bacteria to ENROFLON® powder develops relatively slow, because enrofloxacin inhibits gyrase activity, which has an impact on DNA replication in the bacterial cell nucleus. The maximum concentration is reached in 1-2 hours after administration and persists for 6 hours, the therapeutic

concentration persists for 24 hours. Fluoroquinolo-nes are mainly excreted in the urine and bile.

Dosage

The drug is administered via feed at a dose of 2.5-5.0 mg of enrofloxacin per 1 kg bw, once a day for 3-5 days.
ENROFLON® powder is administered to poultry via feed at a dose of 2 kg of ENROFLON® 5% powder (or 1 kg of ENROFLON® 10% powder) per 1 t of feed, to pigs – 1.5 kg of ENROFLON® 5% powder (or 0.75 kg of ENROFLON® 10% powder) per 1 t of feed. To treat salmonellosis and in severe cases, the dose is doubled.

Klindaspectin®

(clindamycin hydrochloride, spectinomycin hydrochloride)

water-soluble powder
oral administration

Indications

KLINDASPECTIN® water-soluble powder is used for treatment and prevention of bacterial infections in poultry, including colibacillosis associated with mycoplasmosis.

Composition

1 g of the drug contains 133 mg of clindamycin hydrochloride and 400 mg of spectinomycin.

Pharmacological properties

Clindamycin hydrochloride is an antibiotic of the lincosamide class, has a bacteriostatic effect on gram-positive bacteria, including penicillinase-producing strains; aerobic non-spore-forming and spore-forming bacteria; anaerobic spore-forming bacteria and some gram-negative microorganisms and *Mycoplasma spp*.

Spectinomycin hydrochloride is an antibiotic of the aminocyclitol class. Depending on the concentration, it has both bacteriostatic and bactericidal effect. The antibiotic is active against gram-positive and gram-negative bacteria, including *Salmonella spp.* and *Escherichia coli*.

The combination of clindamycin and spectinomycin has a synergistic effect on gram-positive and gram-negative bacteria: *Staphylococcus spp., Streptococcus spp., Escherichia coli, Salmonella spp., Pasteurella*

multocida, Haemophilus spp., Proteus spp., Shigella spp., Klebsiella spp., Bordetella spp. and Mycoplasma spp.

Clindamycin and spectinomycin inhibit the assembly of polypeptide chains at the 50S and 30S ribosomal subunit. It causes the inhibition of protein synthesis and death of bacteria.

Dosage

KLINDASPECTIN® water-soluble powder is administered at a dose of 150 mg/kg bw. It is administered via drinking water at a dose of 800 g per 1000 L of water. The treatment course is 5-7 days.

Neomycin sulfate
(neomycin sulfate)

oral powder

Indications

NEOMYCIN SULFATE is used for treatment and prevention of gastrointestinal diseases, colibacillosis, salmonellosis, gastro-enterocolitis of bacterial etiology in calves, piglets, lambs and poultry.

Composition

1 g of the drug contains not less than 680 mg of neomycin sulfate.

Pharmacological properties

NEOMYCIN SULFATE is a broad-spectrum antibiotic of the aminoglycoside class. It is active against gram-positive and gram-negative bacteria, including *Escherichia coli, Salmonella spp., Proteus spp., Staphylococcus spp., Corinebacterium spp., Listeria spp.* and *Bacillus anthracis*.

Protozoa, fungi and most Pseudomonas aeruginosa strains are resistant to NEOMYCIN SULFATE. The antibiotic has a bactericidal effect, inhibits protein synthesis at the bacterial ribosomes.

After oral administration, NEOMYCIN SULFATE is hardly absorbed, the bactericidal effect is mainly provided in the gastrointestinal tract. The drug is excreted primarily in the feces and partially in the urine.

Dosage

NEOMYCIN SULFATE is administered by oral route via feed or water (milk) 2-3 times a day at a daily dose of 10-20 mg per 1 kg bw for 3-7 days.

Oxytetracycline hydrochloride 1000

(oxytetracycline hydrochloride)

oral powder

Indications

The drug is used to treat livestock and poultry for colibacillosis, salmonellosis, pasteurellosis, dysentery, pullorosis, eimeriosis, infectious respiratory diseases, respiratory mycoplasmosis, mastitis, endometritis, vaginitis, infectious kidney diseases and urinary diseases; for treatment of mucous membranes of skin wounds (as a 0.5-3% solution or ointment).

Composition

OXYTETRACYCLINE HYDROCHLORIDE 1000 contains water-soluble antibiotic salt produced by Streptomyces rimosus, oxytetracycline hydrochloride.

Pharmacological properties

OXYTETRACYCLINE HYDROCHLORIDE 1000 is a broad-spectrum antibacterial drug, active against gram-positive and gram-negative bacteria, *Spirochaetas spp., Leptospira spp., Rickettsia spp., Chlamydia spp., Mycoplasma spp.* The antibiotic has no effect on *Proteus spp.* and *Pseudomonas aeruginosa.* The drug inhibits protein synthesis.
After oral administration, oxytetracycline hydrochloride is well absorbed in the gastrointestinal tract and distributed to all organs and tissues. The maximum concentration is reached in 2-3 hours after administration and persists for 8-12 hours. OXYTETRACYCLINE

HYDROCHLORIDE 1000 is excreted partially in the urine and mainly in the feces.

Dosage

The drug is administered by oral route during or after feeding, twice a day for 5-7 days at the following doses: horses – 5-8 mg/kg bw, cattle – 10-20 mg/kg bw, sheep and goats – 10-30 mg/kg bw, pigs – 15-30 mg/kg bw, poultry – 20-40 mg/kg bw.

Pulmokit®

(kitasamycin, trimethoprim, sulfadiazine, paracetamol, ascorbic acid, retinol)

oral powder

Indications

PULMOKIT® is used for treatment and prevention of respiratory diseases of bacterial etiology, colibacillosis, salmonellosis, pasteurellosis, haemophillosis, mycoplasmosis and bacterial complications of viral infections in calves, pigs and poultry.

Advantages

- unique composition of six components;
- combination treatment: antibacterial, analgesic, anti-inflammatory, antipyretic, regenerating and anti-stress effect;
- synergistic effect of the antibacterial components;
- activation of cell-mediated immunity;
- increases non-specific resistance.

Composition

1 kg of PULMOKIT® contains 30 g of kitasamycin, 45 g of trimethoprim, 160 g of sulfadiazine, 50 g of paracetamol, 4 million IU of vitamin A, 25 g of vitamin C.

Pharmacological properties

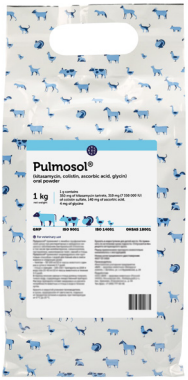
PULMOKIT® has a broad-spectrum antimicrobial effect on gram-positive and gram-negative bacteria, including *Mycoplasma spp*. The

drug also has analgesic, antipyretic, anti-inflammatory and anti-stress effects, accelerates mucosal regeneration, increases resistance.

Dosage

PULMOKIT® is administered via feed at the following doses:

- calves: 2-3 g per 10 kg bw for 5-7 days;
- poultry: 1-2 kg per 1 t of feed for 3-5 days;
- pigs: 1-2 kg per 1 t of feed per 5 days.



Pulmosol®

(kitasamycin tartrate, colistin sulfate)

oral powder

Indications

PULMOSOL® is used for treatment and prevention of respiratory and gastrointestinal diseases, including colibacillosis, salmonellosis, pasteurellosis, mycoplasmosis in calves, pigs and poultry.

Advantages

- well-balanced composition of the drug;
- directed action of kitasamycin tartrate in the pulmonary tissue, colistin sulfate – in the intestinal lumen;
- high stability of the solution even in hard water;
- effect in 20 minutes;
- anti-stress effect;
- stimulation of non-specific natural resistance.

Composition

1 g of PULMOSOL® contains
active substances: 350 mg of kitasamycin tartrate, 310 mg of colistin sulfate (7.35 million IU), 140 mg of ascorbic acid, 40 mg of glycine;
excipients: citric acid – up to 1000 mg.

Pharmacological properties

PULMOSOL® is an antibacterial drug.
Kitasamycin is a macrolide antibiotic, has a bacteriostatic effect on gram-positive bacteria – *Staphylococcus spp., Streptococcus spp.*

(including penicillinase-producing bacteria), *Clostridium spp., Bacillus anthracis, Listeria monocytogenes* and some gram-negative bacteria – *Hemophilus spp., Brucella spp., and Mycoplasma spp., Chlamydia spp., Rickettsia spp.*, etc. Kitasamycin reversibly binds to the peptidyl transferase center of the 50S ribosomal subunit and induces the cleavage of peptidyl-tRNA complex. As a result, it inhibits the peptide bond formation.

Colistin sulfate is a mixture of sulfate polypeptides produced by Bacillus polymyxia strains. Colistin has a bactericidal effect on most aerobic gram-negative bacteria. It is active against *Enterobacter spp., Escherichia coli, Klebsiella spp., Salmonella spp., Pasteurella spp., Bordetella spp., Proteus spp.* and others. Colistin disrupts cytoplasmic membrane permeability.

Ascorbic acid has an anti-stress effect and increases the resistance of the body.

Glycine is an amino acid neurotransmitter, part of many proteins, forms porphyrins and purine bases in cells.

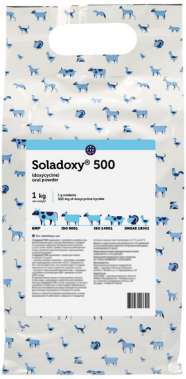
After oral administration, the components of the drug are quickly absorbed in the gastrointestinal tract and distributed to most organs and tissues. There, they reach antibacterial concentration, which persists for 20-24 hours.

The drug is mainly excreted in the urine and bile.

Dosage

PULMOSOL® is administered individually or to groups via drinking water or feed at the following doses:

- calves: 50-100 mg per 10 kg bw, once a day for 5-7 days;
- pigs and poultry: 100-150 g per 1000 L of drinking water for 3-5 days (individually – 25-40 mg per 10 kg bw).



Soladoxy® 500
(doxycycline hyclate)

oral powder

Indications

SOLADOXY® 500 is used for treatment and prevention of respiratory and gastrointestinal diseases of bacterial etiology in calves, lambs, goatlings, pigs and poultry caused by doxycycline-sensitive bacteria.

Composition

1 g of SOLADOXY® 500 contains
active substance: 500 mg of doxycycline hyclate;
excipients: 100 mg of ascorbic acid, 380 mg of lactose, 10 mg of sodium metabisulphite and 10 mg of trilon B.

Pharmacological properties

SOLADOXY® 500 is an antibacterial drug.
Doxycycline is a semisynthetic antibiotic, belongs to the tetracycline class. The antibiotic has a broad-spectrum antibacterial effect on gram-positive (*Staphylococcus spp., Streptococcus spp., Actinomyces spp., Clostridium spp., Bacillus anthracis, Corynebacterium spp., Erysipelothrix spp., Listeria spp.*) and gram-negative bacteria (*Haemophilus influenzae, Haemophilus parasuis, Pasterurella multocida, Bordetella spp., Brucella spp., Bartonella spp., Actinobacillus pleuropneumoniae, Escherichia coli, Salmonella spp., Campylobacter spp.*) and *Mycoplasma spp. (M. synoviae, M. hyopneoumonia, M. hyorhinis, M. hyosynoviae), Spirochaetas spp., Chlamydia spp.* and *Rickettsia spp.* The drug has a bacteriostatic effect.

Doxycycline inhibits bacterial protein synthesis, disrupts the binding of aminoacyl-tRNA to the 30S ribosomal subunit.
After oral administration, doxycycline is well absorbed in the gastrointestinal tract and distributed to all organs and tissues. The maximum concentration is reached in 2-4 hours. The therapeutic concentration persists 18-24 hours.
Doxycycline is mainly excreted in the bile.

Dosage

SOLADOXY® 500 is administered via drinking water for 3-5 days:

- calves, lambs and goatlings – individually, at a dose of 1 g of the drug per 100 kg bw (5 mg of doxycycline per 1 kg bw), twice a day;
- pigs and poultry – to groups, at a dose of 100 g of the drug per 500-1000 L of drinking water.

Solamox®
(amoxicillin trihydrate)

oral powder

Indications

SOLAMOX® is used for treatment and prevention of respiratory and gastrointestinal bacterial infections in calves, pigs and poultry caused by amoxicillin-sensitive bacteria.

Composition

1 g of SOLAMOX® contains
active substance: 700 mg of amoxicillin trihydrate:
excipients: 270 mg of sodium carbonate, 20 mg of glycine, 10 mg of trilon B.

Pharmacological properties

SOLAMOX® is an antibacterial drug.
Amoxicillin is a semisynthetic antibiotic, belongs to the penicillin class. It has a bactericidal effect on gram-positive and gram-negative bacteria, including *Staphylococcus spp. Streptococcus suis, Streptococcus faecalis, Streptococcus pneumoniae, Arcanobacterium pyogenes, Corynebacterium bovis, Erysipelothrix rhusiopathiae, Listeria monocytogenes, Bacillus anthracis, Clostridium perfringens, Hemophilus spp., Pasteurella spp., Escherichia coli, Salmonella spp., Proteus mirabilis, Morexella bovis, Fusobacterium necrophorus, Brachyspira hyodysenteriae.*
Amocicillin is not active against β-lactamase-producing bacteria.
Amoxicillin disrupts cell wall synthesis, inhibits the formation of

transpeptide bonds, which are necessary for peptidoglycan cross-linking.
After oral administration, amoxicillin is quickly absorbed in the gastrointestinal tract and distributed to most organs and tissues. The antibiotic reaches the maximum concentration in 1-2 hours after administration. The constant administration of the drug via water or feed keeps the therapeutic concentration within the whole treatment course.

Dosage

SOLAMOX® is administered via feed or drinking water at the following daily doses:

- calves: 150 mg of the drug per 10 kg bw (10 mg of amoxicillin per 1 kg bw), twice a day with a 12-hour interval for 5 days. The drug can also be administered via milk or milk replacer;
- pigs: 150-300 mg of the drug per 10 kg bw (10-20 mg of amoxicillin per 1 kg bw) for 5 days;
- poultry: 20 mg of the drug per 1 kg bw (14 mg of amoxicillin per 1 kg bw) for 5 days.

Solutistin®

(tylosin tartrate, colistin sulfate)

oral powder

Indications

SOLUTISTIN® is used for treatment and prevention of mycoplasmosis, colibacillosis, salmonellosis and other bacterial diseases in poultry, pigs, calves, lambs and goatlings caused by bacteria sensitive to colistin and tylosin.

Advantages

- directed action of tylosin tartrate in the pulmonary tissue, colistin sulfate – in the intestinal lumen;
- no resistance during long-term administration;
- high stability of the solution even in hard water;
- unique efficacy of two active substances.

Composition

1 g of SOLUTISTIN® contains
active substances: 450 mg of tylosin tartrate and 2.4 million IU of colistin sulfate (100 mg);
excipients: L-tartaric acid, ascorbic acid, glycine and sugar.

Pharmacological properties

SOLUTISTIN® is an antimicrobial drug, its active substances are tylosin tartrate and colistin sulfate.
Tylosin tartrate is a macrolide antibiotic, active against most gram-positive and some gram-negative bacteria, including

Streptococcus spp., Leptospira spp., Corynebacterium spp., Clostridium spp., Erysipelotrix spp., Pasteurella spp., Chlamidia spp., Brachyspira (Serpulina) hyodysenteriae, Spirochaetae spp., Mycoplasma spp. The antibiotic has a bacteriostatic effect, inhibits protein synthesis at the ribosomal level in the bacterial cell.

Colistin is a polymyxin E, belongs to cyclic polypeptide antibiotics, active against *Escherichia coli, Salmonella spp., Citrobacter spp., Klebsiella spp., Shigella spp*., etc. The antibiotic disrupts cytoplasmic membrane permeability. It causes death of bacteria.

The combination of tylosin tartrate and colistin sulfate expends the range of antimicrobial activity and prevents the development of resistance to the antibiotics.

After oral administration, colistin is hardly absorbed in the gastrointestinal tract and has its antimicrobial effect directly in the intestine. Colistin is excreted intact mainly in the feces. Tylosin tartrate is absorbed in the gastrointestinal tract and distributed to most organs and tissues. The therapeutic concentration of the antibiotic persists for 15-18 hours after a single administration. Tylosin tartrate is metabolized and excreted intact in the urine and feces.

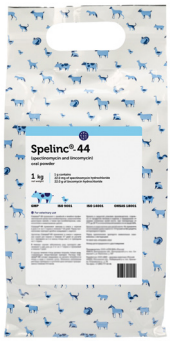
Dosage

SOLUTISTIN® is administered individually and to groups via drinking water or feed at the following daily doses:

- pigs, calves, lambs and goatlings: 3-4 g of the drug per 100 kg bw;
- poultry: 250-500 g of the drug per 1000 L of drinking water.

In severe cases, the dose can be doubled.

The treatment course is 3-5 days.



Spelinc®-44

(spectinomycin hydrochloride, lincomycin hydrochloride)

oral powder

Indications

- treatment and prevention of colibacillosis, salmonellosis and dysentery in pigs;
- treatment and prevention of salmonellosis, colibacillosis and mycoplasmosis in chickens.

Advantages

- synergistic effect;
- two forms: administration via feed and water;
- high stability of the solution even in hard water;
- high bioavailability;
- short withdrawal period.

Composition

1 g of SPELINC®-44 contains 22 mg of spectinomycin hydrochloride and 22 mg of lincomycin hydrochloride.

Pharmacological properties

The combination of spectinomycin and lincomycin has a synergistic effect on most gram-positive and gram-negative bacteria, including *Escherichia spp., Salmonella spp., Bordetella spp., Treponema chiodysenteriae* and *Mycoplasma spp.*
The maximum concentration is reached in 3-6 hours after administration.

Lincomycin and spectinomycin are excreted intact mainly in the urine and feces.

Dosage

SPELINC®-44 is administered to pigs by oral route via feed at a dose of 1 kg per 1 t of feed for 7-10 days. In severe cases, the dose can be increased to 2 kg per 1 t of feed for 7 days.
SPELINC®-44 is administered to chickens via feed at a dose of 1.1 g of the drug per 1 kg bw or 1 kg per 1 t of feed for 3-7 days.

Spelinc® 660

(spectinomycin hydrochloride, lincomycin hydrochloride)

oral powder

Indications

SPELINC® 660 is used for treatment and prevention of colibacillosis, salmonellosis and dysentery in pigs and salmonellosis, colibacillosis and mycoplasmosis in chickens.

Advantages

- synergistic effect;
- two forms: administration via feed and water;
- high stability of the solution even in hard water;
- high bioavailability;
- short withdrawal period.

Composition

1 g of SPELINC® 660 contains
active substances: 440 mg of spectinomycin hydrochloride and 220 mg of lincomycin hydrochloride;
excipient: lactose – up to 1 g.

Pharmacological properties

SPELINC® 660 is an antibacterial drug.
Spectinomycin is an aminocyclitol antibiotic. It has a bacteriostatic effect on gram-negative bacteria, including *Escherichia coli, Salmonella spp.*
Spectinomycin inhibits protein synthesis at the ribosomal level through binding to the 30S ribosomal subunit.

Lincomycin hydrochloride is a lincosamide antibiotic. It has a bacteriostatic effect mostly on gram-positive bacteria: *Staphylococcus spp., Streptococcus spp.* (including penicillinase-producing microorganisms), *Corynebacterium spp., Clostridium spp.*, and *Bacteroides spp.* и *Mycoplasma spp.*

Lincomycin inhibits protein synthesis at the ribosomal level through binding to the 50S ribosomal subunit.

The combination of spectinomycin and lincomycin has a synergistic effect on gram-positive and gram-negative bacteria, including *Escherichia spp., Salmonella spp., Bordetella spp., and Brachyspira (Serpulina) hyodysenteriae, Mycoplasma spp.*

After oral administration, lincomycin is absorbed in the gastrointestinal tract and distributed to most organs and tissues. The maximum concentration in the blood is reached in 3-6 hours after administration. Spectinomycin is poorly absorbed and has its antimicrobial effect directly in the intestine.

Lincomycin and spectinomycin are excreted intact mainly in the urine and feces.

Dosage

SPELINC® 660 is administered individually and to groups via drinking water or feed at the following doses:

- pigs: 90-100 g per 1000 L of water for 7 days;
- poultry: 500-1000 g per 1000 L of water for 3-7 days.

Sulteprim®

(sulfamethoxazole, trimethoprim, oxytetracycline)

oral powder

Indications

SULTEPRIM® is used to treat calves, lambs, piglets and chickens for colibacillosis, bronchopneumonia and other bacterial infections.

Composition

1 g of SULTEPRIM® contains
active substances: 100 mg of sulfamethoxazole, 20 g of trimethoprim, 50 mg of oxytetracycline hydrochloride; excipients: lactose – up to 1 g.

Pharmacological properties

The antibacterial components of SULTEPRIM® have a synergistic effect on most gram-positive and gram-negative bacteria, including *Escherichia coli, Salmonella spp., Pasteurella spp., Klebsiella spp., Corynebacterium spp., Staphylococcus spp., Streptococcus spp.* and *Proteus spp.*
The active substances of SULTEPRIM® are well absorbed in the gastrointestinal tract and distributed to all organs and tissues. The antibacterial concentration persists for 24 hours.

Dosage

The drug is administered to lambs and calves individually via drinking water or milk at a dose of 250 mg/kg bw, 30 minutes before feeding once a day for 3-5 days. In severe cases, the first dose is doubled to 500 mg/kg bw.
SULTEPRIM® is administered to chickens and piglets via feed at a dose of 250 mg per 1 kg bw for 3-7 days.

Terpentiam® 45%
(tiamulin hydrogen fumarate)

oral powder

Indications

The drug is used for treatment and prevention of diseases of the gastrointestinal and respiratory tract, including dysentery, enzootic pneumonia, proliferative enteropathy (ileitis) in pigs and mycoplasma infections, caused by *M. gallisepticum, M. synoviae u M. meleagridis,* in turkeys and chickens.

Advantages

- 45% water-soluble powder is convenient to use;
- high stability of the water-soluble powder in the stock solution.

Composition

1 g of the drug contains
active substance: 450 mg of tiamulin hydrogen fumarate;
excipients: glycine, tartaric acid, citric acid, EDTA and lactose – up to 1 g.

Pharmacological properties

TERPENTIAM® 45% is an antibacterial drug, belongs to pleuromutilins.
Tiamulin is a broad-spectrum antibiotic, effective against gram-positive *(Staphylococcus spp., Streptococcus spp., Listeria monocytogenes, Corynebacterium spp., Erysipelothrix suis, Clostridium spp., etc.)* and gram-negative bacteria (*Actinobacillus pleuropneumoniae*, *Lawsonia*

intracellularis, Mannheimia haemolitica, Pasteurella spp., Haemophillus spp., Brachyspira (Serpulina) hyodysenteriae, Bacteroides spp., Fusobacterium spp., some strains of *Klebsiella spp*., etc), *Mycoplasma spp. (M. hyopneumoniae, M. hyosinoviae, M. hyorhinis, M. gallisepticum, M. synoviae, M. meleagridis), Chlamydia spp*., *Rickettsia spp*. and *Borrelia spp*.

The drug is not active against most Enterobacteriaceae bacteria, including *Salmonella spp., E. coli, Pseudomonas aeruginoza,* fungi and viruses.

Tiamulin is a bacteriostatic drug. It binds to the 70S ribosomal subunit, inhibits the formation of the mRNA-tRNA complex and protein synthesis.

After oral administration, the drug is well absorbed in the gastrointestinal tract and distributed to all organs and tissues. The maximum concentration in the blood serum is reached in 2 hours. The therapeutic concentration persists for 18-24 hours after administration. The antibiotic is mainly excreted in the feces.

Dosage

TERPENTIAM® 45% is administered individually and to groups via drinking water or feed at the following doses:

Pigs:

- to treat diseases of the gastrointestinal tract: 5-10 mg of tiamulin per 1 kg bw, which corresponds to 1.1-2.2 g of the drug per 100 kg bw, for 3-5 days;
- to treat diseases of the respiratory tract: 10-20 mg of tiamulin per 1 kg bw, which corresponds to 2.2-4.4 g of the drug per 100 kg bw, for 5-10 days.

Poultry:

- 1-3 day old chickens: 70-150 mg of tiamulin per 1 kg bw, which corresponds to 1.6-3.4 g of the drug per 10 kg bw:
- broilers, replacement chickens, parent flock: 25-50 mg of tiamulin per 1 kg bw, which corresponds to 0.5-1.1 g of the drug per 10 kg bw, within 1-3 days for prevention and within 3-5 days for treatment.

Terpentiam® premix 80%
(tiamulin hydrogen fumarate)

oral powder

Indications

TERPENTIAM® premix 80% is used for treatment and prevention of diseases of gastrointestinal and respiratory tract in pigs, including dysentery, enzootic pneumonia, proliferative enteropathy (ileitis).

Composition

1 g of TERPENTIAM® premix 80% contains
active substance: 800 mg of tiamulin hydrogen fumarate;
excipients: tartaric acid, citric acid, glycine, trilon B and lactose – up to 1 g.

Pharmacological properties

TERPENTIAM® premix 80% is an antibacterial drug.
Tiamulin is a semisynthetic antibiotic of the pleuromutilin class. It is a broad-spectrum antibiotic, effective against gram-positive (*Staphylococcus spp., Streptococcus spp., Listeria monocytogenes, Corynebacterium spp., Erysipelothrix suis, Clostridium spp.,* etc.) and gram-negative bacteria (*Actinobacillus pleuropneumoniae, Lawsonia intracellularis, Mannheimia haemolitica, Pasteurella spp., Haemophillus spp., Brachyspira (Serpulina) hyodysenteriae, Bacteroides spp., Fusobacterium spp., some strains of Klebsiella spp.*, etc), *Mycoplasma spp., Chlamydia spp., Rickettsia spp.* and *Borrelia spp.* The drug is not active against most Enterobacteriaceae bacteria, including *Salmonella spp., E. coli, Pseudomonas aeruginoza*, fungi and viruses.
Tiamulin is a bacteriostatic agent. It binds to the 70S ribosomal

subunit, inhibits the formation of the mRNA-tRNA complex and protein synthesis.
After oral administration, the drug is well absorbed in the gastrointestinal tract and distributed to all organs and tissues. The maximum concentration in the blood serum is reached in 2 hours. The therapeutic concentration persists for 18-24 hours after administration. The antibiotic is mainly excreted in the feces.

Dosage

TERPENTIAM® premix 80% is administered via feed within 7-10 days for treatment and within 10-14 days for treatment and prevention at the following daily doses:

Drug	Dose
Tiamulin	6-8 mg/kg bw
TERPENTIAM® premix 80%	0.125-0.188 kg/t of feed

In severe cases, the dose can be doubled.

Tiacyclin®

(doxycycline hydrochloride, tiamulin hydrogen fumarate)

oral powder

Indications

The drug is used for treatment and prevention of dysentery, atrophic rhinitis, enzootic pneumonia, pleuropneumonia, haemophillosis, intestinal spirochetosis, salmonellosis, colibacillosis, necrotic enteritidis in pigs caused by bacteria sensitive to tiamilin and doxycycline.

Composition

1 g of TIACYCLIN® contains 50 mg of doxycycline hydrochloride and 50 mg of tiamulin hydrogen fumarate.

Pharmacological properties

Tiamulin and doxycycline are effective against *Mycoplasma spp. (Mycoplasma hyopneumoniae, M. hyorhinis, M. hyosynoviae, M. synoviae, M. meleagridis), Spirochaetas spp. (Brachyspira hyodysenteriae, B. innocents, B. suis)*, most gram-positive and some gram-negative bacteria, including *Streptococcus spp., Staphylococcus spp., Bacillus anthracis, Erysipelothrix spp., Listeria spp., Arcanobacterium (Corynebacterium), Actinobacillus pleuropneumoniae, Clostridium perfringens, Lawsonia intracellularis, Mannheimia haemolitica, Pasteurella spp., Leptospira spp., Haemophilus spp, Bordetella sp., Brucella sp., Bartonella sp., Actinobacillus pleuropneumoniae, Campylobacter spp., Bacteroides spp.*

After a single administration, the high therapeutic concentration persists for 24 hours.
Tiamulin is excreted mainly in the bile and to a lesser extent in the urine. Doxycycline is mainly excreted in the bile.

Dosage

TIACYCLIN® is administered individually or to groups via feed at the following doses:

- for treatment: 2.5-3 kg of the drug per 1 t per day for 5 days;
- for prevention: 2-2.5 kg of the drug per 1 t per day for 5-10 days.

Tylanic®
(tylosin tartrate)

water-soluble powder for oral administration

Indications

- for treatment and prevention of respiratory mycoplasmosis in poultry and infectious sinusitis in turkeys;
- for treatment of dysentery and bacterial gastroenterocolitis in pigs and for treatment of bronchopneumonia in calves caused by tylosin-sensitive bacteria.

Composition

TYLANIC® water-soluble powder contains tylosin tartrate.

Pharmacological properties

Tylosin is a macrolide antibiotic. It is effective against most gram-positive and some gram-negative bacteria, including *Streptococcus spp., Staphylococcus spp., Corynebacterium spp., Clostridium spp., Pasteurella spp., Erysipelothrix spp., Fusiformis spp., Spirochaetas spp., Chlamydia spp., Treponema spp.* and *Mycoplasma spp.*
The therapeutic concentration of the antibiotic after a single administration persists for 15-18 hours. Tylosin tartrate is excreted mainly in the bile and to a lesser extent in the milk and urine.

Dosage

To treat bronchopneumonia in calves, TYLANIC® is administered individually via water or milk at a dose of 5 mg/kg bw, twice a day for 7-14 days.

TYLANIC® is administered to poultry at a dose of 0.5 g per 1 L of water for 3-5 days.
To treat dysentery and gastroenterocolitis in pigs, TYLANIC® is administered at a dose of 0.25 g per 1 L of water (or 5 mg/kg bw) for 3-10 days.

Amoxiprem 200
(amoxicillin trihydrate)

oral granules

Indications

AMOXIPREM 200 is used for treatment and prevention of diseases of gastrointestinal and respiratory tract, genitourinary system and other bacterial diseases in calves, pigs and poultry, caused by amoxicillin-sensitive bacteria.

Composition

1 g of AMOXIPREM 200 contains 200 mg of amoxicillin trihydrate and excipients.

Pharmacological properties

AMOXIPREM 200 is an antibacterial drug, belongs to β-lactam antibiotics.
Amoxicillin trihydrate is a semisynthetic antibiotic of the penicillin class. It is a broad-spectrum antibiotic, active against gram-positive (*Actinomyces spp., Bacillus antracis, Clostridium spp., Corynebacterium spp., Erysipelothrix rhusiopathiae, Streptococcus spp., Staphylococcus spp. Listeria monocytogenes,* etc.) and gram-negative bacteria (*Actinobacillus spp., Bordetella bronchiseptica, Fusobacterium spp., Haemophilus spp., Moraxella spp., Pasteurella spp., Salmonella spp.*, etc.).
Due to the bactericidal effect, the antibiotic inhibits transpeptidase activity, which leads to death of bacteria.
After oral administration, amoxicillin is quickly absorbed in the gastrointestinal tract and distributed to all organs, tissues and liquids.

The therapeutic concentration persists for 24 hours. The antibiotic is metabolized in the liver and forms inactive penicilloic acid, excreted primarily intact in the urine and to a lesser extent in the bile and partially in the milk.

Dosage

AMOXIPREM 200 is administered via feed at the following doses:

- calves: 50-75 mg/kg bw (10-15 mg of amoxicillin per 1 kg bw) for 10-15 days;
- pigs: 50-100 mg/kg bw (10-20 mg of amoxicillin per 1 kg bw) or 1.0-1.5 kg per 1 t of feed for 10-15 days;
- poultry: 100 mg/kg bw (20 mg of amoxicillin per 1 kg bw) or 1.0 kg per 1 t of feed for 5-7 days.

Colimixol®
(colistin sulfate)

oral granules

Indications

COLIMIXOL® is used to treat poultry, pigs and calves for colibacillosis, salmonellosis and other gastrointestinal diseases of bacterial etiology, caused by colistin-sensitive bacteria.

Composition

1 g of COLIMIXOL® contains 1.8 million IU (200 mg), 2.4 million IU (100 mg), 1.2 million IU (50 mg) of colistin sulfate and excipients – up to 1 g.

Pharmacological properties

COLIMIXOL® is an antibacterial drug, belongs to polypeptide antibiotics.
Colistin sulfate is effective against gram-negative bacteria, including *E. coli, Pseudomonas aeruginosa, Aerobacter aerogenes, Klebsiella spp., Proteus spp., Salmonella spp.*, etc. The antibiotic disrupts cytoplasmic membrane permeability, which leads to death of bacterial cell.
After oral administration, colistin is hardly absorbed in the gastrointestinal tract and has its antimicrobial effect directly in the intestine. Colistin is mainly excreted intact in the urine and feces.

Dosage

COLIMIXOL® is administered via feed at the following daily doses:

Antibacterial drugs

Drug	Poultry	Pigs	Calves
Colistin	75 000 IU/kg bw	100 000 IU/kg bw	100 000 IU/kg bw
COLIMIXOL® 4.8 million IU	0.2-0.3 kg/t of feed	0.75 kg/t of feed	20 mg/kg bw
COLIMIXOL® 2.4 million IU	0.4-0.6 kg/t of feed	1.5 kg/t of feed	40 mg/kg bw
COLIMIXOL® 1.2 million IU	0.8-1.2 kg/t of feed	3 kg/t of feed	80 mg/kg bw

Doxyprem 100, 200
(doxycycline hyclate or hydrochloride)

oral granules

Indications

DOXYPREM 100, 200 is used for treatment and prevention of bacterial diseases of gastrointestinal and respiratory tract in pigs, poultry, calves, lambs and goatlings caused by doxycycline-sensitive bacteria.

Composition

1 g of DOXYPREM 100, 200 contains 100 or 200 mg of doxycycline hyclate or hydrochloride and excipients.

Pharmacological properties

DOXYPREM 100, 200 is an antibacterial drug.
Doxycycline hyclate or hydrochloride is a semisynthetic tetracycline antibiotic. It is effective against most gram-positive (*Staphylococcus spp., Streptococcus spp., Actinomyces spp., Clostridium spp., Bacillus anthracis, Corynebacterium spp., Erysipelothrix spp., Listeria spp.*) and gram-negative bacteria (*Haemophilus influenzae, Haemophilus parasuis, Pasteurella multocida, Bordetella spp., Brucella spp., Bartonella spp., Actinobacillus pleuropneumoniae, Escherichia coli, Salmonella spp., Campylobacter spp.*) and *Mycoplasma spp. (M. synoviae, M. gallisepticum, M. hyopneoumonia, M. hyorhinis, M. hyosynoviae), Chlamydia spp., Rickettsia spp.* It is a bacteriostatic drug. Doxycycline inhibits protein synthesis, disrupts the binding of aminoacyl-RNA to the 30S ribosomal subunit.
After oral administration, doxycycline is well absorbed in the

gastrointestinal tract and distributed to all organs and tissues. Doxycycline is mainly excreted in the bile, feces, urine and eggs.

Dosage

DOXYPREM 100, 200 is administered via feed for 5-7 days at the following daily doses:

Animal species	DOXYPREM 100		DOXYPREM 200	
Pigs	2-3 kg/1000 kg of feed	100-150 mg/ kg bw	1-1.5 kg/1000 kg of feed	50-75 mg/ kg bw
Poultry	1-1.5 kg/1000 kg of feed	100-120 mg/ kg bw	0.5-0.75 kg/1000 kg of feed	50-60 mg/ kg bw
Calves, lambs, goatlings		50-100 mg/ kg bw		25-50 mg/ kg bw

Floriprem 40
(florfenicol)

oral granules

Indications

FLORIPREM 40 is used for treatment and prevention of pleuropneumonia, caused by Actinobacillus pleuropneumoniae, pasteurellosis, bordetellosis, haemophillosis in pigs caused by florfenicol-sensitive bacteria.

Composition

1 g of FLORIPREM 40 contains 40 mg of florfenicol and excipients.

Pharmacological properties

FLORIPREM 40 is an antibacterial drug.
Florfenicol is a thiamphenicol derivative. The hydroxyl group is substituted by a fluorine atom. Florfenicol is a broad-spectrum bacteriostatic antibiotic. Florfenicol is active against *Staphylococcus spp., Streptococcus spp., Escherichia coli, Salmonella spp., Actinobacillus pleuropneumoniae, Pasteurella multocida, Haemo-philus spp., Fusobacterium necrophorum, Proteus spp., Enterobacter spp., Klebsiella spp., Bordetella spp.*, as well as *Mycoplasma spp.*
The antibiotic inhibits peptidyl transferase activity, as a result it leads to the inhibition of protein synthesis at the ribosomal level.
After oral administration, florfenicol is well and quickly absorbed in the gastrointestinal tract and distributed to all organs and tissues. The therapeutic concentration persists for 24 hours.
Florfenicol is metabolized and excreted intact in the urine and to a lesser extent in the feces.

Dosage

FLORIPREM 40 is administered to pigs via feed at the following doses:

- for treatment and prevention: 0.75-1 kg per 1 t of feed or 37.5-50 mg of the drug per 1 kg bw for 10-14 days;
- for treatment: 2.5-5 kg per 1 t of feed or 125-250 mg of the drug per 1 kg bw for 7-10 days.

Lincoprem 150
(lincomycin hydrochloride)
oral granules

Indications

LINCOPREM 150 is used for treatment and prevention of mycoplasma and bacterial diseases (dysentery, ileitis, clostridiosis, streptococcosis, etc.) in pigs and poultry caused by lincomycin-sensitive bacteria.

Composition

1 g of LINCOPREM 150 contains 150 mg of lincomycin hydrochloride and excipients.

Pharmacological properties

LINCOPREM 150 is an antibacterial drug. Lincomycin hydrochloride is a lincosamide antibiotic. The antibiotic has a bacteriostatic effect on *Staphylococcus spp., Streptococcus spp.* (including penicillinase-producing strains) *Corynebacterium spp., Brachyspira spp., Lawsonia intracellularis, Clostridium spp., Bacteroides spp.* and *Mycoplasma spp.*
Due to the binding with the 50S subunit, lincomycin inhibits protein synthesis at the ribosomal level.
After oral administration, lincomycin is absorbed in the gastrointestinal tract and distributed to most organs and tissues. The maximum concentration in the blood is reached in 3-6 hours after drug administration.
Lincomycin is excreted intact mainly in the urine and feces.

Dosage

LINCOPREM 150 is administered via feed at the following daily doses:
- pigs: 300-750 g/t of feed, for 3 weeks;

- poultry: for treatment and prevention of necrotic enteritidis – 250-500 g/t of feed, for 7-10 days.

For treatment and prevention of diseases caused by anaerobic bacteria in poultry (chickens, turkey poults), the drug is administered at a dose of 750 g/t of feed for 10-20 days.

Terpentiam® premix 10%
(tiamulin hydrogen fumarate)

oral granules

Indications

TERPENTIAM® premix 10% is used for treatment and prevention of gastrointestinal and respiratory diseases, including dysentery, enzootic pneumonia, proliferative enteropathy (ileitis) in pigs.

Composition

1 g of TERPENTIAM® premix 10% contains 100 mg of tiamulin hydrogen fumarate and excipients.

Pharmacological properties

TERPENTIAM® premix 10% is an antibacterial drug.
Tiamulin is a semisynthetic antibiotic of the pleuromutilin class. It is a broad-spectrum antibiotic, effective against gram-positive (*Staphylococcus spp., Streptococcus spp., Listeria monocytogenes, Corynebacterium spp., Erysipelothrix suis, Clostridium spp.*, etc.) and gram-negative bacteria (*Actinobacillus pleuropneumoniae, Lawsonia intracellularis, Mannheimia haemolitica, Pasteurella spp., Haemophillus spp., Brachyspira (Serpulina) hyodysenteriae, Bacteroides spp., Fusobacterium spp.*, some strains of *Klebsiella spp.*, etc), *Mycoplasma spp., Chlamydia spp., Rickettsia spp.* and *Borrelia spp.* The drug is not active against most Enterobacteriaceae bacteria, including *Salmonella spp., E. coli, Pseudomonas aeruginoza*, fungi and viruses.
Tiamulin is a bacteriostatic antibiotic. It binds to the 70S ribosomal subunit, inhibits the formation of the mRNA-tRNA complex and protein synthesis.

After oral administration, the drug is well absorbed in the gastrointestinal tract and distributed to all organs and tissues. The maximum concentration in the blood serum is reached in 2 hours. The therapeutic concentration persists for 18-24 hours after administration. The antibiotic is mainly excreted in the feces.

Dosage

TERPENTIAM® premix 10% is administered via feed at the following daily doses:

Drug	Dose
Tiamulin	6-8 mg/kg bw
TERPENTIAM® premix 10%	1-1.5 kg/t of feed

for treatment – 7-10 days;
for treatment and prevention – 10-14 days.
In severe cases, the dose can be doubled.

VIC-AMOX
(amoxicillin)

oral tablets

Indications

VIC-AMOX is used to treat infectious diseases of the respiratory system, genitourinary system, skin and gastrointestinal tract, the pathogens of which are sensitive to amoxicillin, in calves, lambs, kids, cats and dogs.

Composition

1 tablet contains 40 mg of amoxicillin (45.92 mg of amoxicillin trihydrate) and excipients.

Pharmacological properties

VIC-AMOX is an antibacterial drug of the penicillin class of antibiotics. Amoxicillin trihydrate has a broad spectrum of bactericidal action against gram-positive and gram-negative microorganisms, such as *Escherichia coli, Clostridium spp., Fusobacterium spp., Erysipilotrix spp., Bordetella spp., Staphylococcus spp., Streptococcus spp., Actynomyces spp., Corynebacterium spp., Salmonella spp., Haemophilus spp., Pausterella spp., Actinobacillus spp.*, etc. Does not affect penicillin-forming strains of *Klebsiella spp., Enterobacter spp. and Pseudomonas spp.*
The mechanism of action of amoxicillin is to disrupt the synthesis of the cell wall of the microorganism, inhibition of the enzymes transpeptidase and carboxypeptidase, disruption of osmosis, which leads to the death of the bacterial cell at the growth stage.
After oral administration, the drug is well absorbed from the gastrointestinal tract, and distributed to all organs and tissues of the body. The drug is excreted from the body mainly with urine.
In recommended doses, it does not have a sensitizing, embryotoxic, teratogenic, mutagenic and hepatotoxic effect.

Dosage

The drug is administered orally. Tablets are given to the animal in a mixture with food or from the hand. A single dose of the drug is 10 mg of amoxicillin per 1 kg of bw (1 tablet per 4 kg of bw) twice a day. The course of treatment is 7 days.
In case of allergic reactions, the use of the drug is stopped and antihistamines and symptomatic drugs are prescribed.

Coliquinol®

(sulfamethoxazole, lincomycin hydrochloride, colistin sulfate, trimethoprim)

oral solution

Indications

COLIQUINOL® is used to treat poultry and pigs for bacterial, mycoplasma, protozoan infections caused by bacteria sensitive to the drug components.

Composition

1 ml of COLIQUINOL® oral solution contains 50 mg of sulfamethoxazole, 50 mg of lincomycin hydrochloride, 400 000 IU of colistin sulfate, 10 mg of trimethoprim and excipients.

Pharmacological properties

COLIQUINOL® is an antibacterial and antiprotozoal drug. The components of COLIQUINOL® have a synergistic effect on gram-positive and gram-negative bacteria, including *Staphylococcus spp., Streptococcus spp.* (including penicillinase-producing strains), *Corynebacterium spp., Clostridium spp., Haemophilus spp., Klebsiella spp., Proteus spp., Salmonella spp., Pasteurella spp., Brucella spp., Shigella spp., Esherichia coli, Pseudomonas aeruginosa, Aerobacter aerogenes, Neiseria gonorrhoeae*, and *Bacteroides spp., Mycoplasma, large viruses, Coccidia, Toxoplasma, Actinomycetales.*
The synergistic effect of sulfamethoxazole and trimethoprim combination inhibits folic acid synthesis in the bacterial cell, which leads to the inhibition of nucleotide synthesis.

After oral administration, lincomycin, sulfamethoxazole and trimethoprim are absorbed in the gastrointestinal tract and distributed to organs and tissues. Colistin is hardly absorbed in the gastrointestinal tract and has its antimicrobial effect directly in the intestine.
Lincomycin and colistin are excreted intact, mainly in the urine and feces, sulfamethoxazole and trimethoprim – mainly in the urine.

Dosage

COLIQUINOL® is administered to pigs and poultry individually or to groups via drinking water at a dose of 1000-1500 ml/t of water. The treatment course is 3-5 days.

Dolinc®

(doxycycline hydrochloride, lincomycin hydrochloride)

oral solution

Indications

DOLINC® is used to treat pigs and poultry for bacterial infections caused by bacteria sensitive to the combination of doxycycline and lincomycin. It is also used for multi-purpose treatment and prevention of simultaneous infection of the respiratory and gastrointestinal tract and joint pathology.

Composition

1 ml of DOLINC® oral solution contains 100 mg of doxycycline hydrochloride and 100 mg of lincomycin hydrochloride.

Pharmacological properties

Doxycycline and lincomycin are bacteriostatic antibiotics. The drug is effective against gram-positive and gram-negative bacteria: aerobic – *Staphylococcus spp., Streptococcus spp., including Str. pneumonia*; aerobic spore-forming bacteria – *Bacillus anthracis*; aerobic non-spore-forming bacteria – *Listeria monocytogenes*; anaerobic spore-forming bacteria – *Clostridium spp.*; facultative anaerobic bacteria – *E. coli, Salmonella spp., Enterobacter spp., Shigella spp., Klebsiella spp., Pasteurella spp., Haemophilus spp., Actinobacillus leuropneumoniae, Bordetella spp., Corynebacterium spp., Actinomyces spp.*, and *Campylobacter spp., Leptospira pomona, Fusobacterium spp., Spirochetes, Mycoplasma spp., Bacteroides spp., Treponema, Ricettsia, Chlamydia psittaci, Erlichia* and *Anaplasma*. The

antibacterial components are well absorbed in the gastrointestinal tract and distributed to most organs and tissues. After administration via drinking water, the therapeutic concentration is reached in 3 hours and persists within the whole treatment course. DOLINC® is mainly excreted in the bile and feces.

Dosage

DOLINC® is administered to poultry via drinking water at a dose of 0.5-1 ml/L of water for 3-5 days.

The drug is administered to pigs for 5 days at the following doses:

- for prevention: 0.5 L per 1000 L of water;
- for treatment: 1 L per 1000 L of water.

Enroflon® 10%
(enrofloxacin)

oral solution

Indications

ENROFLON® 10% solution for injection is used to treat calves, lambs, pigs and poultry for colibacillosis, salmonellosis, mycoplasmosis, bronchopneumonia, enteritis and other diseases caused by fluoroquinolone-sensitive bacteria; to treat pigs for atrophic rhinitis, enzootic pneumonia and mastitis-metritis-agalactia syndrome.

Composition

1 ml of ENROFLON® 10% oral solution contains 100 mg of enrofloxacin.

Pharmacological properties

Enrofloxacin is a fluoroquinolone antibiotic, has broad-spectrum antibacterial activity. The antibiotic inhibits bacterial DNA replication. The resistance of bacteria to ENROFLON® 10% develops relatively slow, due to the inhibition of bacterial DNA replication. Enrofloxacin is effective against gram-positive and gram-negative bacteria, including *E. coli, Salmonella spp., Pasteurella haemolytica, Pasteurella multocida, Staphylococcus aureus, Staphylococcus hyicus., Streptococcus spp., Klebsiella spp., Pseudomonas aeruginosa, Bordetella bronchiseptica., Campylobacter spp., Corynebacterium pyogenes, Proteus spp., Mycoplasma spp., Brucella canis, Actino-bacillus spp., Listeria monocytogenes, Haemophilus spp., Clostridium perfringens*, etc. ENROFLON® 10% oral solution is well absorbed in

the gastrointestinal tract and quickly distributed to all organs and tissues. The maximum concentration in the blood is reached in 1-2 hours and persists for 6 hours. The therapeutic concentration persists for 24 hours. Enrofloxacin is partially metabolized to ciprofloxacin. Enrofloxacin and ciprofloxacin are excreted primarily intact in the urine and bile.

Dosage

The drug is administered via drinking water once a day for 3-5 days at the following doses:

- calves, lambs and piglets: 2.5-5.0 mg of enrofloxacin per 1 kg bw;
- broilers and turkeys: 0.5-1 L per 1 t of water.

Enroflon®-K
(enrofloxacin, colistin sulfate)

oral solution

Indications

ENROFLON®-K is used for treatment and prevention of bacterial diseases of respiratory and gastrointestinal tract, including colibacillosis, salmonellosis, enteritis, mycoplasmosis, mixed and secondary infections in poultry caused by bacteria sensitive to enrofloxacin and colistin.

Advantages

- high solubility in hard water and stability in the stock solution;
- high content of colistin sulfate in comparison with analogues;
- due to the small molecule, enrofloxacin penetrates cell tissues;
- effect of colistin in the intestinal lumen;
- high bactericidal effect of the active substances;
- long-term and stable activity of the active substances in the stock solution;
- import substitution program;
- the largest manufacturer of quinolones in Russia and Europe.

Composition

1 ml of ENROFLON®-K contains
active substances: 100 mg of enrofloxacin and 2 000 000 IU of colistin sulfate;
excipients: 187.5 mg of lactic acid, 150 mg of propionic acid, 90 mg of propylene glycol, 10 mg of ascorbic acid and distilled water-up to 1 ml.

Pharmacological properties

ENROFLON®-K is an antimicrobial drug.

Enrofloxacin is a quinolone-carboxylic acid derivative, belongs to the third-generation fluoroquinolones. The antibiotic has a broad-spectrum bactericidal effect on most gram-positive and gram-negative bacteria, including *Escherichia coli, Salmonella spp., Enterobacter spp., Proteus mirabilis, Proteus vulgaris, Haemophilus spp., Klebsiella, Pasteurella multocida, Pseudomonas aeruginosa, Bordetella, Campylobacter, Erysipelothrix, Corynebacterium, Staphylococcus spp., Streptococcus spp., Actinobacillus, Clostridium, Fusobacterium, Bacteroides* and *Mycoplasma spp*.

Enrofloxacin inhibits DNA gyrase activity, DNA synthesis, bacterial growth and division; causes evident morphological changes (in cell walls and membranes). It causes death of bacteria.

Colistin sulfate is a polymyxin E, belongs to cyclic polypeptide antibiotics. By modifying the structure and functions of outer and cytoplasmic membranes, colistin has a bactericidal effect on gram-negative bacteria at the stage of division and resting. The antibiotic is active against *Escherichia coli, Salmonella spp., Pseudomonas aeruginosa, Pasteurella spp., Haemophilus spp., Acinetobacter spp., Citrobacter spp., Klebsiella spp., Shigella spp*.

The combination of enrofloxacin and colistin has a synergistic effect due to the different mechanisms of bactericidal effect. The resistance to the antibiotics develops slowly.

After oral administration, enrofloxacin is quickly absorbed in the gastrointestinal tract and distributed to all organs and tissues. Enrofloxacin reaches the maximum concentration in the blood in 1-2 hours. Colistin sulfate is poorly absorbed and has its antimicrobial effect directly in the intestine.

Enrofloxacin is excreted mainly intact and as ciprofloxacin. Colistin is excreted intact mainly in the urine and feces.

Dosage

ENROFLON®-K is administered via drinking water at a dose of 0.5-1 ml per 1 L of water for 3-5 days.

Floricol®
(florfenicol)

oral solution

Indications

FLORICOL® is used for treatment and prevention of colibacillosis, salmonellosis, pasteurellosis, staphylococcosis and other bacterial diseases in poultry caused by florfenicol-sensitive bacteria, and atrophic rhinitis, pleuropneumonia and secondary bacterial infections in pigs.

Composition

1 ml of FLORICOL® contains
active substance: 100 mg of florfenicol;
excipient: propylene glycol-300 – up to 1 ml.

Pharmacological properties

FLORICOL® is an antibacterial drug.
Florfenicol is a synthetic antibiotic, thiamphenicol derivative. The hydroxyl group is substituted by a fluorine atom. Florfenicol is a broad-spectrum bacteriostatic antibiotic. The antibiotic binds to the 50S ribosomal subunit, inhibits peptidyl transferase activity, as a result it leads to the inhibition of protein synthesis.
Florfenicol is active against gram-positive and gram-negative bacteria: *Staphylococcus spp., Streptococcus spp., Escherichia coli, Salmonella spp., Actinobacillus pleuropneumoniae, Pasteurella multocida, Pasteurella haemolitica, Haemophilus spp., Fusobacterium*

necrophorum, Proteus spp., Enterobacter spp., Shigella spp., Klebsiella spp., Bordetella spp., and *Mycoplasma spp.*

After oral administration, florfenicol is rapidly absorbed and distributed to all organs and tissues. The antibiotic reaches the maximum concentration in 40-60 minutes, the therapeutic concentration persists for 24 hours. Bioavailability of florfenicol in pigs is 88%, poultry – 55%.

Florfenicol and its metabolites (florfenicol amine) are excreted primarily in the bile and feces.

Dosage

FLORICOL® is administered to pigs and poultry via drinking water.

FLORICOL® is administered at a daily dose of 20 mg of florfenicol per 1 kg bw for 3-5 days.

- chickens under the age of 4 weeks – 100 ml of the drug per 100 L of water
- poultry over the age of 4 weeks – 200 ml of the drug per 100 L of water.

FLORICOL® is administered to pigs at a dose of 5 mg of florfenicol per 1 kg bw (5 ml of the drug per 100 kg bw) for 7 days.

Flox-O-Quin®
(ofloxacin)

oral solution

Indications

FLOX-O-QUIN® is used to treat calves, goatlings, lambs, pigs, cats, dogs and poultry for bacterial diseases of respiratory and genitourinary system, gastrointestinal tract, arthritis, colibacillosis, salmonellosis, streptococcosis, septicemia, necrotic enteritidis, peritonitis, secondary and mixed infections caused by fluoroquinolone-sensitive bacteria.

Composition

1 ml of FLOX-O-QUIN® oral solution contains
active substance: 100 mg of ofloxacin;
excipients: acetic acid, propylene glycol, propionic acid, thioglycerin and purified water – up to 1 ml.

Pharmacological properties

FLOX-O-QUIN® is an antibacterial drug of the second-generation fluoroquinolones. Ofloxacin is a broad-spectrum antibiotic, has a bacteriostatic effect. The antibiotic is active against gram-positive and gram-negative bacteria, including *Escherichia coli, Salmonella spp., Shigella spp., Enterobacter spp., Klebsiella spp., Proteus spp., Campylobacter spp., Pseudomonas aeruginosa, Haemophilus spp., Staphylococcus spp.* and *Mycoplasma spp.* Ofloxacin inhibits DNA gyrase activity (type II topoisomerase). After oral administration, ofloxacin is quickly absorbed in the gastrointestinal tract and distributed to most organs and tissues, reaches the maximum

concentration in the lungs, liver and kidneys. The maximum concentration in the blood serum is detected in 1.5-2 hours after administration. The therapeutic concentration persists for 24 hours. The antibiotic is metabolized and excreted intact (80%) in the urine and bile.

Dosage

FLOX-O-QUIN® is administered individually and to groups by oral route for 3-5 days, at the following doses:

- calves, goatlings, lambs, pigs, cats and dogs: via drinking water or milk replacer, at a dose of 0.5 ml of the drug per 10 kg bw;
- broilers, replacement chickens and turkeys: via drinking water, at a dose of 50 ml of the drug per 100 L of water;
- to treat salmonellosis, mixed infections and chronic diseases, the dose for poultry is 100 ml per 100 L of water for 5 days.

Quinocycline®
(ciprofloxacin)

oral solution

Indications

QUINOCYCLINE® is used for treatment and prevention of bacterial diseases of respiratory and gastrointestinal tract, genitourinary system, joints, soft tissues and skin, colibacillosis, salmonellosis, streptococcosis, septicemia, necrotic enteritidis, peritonitis, secondary and mixed infections in calves, lambs, goatlings, pigs and poultry caused by fluoroquinolone-sensitive bacteria.

Composition

1 ml of QUINOCYCLINE® oral solution contains 100 mg of ciprofloxacin and excipients – up to 1 ml.

Pharmacological properties

QUINOCYCLINE® is an antibacterial drug of the fluoroquinolone class. Ciprofloxacin is a broad-spectrum antibiotic, effective against gram-positive and gram-negative bacteria: *Escherichia coli, Corynebacterium pyogenes, Pseudomonas aeruginosa, Salmonella spp., Pasteurella spp., Staphylococcus spp., Streptococcus spp., Klebsiella spp., Bordetella bronchiseptica, Campylobacter spp., Corynebacterium spp., Enterobacter spp., Erysipelotrox spp., Proteus spp., Brucella canis, Actinobacillus spp., Listeria monocytogenes, Haemophilus spp., Clostridium spp.* and *Mycoplasma spp.* Ciprofloxacin inhibits activity of DNA gyrase necessary for replication of bacterial DNA.

After oral administration, ciprofloxacin is quickly absorbed in the gastrointestinal tract and distributed to all organs and tissues. The maximum concentration is reached in 1-2 hours, the therapeutic concentration persists for 24 hours. Ciprofloxacin is primarily excreted in the urine and bile.

Dosage

QUINOCYCLINE® is administered individually or to groups by oral route at the following doses:

- calves, lambs, goatlings: 0.25 ml of the drug per 10 kg bw, twice a day;
- pigs: 1-2 ml of the drug per 1 L of water for 5-7 days;
- broilers, replacement chickens (up to the age of 16 weeks), parent flock and turkeys: 50 ml of the drug per 100 L of water for 3-5 days.

Against salmonellosis, mixed infections and chronic diseases, it is recommended to increase the dose to 100 ml per 100 L of water and administer for at least 5 days.

Quinoline®
(norfloxacin base)

oral solution

Indications

QUINOLINE® is used for treatment and prevention of colibacillosis, salmonellosis, pasteurellosis, haemophillosis, mycoplasmosis, atrophic rhinitis and other diseases in calves, lambs, pigs and poultry caused by fluoroquinolone-sensitive bacteria. The drug is also used to treat pigs for mastitis-metritis-agalactia syndrome.

Composition

1 ml of QUINOLINE® oral solution contains
active substance: 100 mg or 200 mg of norfloxacin base;
excipients: 100 mg of acetic acid, 100 mg of propylene glycol, 5 mg of propionic acid, 1 mg of thioglycerin and purified water – up to 1 ml.

Pharmacological properties

QUINOLINE® is an antimicrobial drug of the fluoroquinolone class. Norfloxacin is a synthetic analogue of nalidixic acid, pefloxacin metabolite, has a bactericidal effect. The antibiotic inhibits activity of DNA gyrase (type II and IV topoisomerase) necessary for replication, transcription and repair of bacterial DNA. The antibiotic inhibits synthesis of DNA and proteins, which leads to death of bacteria. Norfloxacin is active against a wide range of gram-positive and gram-negative bacteria: *E. coli, Haemophilus spp., Pasteurella spp., Bordetella spp., Citrobacter spp., Enterobacter spp., Proteus mirabilis, Proteus*

vulgaris, Serratia spp, Neisseria gonorrhoeae, Pseudomonas aeruginosa, some strains of Aeromonas spp., Campylobacter spp., Klebsiella spp., Providencia spp., Salmonella spp., Shigella spp., Vibrio spp., Yersinia spp., Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus agalactiae, Mycoplasma spp.

After oral administration, norfloxacin is quickly absorbed in the gastrointestinal tract and distributed to most organs and tissues, the highest concentration is reached in the lungs, liver and kidneys. The maximum concentration is reached in 1-2 hours and persists for 6 hours. The therapeutic concentration persists for 24 hours after administration. Norfloxacin is metabolized and excreted intact in the urine and bile.

Dosage

QUINOLINE® 10% and 20% is administered to calves, lambs and pigs individually or to groups via drinking water at a dose of 2.5-5.0 mg of norfloxacin per 1 kg bw (0.25-0.5 ml of 10% solution per 10 kg bw or 0.12-0.25 ml of 20% solution per 10 kg bw) for 3-5 days.

QUINOLINE® 10% and 20% is administered to turkeys and broilers at a dose of 0.5 ml of 10% solution per 1 L of water or 0.25 ml of 20% solution per 1 L of water for 3-5 days.

To treat salmonellosis, the dose can be doubled.

Sulteprim®
(sulfadimezine, trimethoprim)

oral solution

Indications

SULTEPRIM® oral solution is used to treat poultry for colibacillosis, salmonellosis, pasteurellosis, staphylococcosis, coccidiosis; calves, lambs, goatlings – for colibacillosis, salmonellosis, pasteurellosis, bronchopneumonia, abscesses, polyarthritis of bacterial etiology; pigs – for colibacillosis, atrophic rhinitis, haemophillosis, pleuropneumonia, caused by Actinobacillus pleuropneumonia.

Advantages

- synergistic bactericidal effect;
- broad-spectrum activity;
- high stability even in hard water;
- unique composition of excipients.

Composition

1 ml of SULTEPRIM® oral solution contains
active substances: 200 mg of sulfadimezine, 40 mg of trimethoprim or 400 mg of sulfadimezine and 80 mg of trimethoprim;
excipients: soluphor, N-methyl-2-pyrrolidone, sodium hydroxide, benzyl alcohol, sodium thiosulfate, disodium edetate and purified water.

Pharmacological properties

SULTEPRIM® oral solution is an antibacterial drug, has a broad-

spectrum activity against most gram-positive and gram-negative bacteria, including *E. coli, Salmonella spp., Staphylococcus spp., Streptococcus spp., Shigella spp., Haemophilus spp., Pasteurella spp*., etc., some protozoa (Coccidia and Toxoplasma gondii). Sulfadimezine is a sulfanilamide agent. In structure, it is similar to para-aminobenzoic acid. Sulfadimezine inhibits dihydrofolic acid synthesis in the bacterial cell, prevents inclusion of para-aminobenzoic acid in its molecule. Trimethoprim is a synthetic antibiotic. It enhances the effect of sulfadimezine through reduction of dihydrofolic acid to tetrahydrofolic acid – active form of folic acid – responsible for protein metabolism and bacterial division. The synergistic bactericidal effect of the combination inhibits folic acid synthesis, which leads to the inhibition of nucleotide synthesis.

Sulfadimezine and trimethoprim are well and quickly absorbed in the gastrointestinal tract and distributed to all organs and tissues. The antibacterial concentration persists for 24 hours. Sulfadimezine and trimethoprim are excreted primarily in the urine and to a lesser extent in the bile.

Dosage

SULTEPRIM® oral solution is administered individually and to groups by oral route at the following doses:

- poultry: via drinking water for 3-5 days, coccidiosis – 2 L per 1000 L of water, other diseases – 0.5-1.0 L per 1000 L of water;
- calves, lambs and goatlings: via drinking water or milk replacer at a daily dose of 1-2 ml per 16 kg bw. The treatment course is 5 days.
- pigs: via drinking water at a dose of 0.5-1.0 L per 1000 L of water for 3-5 days.

If necessary, the daily dose for calves, goatlings and lambs can be divided into two doses administered with a 12-hour interval.

Tiacyclin
(doxycycline, tiamulin)

oral solution

Indications

TIACYCLIN oral solution is used to treat pigs, calves, lambs and kids, poultry for bacterial diseases (pasteurellosis, colibacillosis, salmonellosis, etc.), the pathogens of which are sensitive to thiamulium and doxycycline.

Composition

1 ml of TIACYCLIN contains 100 mg of doxycycline, 100 mg of tiamulin and excipients.

Pharmacological properties

TIACYCLIN oral solution is a combined antibacterial drug. In combination, tiamulin and doxycycline have a mutually reinforcing effect on microorganisms by inhibiting protein synthesis in the microbial cell at different stages.
Tiamulin is a macrolide antibiotic. It is active against Mycoplasmas (*Micoplasma hyopneumoniae, M. hyorhinis, M. hyosynoviae, M. synoviae, M. meleagridis*), Borrelia (*Brachyspira hyodysenteriae, B. innocents, B. suis*), many gram-positive and gram-negative bacteria, including *Streptococcus spp., Staphylococcus spp., Arcanobacterium (Corynebacterium), Actinobacillus pleuropneumoniae, Clostridium perfringens, Lawsonia intracellularis, Mannheimia haemolytica, Pasteurella spp., Leptospira spp., Haemophillus spp., Bacteroides spp.* and etc.

Forming a physiologically inactive initiation complex, tiamulin blocks the first peptide-bond formation at the ribosomal level. The molecule of tiamulin is located in the peptidyl transferase center of the 50S ribosomal subunit.
Doxycycline is a tetracycline antibiotic. It is active against gram-positive bacteria (*Staphylococcus spp., Streptococcus spp., Actinomyces spp., Clostridium spp., Bacillus anthracis, Corynebacterium spp., Erysipelothrix spp., Listeria spp.*) and gram-negative microorganisms (*Haemophilus influenza, Haemophilus parasuis, Pasteurella multocida, Bordetella spp., Bartonella spp., Actinobacillus pleuropneumoniae, Campylobacter spp.*), as well as Mycoplasmas (*Micoplasma hyopneumoniae, M. hyorhinis, M. hyosynoviae, M. synoviae*), Borrelia, Chlamydia and Rickettsia.
Disrupting the binding of the aminoacyl-tRNA to the 30S ribosomal subunit, doxycycline inhibits protein synthesis in a bacterial cell.
After oral administration of TIACYCLIN solution, tiamulin and doxycycline are well and quickly absorbed and distributed to all organs and tissues of the body, where they provide therapeutic concentration for 24 hours.
Tiamulin is excreted mainly in the bile and to a lesser extent in the urine. Doxycycline is mainly excreted in the bile.

Dosage

TIACYCLIN oral solution is administered once a day for 3-5 days at the following doses:
calves, lambs and kids: 1-2 ml per 25 kg bw;
pigs: 1-2 ml per 25 kg bw or 0.5-1 L per 1000 L of drinking water, in severe cases – 2 L per 1000 L of drinking water.
poultry: 0.5-1 L per 1000 L, in severe cases – 2 L per 1000 L of drinking water. The solution of the drug is prepared for poultry based on the need for water for one day. During the treatment period, the poultry should receive only water, containing the drug.

Tilmipul®
(tilmicosin in phosphate form)

oral solution

Indications

TILMIPUL® is used for treatment and prevention of bacterial diseases of the gastrointestinal and respiratory tract, including mycoplasmosis, pleuropneumonia, caused by Actinobacillus pleuropneumonia, pasteurellosis, ornithobacteriosis in poultry, pigs and calves.

Advantages

- high solubility in hard water and stability in the working solution;
- high bioavailability and rapid therapeutic effect;
- immunotropic effect; activation of cell-mediated immunity;
- short-term treatment course.

Composition

1 ml of TILMIPUL® oral solution contains
active substance: 250 mg of tilmicosin in phosphate form;
excipients: 300 mg of propylene glycol, 10 ml of benzyl alcohol and purified water – up to 1 ml.

Pharmacological properties

Tilmicosin is a macrolide antibiotic, has a broad-spectrum activity against gram-positive and gram-negative bacteria, including *Streptococcus spp., Staphylococcus spp., Pasteurella spp., Bordetella spp., Brachyspira spp., Mycoplasma spp., Actinobacillus pleuropneumoniae, Clostridium spp., Ornithobacterium hinotracheale, Corynebacterium pyuogenes, Manheimia haemolitica*, etc.

Tilmicosin has a bacteriostatic effect. The antibiotic inhibits protein synthesis in the bacterial cell at the ribosomal level.
After oral administration, the drug is well absorbed in the gastrointestinal tract and distributed to most organs and tissues. The maximum concentration in the blood serum is reached in 2-3 hours. The therapeutic concentration persists for 24 hours. Tilmicosin is excreted mainly intact, mostly in the feces and partially in the urine.

Dosage

TILMIPUL® is administered individually or to groups via drinking water at the following doses:

- poultry: 300 ml per 1000 L of water (75 mg of tilmicosin per 1 L) for 3 days;
- pigs: 800 ml per 1000 L of water (200 mg of tilmicosin per 1 L) for 3 days;
- calves: via drinking water or milk replacer at a dose of 12.5 mg of tilmicosin per 1 kg bw (0.5 ml of the drug per 10 kg bw) for 3-5 days.

Enroflon®
(enrofloxacin)

foaming tablets
for intrauterine administration

Indications

ENROFLON® foaming tablets is used for treatment and prevention of inflammation in the uterus after obstetrics, expulsion of the placenta, abortions, complicated and pathological delivery, acute postpartum endometritis in cattle and pigs.

Advantages

- unique intrauterine fluoroquinolone drug;
- pronounced bactericidal effect;
- optimal foaming for treatment of the uterus;
- 95% bioavailability of the active substance;
- import substitution program;
- the largest manufacturer of quinolones in Russia and Europe.

Composition

1 tablet contains 0.36 g of enrofloxacin.

Pharmacological properties

Enrofloxacin is a fluoroquinolone derivative. It inhibits DNA gyrase, growth and division of bacteria. The antibiotic has a bactericidal effect on gram-negative bacteria at the stage of division, and resting and on gram-positive – at the stage of division. Enrofloxacin has broad-spectrum antibacterial activity against gram-positive and gram-negative bacteria, including *E. coli, Haemophilus spp., Klebsiella*

spp., Pasteurella spp., Pseudomonas spp., Bordetella spp., Campylobacter spp., Erysipelothris spp., Corynebacterium spp., Staphylococcus spp., Streptococcus spp., Actinobacillus spp., Clostridium spp., Bacteroides spp., Fusobacterium spp. and *Mycoplasma spp*. The resistance of bacteria to ENROFLON® foaming tablets develops relatively slowly.
Due to the foaming, the drug is equally distributed along the endometrial mucosa. Produced carbon dioxide enhances enrofloxacin resorption and contributes to its penetration into deeper layers of the endometrium. Enrofloxacin is partially metabolized to ciprofloxacin in the liver. Fluoroquinolones are mainly excreted in the urine and bile.

Dosage

For prevention, one tablet is administered once immediately after expulsion of the placenta, abortion or complicated and pathological delivery.
For treatment, 2-4 tablets are administered 2-3 times with a 24-hour interval until clinical recovery.

Enroflon gel
(enrofloxacin, ketoprofen)

gel for intracisternal use

Indications

ENROFLON GEL for intracisternal use is used for treatment of subclinical mastitis of bacterial etiology in lactating cows.

Composition

One syringe dispenser for intracisternal administration contains 300 mg of enrofloxacin, 50 mg of ketoprofen and excipients (hydroxyethylcellulose, potassium hydroxide, acetic acid, 1,2-propylene glycol, thioglycerin, benzyl alcohol and water for injection).

Pharmacological properties

ENROFLON GEL for intracisternal use is a combined antibacterial drug, which consists of enrofloxacin (a fluoroquinolone) and ketoprofen (a non-steroidal anti-inflammatory drug).
Enrofloxacin is a derivative of quinolocarboxylic acid, belongs to the 3rd generation Fluoroquinolones, and has a broad spectrum of activity against most gram-positive and gram-negative microorganisms, including *Staphylococcus spp., Streptococcus agalactiae, Streptococcus uberis, Streptococcus dysagalactiae, Corynebacterium pyogenes, Escherichia coli, Pseudomonas aeruginosa, Bacillus spp., Pasteurella spp.* and *etc.*
Enrofloxacin inhibits bacterial DNA gyrase, disrupts DNA synthesis, growth and division of bacteria; causes pronounced morphological changes (including in the cell wall and membranes), which leads to rapid death of the bacterial cell.
Ketoprofen is a derivative of propionic acid from the group of carboxylic acids, has anti-inflammatory, analgesic and antipyretic

effects, is effective for the treatment of acute, subacute and chronic inflammation accompanied by a symptom of pain, reducing swelling and soreness that are characteristic of mastitis.
The mechanism of action of ketoprofen is to suppress the synthesis of prostaglandins and thromboxane, by disrupting the metabolism of arachidonic acid.
After intracisternal administration of the drug, the active substances are evenly distributed in the udder tissues and quickly reach therapeutic concentrations. The level of enrofloxacin in milk exceeds the minimum inhibitory concentrations for the main causative agents of mastitis during treatment and at least for a day after the last administration of the drug.
Enrofloxacin is partially metabolized in the liver to form ciprofloxacin, which also has antibacterial activity. Fluoroquinolones are excreted from the body mainly with urine and bile. Ketoprofen is excreted from the body of animals mainly by the kidneys.

Dosage

Before the administration of the drug, the infected quarter of the udder is completely freed from milk. The nipple is treated with an antiseptic wipe from the outside. If it is necessary to administer the drug into two or more nipples, a separate napkin is used for each of them. The cannula of the syringe dispenser is inserted into the nipple canal and, gently pressing on the piston, squeeze its contents into the infected quarter of the udder. After that, the tip of the syringe is removed, the tip of the nipple is squeezed with fingers for 1-2 minutes and the nipple is lightly massaged from bottom to top for better distribution of the drug.
ENROFLON GEL for intracisternal use is administered to animals twice a day with an interval of 12 hours for 2-3 days.

Lactico
(amoxicillin, clavulanic acid, prednisolone)

suspension
for intracisternal administration

Indications

LACTICO is prescribed for the treatment of subclinical and clinical mastitis of bacterial etiology in lactating cows.

Advantages

- three active substances: amoxicillin, clavulanic acid, prednisolone;
- broad spectrum antibacterial activity;
- efficacy against penicillin-resistant microorganisms;
- pronounced anti-inflammatory, analgesic and antipyretic effect;
- homogeneous distribution in the tissues of the udder and the rapid achievement of therapeutic concentrations of active substances;
- convenient dosing schedule: three times with an interval of 12 hours;
- short milk withdrawal period of 60 hours.

Composition

One syringe dispenser for intracisternal administration with a mass of 3 g contains 200 mg of amoxicillin (as trihydrate), 50 mg of clavulanic acid (as potassium salt), 10 mg of prednisolone, and excipients (colloidal silicon dioxide, benzyl alcohol, butylhydroxytoluene, miglyol 812 N – up to 3 g). The drug is produced at 3 g in polyethylene syringe dispensers, hermetically sealed with caps, which are packed together with cleaning disposable wipes in cardboard boxes of 24 pieces.

Pharmacological properties

LACTICO is a combined antibacterial drug for intracisternal

administration, which includes amoxicillin, which belongs to the antibiotics from the penicillin group, prednisolone, a short-acting synthetic glucocorticosteroid, and clavulanic acid.

Amoxicillin trihydrate is a semi-synthetic antibiotic of the penicillin group, has a broad spectrum of bactericidal action against gram-positive and gram-negative microorganisms secreted from the udder with mastitis, including *Staphylococcus spp., Streptococcus agalactiae, Streptococcus uberis, Streptococcus dysgalactiae, Corynebacterium pyogenes, Escherichia coli, Bacillus cereus, Bacteroides spp., Campylobacter spp., Klebsiella spp., Pasteurella spp.*

The mechanism of action of amoxicillin is to disrupt the synthesis of the cell wall of the microorganism, to inhibit the enzymes transpeptidase and carboxypeptidase, to disrupt osmosis, which leads to the death of a bacterial cell at the growth stage.

Clavulanic acid is an irreversible β-lactamase inhibitor. By joining bacterial enzymes, it forms stable, inactive complexes, preventing the decomposition of amoxicillin by enzymes.

Amoxicillin and clavulanic acid have a synergistic effect. Due to this, the drug is effective against penicillin-resistant microorganisms.

Prednisolone has an anti-inflammatory effect, reducing swelling and inflammation of tissues.

After intracisternal administration, the drug creates a high level of antibiotic in the tissues of the udder, without irritating. The therapeutic concentration of the antibiotic is maintained for 12 hours. The active components of the drug are excreted from the body with urine and feces, in lactating animals – with milk.

Dosage

Before the administration of the drug, the infected quarter of the udder is completely freed from milk and the nipple is carefully treated with an antiseptic or a special antiseptic napkin supplied with the drug. Then remove the cap from the tip of the syringe dispenser, insert the tip into the nipple canal and gently squeeze the contents of one syringe dispenser into the infected quarter of the udder. After that, the syringe is removed, the tip of the nipple is squeezed and the udder nipple is massaged from bottom to top for better distribution of the drug.

LACTICO is administered three times with an interval of 12 hours.

Lactico profi
(cloxacillin)

suspension
for intracisternal administration

Indications

LACTICO PROFI is used for treatment of mastitis in cows during the dry period.

Composition

LACTICO PROFI is a suspension from white to grayish-white color. The stratification is allowed, which disappears after shaking.
3 g of LACTICO PROFI contain 500 mg of cloxacillin (in the form of benzathine salt) and excipients (ionol, benzyl alcohol, colloidal silicon oxide, beeswax, a mixture of medium-chain triglycerides).

Pharmacological properties

LACTICO PROFI is an antibacterial drug (penicillin antibiotics).
Cloxacillin is a bactericidal antibiotic from the group of semi-synthetic penicillins.
Cloxacillin is active against gram-positive bacteria commonly secreted from udder secretions during the dry period. The antibiotic is highly active against streptococci (especially *Streptococcus agalactiae*), staphylococci (including strains resistant to penicillin) and corynebacteria (*Corynebacterium pyogenes*).
The mechanism of antimicrobial action of cloxacillin is associated with the blockade of the synthesis of the cell wall of microorganisms.
In the recommended doses, the drug does not have a local irritating and resorptive-toxic effect.
Cloxacillin is excreted mainly in the urine and with milk in lactating animals.

Dosage

LACTICO PROFI is administered intracisternally, once to all cows after the last milking before transfer to the dry period, but no later than 30 days before the expected calving.
The contents of one syringe dispenser are injected into each quarter of the udder.

LACTICO PROFI is contraindicated in animals with hypersensitivity to antibiotics of the penicillin group.
Do not prescribe LACTICO PROFI simultaneously with other antibacterial drugs for intracisternal administration.
LACTICO PROFI is not intended for the treatment of lactating cows.

Mammilacti profi
(ampicillin, cloxacillin)

suspension
for intracisternal administration

Indications

MAMMILACTI PROFI is used for treatment of mastitis of bacterial etiology in cows during the dry period.

Composition

MAMMILACTI PROFI is a suspension from white to light yellow color. The stratification is allowed, which disappears after shaking.
8 g of MAMMILACTI PROFI contain 250 mg of ampicillin (as trihydrate), 500 mg of cloxacillin (as benzathine salt) and excipients (ionol, benzyl alcohol, beeswax, colloidal silicon oxide, a mixture of medium-chain triglycerides).

Pharmacological properties

MAMMILACTI PROFI is a complex antibacterial drug (penicillin antibiotics).
Cloxacillin and ampicillin are antibiotics from the group of semi-synthetic penicillins.
MAMMILACTI PROFI is active against most gram-positive and gram-negative bacteria usually secreted in cows with mastitis, including *Staphylococcus aureus, Streptococcus agalactie, Streptococcus disagalactie, Streptococcus uberis, Klebsiella spp., Arcanobacterium pyogenes, Escherichia coli, Corynebacterium pyogenes*, etc., including strains whose resistance to penicillin is due to β-lactamase.
The mechanism of the antimicrobial action of the components of the drug is associated with the blockade of the synthesis of the cell wall of microorganisms.
In the recommended doses, the drug does not have a local irritating and resorptive-toxic effect.

Dosage

MAMMILACTI PROFI is administered to cows after the last milking before transfer to the dry period, but no later than 42 days before the expected calving, once, intracisternally, at a dose of 8 g (contents of 1 syringe dispenser) in each quarter of the udder.

MAMMILACTI PROFI is contraindicated in animals with hypersensitivity to antibiotics of the penicillin group.
Do not prescribe MAMMILACTI PROFI simultaneously with other antibacterial drugs for intracisternal administration.
MAMMILACTI PROFI is not intended for the treatment of lactating cows.

Claver®
(triclabendazole, ivermectin)

solution for injection
intramuscular and subcutaneous administration

Indications

CLAVER® is used to treat cattle, sheep, goats and deer for dictyocaulosis, haemonchosis, ostertagiosis, trichostrongyloidosis, cooperiosis, nematodiroses, bunostomosis, strongyloidiasis, fasciolosis, hypodermyasis, oedemagenosis and oestrosis.

Composition

CLAVER® is a solution for injection
1 ml of CLAVER® contains 360 mg of triclabendazole, 6 mg of ivermectin and excipients.

Pharmacological properties

CLAVER® is an antiparasitic drug.
Triclabendazole belongs to the benzimidazole family. It is active against trematodes, mature and immature helminths, *Fasciola hepatica* and *Fasciola gigantica*. Triclabendazole inhibits colchicine binding to microtubular protein of Fasciola and thus disrupts structure and function of microtubulars. As a result, it leads to paralysis and death of parasites.
Ivermectin is a macrocyclic lactone. It is effective against larval and mature stages of nematodes in the gastrointestinal tract and lungs, larvae of subcutaneous, nasopharyngeal, gastrointestinal botflies, lice, louse flies, sarcoptic mange. Ivermectin disrupts the transmission of nerve impulses, which leads to paralysis and death of parasites.
After parenteral administration, the components of CLAVER® are

well absorbed from the injection site and distributed to most organs and tissues. The therapeutic concentration of triclabendazole and ivermectin persists for 10-12 days after administration.
Triclabendazole is metabolized to sulfone and sulfoxide. It is mainly excreted in the feces. Ivermectin is excreted in the urine, bile and milk.

Dosage

CLAVER® is administered once by intramuscular or subcutaneous injection at a dose of 1 ml per 30 kg bw (12 mg of triclabendazole and 0.2 mg of ivermectin per 1 kg bw).
During the periods characterized by high parasitic infection or in the areas with a high incidence of parasitic infections, it is recommended to use the drug every 8-10 weeks. To treat acute and subacute fasciolosis, it is recommended to administer CLAVER® every 5-6 weeks.
If one injection exceeds 10 ml, the drug must be administered to 2-3 injection sites to avoid pain syndrome.

Forticarb® 10%
(imidocarb)

solution for injection
intramuscular and subcutaneous administration

Indications

- for treatment and prevention of babesiosis, anaplasmosis and mixed infection caused by *Babesia* and *Anaplasma* in cattle, sheep, goats and deer.

Composition

1 ml of FORTICARB® 10% solution for injection contains 100 mg of imidocarb.

Pharmacological properties

The drug is active against *Babesia bigemina, Babesia bovis, Babesia jakimovi, Babesia divergens, Francaiella colchica, Anaplasma marginale, Babesia canis, Babesia gibsonii* and *Ehrlichia canis*. After parenteral administration, imidocarb is quickly absorbed from the injection site and distributed to most organs and tissues. The drug is poorly metabolized.

Dosage

FORTICARB® 10% solution for injection is administered to animals once by intramuscular or subcutaneous route at a dose of 2.5-3 ml per 100 kg bw (2.5-3.0 mg of imidocarb per 1 kg). To treat anaplasmosis and mixed infections (anaplasmosis and babesiosis), it is recommended to increase the dose to 4-5 ml per 100 kg (4-5 mg of imidocarb per 1 kg bw).

For prevention, FORTICARB® 10% solution for injection is administered once by intramuscular or subcutaneous route at a dose of 3 ml per 100 kg (3 mg of imidocarb per 1 kg bw).

Ivertin®
(ivermectin)

solution for injection
intramuscular and subcutaneous administration

Indications

- to treat cattle for dictyocaulosis, haemonchosis, thelaziasis, strongyloidiasis, oesophagostomosis, bunostomosis, chabertiosis, trichuriasis, siphunculatosis, hypodermatosis, chorioptic mange and psoroptic mange;
- to treat goats and sheep for dictyocaulosis, protostrongylosis, mulleriosis, haemonchosis, ostertagiosis, nematodiros, cooperiosis, chabertiosis, oesophagostomosis, bunostomosis, strongyloidiasis, trichuriasis, psoroptic mange, chorioptic mange, oestrosis, malophagosis, wohlfahrtiosis;
- to treat pigs for ascariasis, oesophagostomosis, strongyloidiasis, trichuriasis, metastrongylosis, stephanurosis, haematopoiesis, sarcoptic mange;
- to treat reindeer and red deer for dictyocaulosis, strongyloidiasis, trichuriasis, oesophagostomosis, bunostomosis, oedemagenosis and cephenomiosis.

Advantages

- high bioavailability due to the excipients;
- broad-spectrum activity against nematodes and arachkoentomoses;
- no pain and local irritant effect at the injection site.

Composition

1 ml of IVERTIN® solution for injection contains 10 mg of ivermectin.

Pharmacological properties

IVERTIN® has broad-spectrum antiparasitic activity. The drug is effective against nematodes, botfly larvae and ectoparasites. The drug disrupts the transmission of nerve impulses, which leads to paralysis and death of parasites.

Dosage

The drug is administered once at the following doses:

- cattle, sheep, goats, deer: subcutaneous injection to the neck region, at a dose of 1 ml of the solution per 50 kg bw (0.2 mg of ivermectin per 1 kg bw);
- pigs: intramuscular injection to the base of the ear, at a dose of 1 ml of the solution per 33 kg bw (0.3 mg of ivermectin per 1 kg bw).

Santel® 5% and 10%
(closantel)

solution for injection
intramuscular and subcutaneous administration

Indications

The drug is used to treat cattle and sheep for fasciolosis, haemonchosis, bunostomosis, chabertiosis, oesophagostomosis, trichostrongyloidosis, hypodermyasis, oestrosis.

Composition

1 ml of SANTEL 5% and 10% solution for injection contains 50 or 100 mg of closantel respectively.

Pharmacological properties

Closantel is a broad-spectrum antiparasitic drug, active against trematodes, nematodes and botfly larvae. The drug has an effect on larval and mature stages of *Fasciola hepatica* and mature stage of *Bunostomum sp., Haemonchus contortus, Haemonchus placei, Oesophagostomum radiatum, Chabertia ovis* and larvae of *Hypoderma bovis* and *Oestrus ovis*.

Closantel inhibits the process of phosphorylation and electron transport, which leads to the inhibition of energy metabolism. It causes paralysis and death of parasites.

After intramuscular administration, closantel is quickly absorbed from the injection site and distributed to most organs and tissues. The maximum concentration is reached in 12 hours and persists for 24-36 hours, the therapeutic concentration – for 10-11 days.

Closantel is primarily excreted intact in the feces, urine and milk.

Dosage

SANTEL 5% and 10% solution for injection is administered to cattle once by intramuscular route, to sheep and goats – by subcutaneous route. For better absorption, it is recommended to heat the vial to 37 °C. If one injection exceeds 20 ml, it is recommended to administer the drug to several injection sites.

SANTEL 5% and 10% solution for injection is administered at the following doses:

Animal species	Parasite	Dose Mg/kg	Dose of 5% ml/10 kg	Dose of 10% ml/10 kg
Cattle	*Bunostomum sp.*	2.5-5.0	0.5-1.0	0.25-0.5
	Fasciola gigantica	2.5	0.5	0.25
	Fasciola hepatica	2.5-5.0	0.5-1.0	0.25-0.5
	Haemonchus placei Haemonchus contortus	2.5	0.5	0.25
	Oesophagostomum radiatum	2.5-5.0	0.5-1.0	0.25-0.5
	Hypoderma bovis	5.0	1.0	0.5
Sheep	*Chabertia ovis*	5-10	1.0-2.0	0.5-1.0
	Fasciola gigantica	5-10	1.0-2.0	0.5-1.0
	Fasciola hepatica	5-10	1.0-2.0	0.5-1.0
	Oesophagostomum radiatum	5	1.0	0.5
	Haemonchus placei Haemonchus contortus	2.5-5.0	0.5-1.0	0.25-0.5
	Oestrus ovis	5	1.0	0.5

Santomectin®
(ivermectin, closantel)

solution for injection
intramuscular and subcutaneous administration

Indications

The drug is used to treat cattle, sheep, goats, deer for dictyocaulosis, haemonchosis, ostertagiosis, trichostrongyloidosis, cooperiosis, nematodiros, oesophagostomosis, bunostomosis, strongyloidiasis, fasciolosis, thelaziasis, hypodermyasis, oestrosis, sifunculatoses, sarcoptoses, psoroptic mange, chorioptic mange.

Composition

1 ml of SANTOMECTIN® solution for injection contains 5 mg of ivermectin and 125 mg of closantel.

Pharmacological properties

The drug has broad-spectrum antiparasitic activity, effective against nematodes in the gastrointestinal tract and lungs, trematodes, botfly larvae and actoparasites. Closantel inhibits the process of phosphorylation and electron transport, which leads to the inhibition of energy metabolism. It causes paralysis and death of parasites.
Ivermectin stimulates secretion of gamma-aminobutyric acid (GABA) in presynaptic neurons, which binds to the specific receptors of nerve endings by increasing membrane permeability to chloride ions and inhibits transmission of neuromuscular pulses. This causes paralysis and death of parasites.
After parenteral administration, the active substances are well absorbed from the injection site and distributed to most organs and

tissues. The therapeutic concentration persists for 10-12 days. The drug is excreted in the urine, bile, feces and partially in the milk.

Dosage

The drug is administered to cattle, sheep, goats and deer by subcutaneous or intramuscular injection to the subscapular region. SANTOMECTIN® solution for injection is administered once at a dose of 1 ml of the drug per 50 kg bw (0.1 mg of ivermectin and 2.5 mg of closantel per 1 kg bw).

Closalben®-20
(albendazole, closantel)

oral powder

Indications

- to treat cattle, sheep, goats and deer for fasciolosis, dicroceliasis, monieziasis, dictyocaulosis, ostertagiosis, haemonchosis, trichostrongyloidosis, cooperiosis, oesophagostomosis, oedema-genosis;
- to treat cattle for hypodermyasis, sheep – oestrosis and psoroptic mange.

Composition

1 g of CLOSALBEN® – 20 insoluble powder contains 100 mg of albendazole and 100 mg of closantel.

Pharmacological properties

The active substances are effective against ectoparasites and endoparasites of ruminants, including trematodes, nematodes, cestodes (resistant to benzimidazoles as well), botfly larvae and sarcoptic mange.
The drug violates oxidative phosphorylation and inhibits enzyme activity, which leads to paralysis and death of parasites.

Dosage

Against helminthiasis and botfly invasion, CLOSALBEN® – 20 is administered once via feed or water (as water suspension) individually or to groups at a dose of 40 mg/kg bw.

Against psoroptic mange in sheep, the drug is administered twice with a 7-day interval. For prevention of psoroptic mange the drug is administered once at a dose of 100 mg/kg bw.

Fenbengran®
(fenbendazole)

oral powder

Indications

The drug is used to treat cattle, sheep, goats, pigs, horses, cats and dogs for nematodoses and cestodiasis.

Animal species	Parasite
Cattle, sheep and goats	*Haemonchus spp., Ostertagia spp., Trichostrongylus spp., Cooperia spp., Nematodirus spp., Bunostomum spp., Oesophagostomum spp., Trichuris spp., Strongyloides spp., Dictyocaulus filaria, Capillaria spp., Moniezia spp.*
Pigs	*Hyostrongylus spp., Oesophagostomum spp., Ascaris suum, Trichuris suis, Metastrongylus spp.*
Dogs	*Toxocara canis, Toxocara leonia, Ancylostorama caninum, Uncinaria stenocephala, Trichuris vulpis, Taenia pisiformis, Oslerus osleri, Giardia spp.*
Cats	*Toxocara mystax, Ancylostoma tubaeforme, Aelurostronglus abstrusus, Taenia pisiformis*

Composition

1 g of FENBENGRAN® contains 22 mg of fenbendazole.

Pharmacological properties

Fenbendazole is a broad-spectrum anthelmintic, effective against mature forms, larvae and eggs of nematodes in the gastrointestinal tract and cestodes. Fenbendazole violates energy processes and disrupts microtubules in the intestinal cells of helminthes, which

causes paralysis and death of parasites. After oral administration, fenbendazole is metabolized and excreted intact mainly in the feces and to a lesser extent in the urine and milk.

Dosage

FENBENGRAN® is administered once via feed, individually or to groups at the following doses:

Animal species	Dose (mg/kg bw)	
	FENBENGRAN®	Fenbendazole
Cattle	34	7,5
Horses	34	7,5
Sheep and goats	22	5,0
Pigs	22	5,0
Cats and dogs	450	100.5
Puppies, kittens (over the age of 3 weeks)	225	50

To treat foals for diarrhea caused by Strongyloides westeri, FENBENGRAN® is administered once at a dose of 50 mg of fenbendazole per 1 kg bw.

Tetramisol 10% and 20%
(tetramisole hydrochloride)

oral powder

Indications

- treatment and prevention of dictyocaulosis, haemonchosis, bunostomosis, nematodiros, ostertagiosis, chabertiosis, cooperiosis, strongyloidiasis in cattle, sheep and goats.
- treatment and prevention of ascariasis, oesophagostomosis, strongyloidiasis, trichuriasis, metastrongylosis in pigs;
- treatment and prevention of ascaridiosis, capillariasis, heterakidosis, amidostomosis and gape in poultry.

Composition

1 g of TETRAMISOL 10% and 20% water-soluble powder contains 100 or 200 mg of tetramisole hydrochloride.

Pharmacological properties

The active substance is a racemic mixture of two optical isomers D and L, whereby the D-isomer has no anthelmintic activity and L-isomer (levamisole) has anthelmintic activity.
TETRAMISOL 10% and 20% is a broad-spectrum anthelmintic, effective against nematodes in the gastrointestinal tract and lungs, including *Haemonchus sp., Ostertagia sp., Trichostrongylus spp., Nematodirus sp., Bunostomum sp., Oesophagostomum sp., Cooperia sp., Dictyocaulus sp., Ascaris suum, Strongyloides ransomi, Metastrongylus sp., Oesophagostomum sp., Ascaridia, Capillaria spp.*, etc.

Tetramisole causes stimulation of ganglia and central nervous system, inhibits activity of fumarate reductase and succinate reductase, which leads to paralysis and death of parasites.
After oral administration, TETRAMISOL 10% and 20% is quickly absorbed in the gastrointestinal tract. The therapeutic concentration in the organs and tissues is reached in 1-3 hours and persists for at least 24 hours. TETRAMISOL 10% and 20% is excreted mainly in the urine and partially in the feces.

Dosage

The drug is administered once by oral route via drinking water or morning feeding individually or to groups at the following doses:

Animal species	Dose mg/kg		
	Active substance	Tetramisole	
		10%	20%
Cattle	8.0	80.0	40.0
Sheep	7.5	75.0	37.5
Pigs	10.0	100.0	50.0
Poultry	20.0	200.0	100.0

Amprolium 30%
(amprolium hydrochloride)

water-soluble powder for oral administration

Indications

The drug is used for treatment and prevention of coccidiosis in broiler chickens, replacement chickens and breeding flocks.

Composition

100 g of AMPROLIUM 30% contains 30 g of amprolium hydrochloride.

Pharmacological properties

Amprolium hydrochloride has broad-spectrum anticoccidial activity. The agent is effective against *E. tenella, E. acervulina, E. necatrix, E. maxima, E. mivati, E. brunetty* and other *Coccidia* affecting poultry.
The anticoccidial activity of AMPROLIUM 30% can be explained by its similar chemical structure with thiamine (vitamin B_1). Amprolium inhibits carbohydrate metabolism in parasites, which causes their paralysis and death. The cell membrane of the intestinal mucosa of poultry and mammals is hardly permeable to AMPROLIUM 30%, it makes the drug practically non-toxic in the therapeutic doses.
97% of AMPROLIUM 30% are excreted in the feces.

Dosage

AMPROLIUM 30% water-soluble powder is administered to poultry via drinking water or feed at the following doses:
for prevention

- broilers (over the age of 3-5 days, during rearing): at a daily dose

of 200 g of the drug per 500 L of water or 400 g of the drug per 1 t of feed (remove from the ration 5 days before slaughter);
- replacement chickens (over the age of 3-5 days until the age of 16 weeks): at a daily dose of 200 g of the drug per 500 L of water or 400 g of the drug per 1 t of feed, which is equivalent to 120 mg of amprolium per 1 L of water or 1 kg of feed;

for treatment
- broilers and replacement chickens: at a daily dose of 400 g of the drug per 500 L of water or 800 g of the drug per 1 t of feed, which is equivalent to 240 mg of amprolium per 1 L of water or 1 kg of feed, for 5-7 days.

Madicox®
(maduramicin ammonium)

microgranulated powder for oral administration

Indications

MADICOX® is used for treatment and prevention of coccidiosis in broiler chickens and replacement chickens.

Composition

100 g of MADICOX® contains
active substance: 1 g of maduramicin ammonium;
excipient: calcium carbonate – up to 100 g.

Pharmacological properties

MADICOX® belongs to ionophore coccidiostats. Maduramicin belongs to the polyether monocarboxylic ionophoric antibiotics, produced from a strain of Actinomadura yumanensis. Maduramicin has broad-spectrum anticoccidial activity against *E. tenella, E. acervulina, E. necatrix, E. maxima, E. mivati, E. brunette* and other *Coccidia* affecting poultry.
Maduramicin forms lipophilic complexes with alcaline mono- and divalent cations, thereby promoting their transport across the cell membrane and increasing the osmotic pressure in the coccidia, which inhibits certain mitochondrial functions such as substrate oxidation and ATP hydrolysis. It causes death of parasites
Maduramicin is hardly absorbed in the gastrointestinal tract and has its anticoccidial effect in the mucous and submucous membranes. Maduramicin is mainly excreted in the feces.

Dosage

MADICOX® is administered at a dose of 0.5 g per 1 kg of feed or 500 g per 1 t of feed, which is equivalent to 5 mg of the active substance per 1 kg bw.

- broiler chickens (from the first days of life and during the whole rearing period, but the drug must not be administered 5 days before slaughter);
- replacement chickens (from the first days of life until the age of 16 weeks).

Toltrax® 2.5%
(toltrazuril)

oral solution

Indications

TOLTRAX® 2,5% is used for treatment and prevention of coccidiosis in broiler chickens, replacement chickens and turkeys.

Advantages

- high bioavailability;
- high therapeutic effect after a single administration;
- high efficacy.

Composition

1 ml of TOLTRAX® 2.5% contains
active substance: 25 mg of toltrazuril;
excipients: triethanolamine, polyethylene glycol, propylene glycol.

Pharmacological properties

Toltrazuril is a synthetic agent of the triazinetrione group. Toltrazuril is a broad-spectrum coccidiostat, effective against *Eimeria acervulina, Eimeria maxima, Eimeria tenella, Eimeria brunetti, Eimeria necatrix, Eimeria mitis, Eimeria praecox, Eimeria hagani Eimeria adenoides, Eimeria meleagrimitis, Eimeria anceris, Eimeria truncate*. Toltrazuril inhibits respiratory enzymes, acts against mitochondria, violates nuclear fission, thereby disrupting the formation of macrogametocytes. It causes death of parasites. After oral administration, toltrazuril is slowly absorbed and has its anticoccidial effect in the mucous and

submucous membranes of the gastrointestinal tract. Toltrazuril is metabolized and excreted intact in the feces.

Dosage

TOLTRAX® 2.5% is administered to poultry via drinking water at a dose of 7 mg of toltrazuril per 1 kg bw (28 ml of the drug per 100 kg bw), which is equivalent to 1 ml of the drug per 1 L of water – for 48 hours within two days in a row, or 3 ml of the drug per 1 L of water – for 8 hours a day within two days in a row. In severe cases, it is recommended to repeat the treatment in 5 days.

Toltrax® 5%
(toltrazuril)

oral suspension

Indications

TOLTRAX® 5% is used for treatment and prevention of coccidiosis in piglets, lambs, goatlings, calves, rabbits and puppies.

Advantages

- high bioavailability;
- high therapeutic effect after a single administration;
- high efficacy.

Composition

1 ml of TOLTRAX® 5% contains 50 mg of toltrazuril and excipients – up to 1 ml.

Pharmacological properties

TOLTRAX® 5% is an anticoccidial drug. Toltrazuril has broad-spectrum anticoccidial activity. It is effective against Isospora suis, *Eimeria arloingi, Eimeria scabra, Eimeria guevarai, Eimeria bovis, Eimeria zuernii, Eimeria alabamensis* and other *Coccidia* affecting piglets, lambs, goatlings, calves rabbits and puppies. Toltrazuril inhibits respiratory enzymes, acts against mitochondria, violates nuclear fission, thereby disrupting the formation of macrogametocytes. It causes death of parasites.
After oral administration, toltrazuril is slowly absorbed in the gastrointestinal tract and has its anticoccidial effect in the mucous

and submucous membranes. Toltrazuril is partially metabolized to sulfone and sulfoxide derivatives.
Toltrazuril is metabolized and excreted intact (70%) mainly in the feces and partially in the urine.

Dosage

TOLTRAX® 5% is administered to piglets, lambs, goatlings, calves rabbits and puppies individually or to groups at the following doses:

- piglets (from the age of 3 days): once, at a dose of 0.4 ml of the suspension per 1 kg bw, but not less than 0.5 ml and not more than 2 ml per animal:
- calves (from the age of 5 days): once, at a dose of 3 ml of the suspension per 10 kg bw:
- lambs and goatlings (from the age of 2 weeks): once, at a dose of 4 ml of the suspension per 10 kg bw;
- rabbits (from the age of 4 weeks): once, at a dose of 0.14 ml of the suspension per 1 kg bw;
- puppies (from the age of 12 days): at a dose of 0.2 ml of the suspension per 1 kg bw, once a day for 3 days.

Ferraxx®- 100, 200

(iron as iron-(III)-dextran heptonic acid complex (gleptoferron)

solution for injection
intramuscular and subcutaneous administration

Registration in the EU

Indications

The drug is used for treatment and prevention of iron-deficiency anemia in piglets and minks.

Composition

FERRAXX® – 100, 200 solution for injection contains 100 mg/ml or 200 mg/ml of iron-(III)-dextran heptonic acid.

Pharmacological properties

After parental administration, iron-(III)-dextran heptonic acid complex slowly releases Fe^{+3} ions, which ensures the long-term effect of the drug. FERRAXX® – 100, 200 stimulates erythropoiesis and increases resistance.

Dosage

- piglets (on 3 or 4 day of life): one deep intramuscular injection to the neck region or upper thigh region at a dose of 1.5-2.0 ml of FERRAXX® – 100, or 0.75-1.0 ml of FERRAXX® – 200 per animal;
- female minks (during lactation in spring): one intramuscular or subcutaneous injection at a dose of 0.3 ml of FERRAXX® – 100 or 0.15 ml of FERRAXX® – 200 per animal;
- mink pups (at the age of 6-12 weeks): one intramuscular or subcutaneous injection at a dose of 0.2 ml of FERRAXX® – 100 or 0.1 ml of FERRAXX® – 200 per animal.

Ferraxx–forte®

(iron as iron-(III)-dextran heptonic acid complex (gleptoferron), vitamin E ,B_3, B_9, B_{12})

solution for injection
intramuscular and subcutaneous administration

Indications

FERRAXX – FORTE® is used for treatment and prevention of iron-deficiency anemia in piglets, calves, foals, lambs, goatlings and minks.

Composition

1 ml of FERRAXX – FORTE® contains
active substances:

- 20 mg of iron as iron-(III)-dextran heptonic acid complex;
- 20 mg of vitamin B_3;
- 10 mg of vitamin E;
- 5 mg of vitamin B_9;
- 0.1 mg of vitamin B_{12};

excipients: macrogol 15 hydroxystearate, benzyl alcohol and water for injection – up to 1 ml.

Pharmacological properties

Iron stimulates erythropoiesis and increases resistance. After parenteral administration, iron-(III)-dextran heptonic acid complex slowly releases Fe^{+3} ions, which ensures the long-term effect of the drug.
Nicotinamide (vitamin PP) stimulates NAD and NADP synthesis. In the form of NAD and NADP, it participates in many redox reactions.

Vitamin E is an active antioxidant. It inhibits lipid peroxidation, prevents cellular structures from damage caused by free radicals. It participates in tissue respiration, biosynthesis of heme and proteins, carbohydrate and fat metabolism, cell proliferation and other metabolic processes.

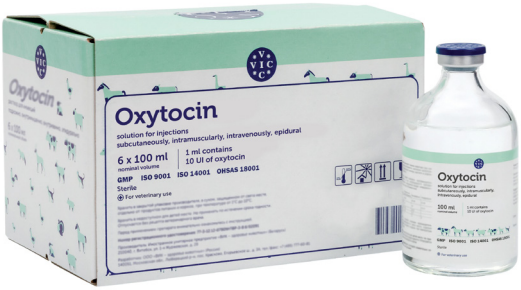
In the body, folic acid (vitamin B_9) is reduced to tetrahydrofolic acid, which is a coenzyme in various metabolic processes. It has an effect on normal megaloblastic maturation and normoblastic formation. Folic acid also stimulates erythropoiesis and participates in the synthesis of amino acids (including methionine and serine), nucleic acids, purines and pyrimidines.

Cyanocobalamin (vitamin B_{12}) is a water-soluble vitamin. It has high biological activity, participates in a transmethylation reaction, hydrogen transfer, formation of methionine, nucleic acids, choline, creatine. Cyanocobalamin is necessary for normal hematopoiesis. Vitamin B_{12} also promotes the accumulation of compounds containing sulfhydryl groups in the erythrocytes, has a positive effect on the function of the liver and nervous system, activates the blood coagulation system. Cyanocobalamin administered at high doses causes the increased activity of thromboplastin and prothrombin.

Dosage

FERRAXX – FORTE® is administered once:

- piglets (on 3 or 4 days of life): deep intramuscular injection to the neck region or upper thigh region at a dose of 0.75-1.0 ml per animal;
- calves and foals (in the first days of life): intramuscular injection to the thigh region at a dose of 2-4 ml per animal;
- lambs and goatlings (in the first days of life): intramuscular injection to the thigh region at a dose of 1.5-2.5 ml per animal;
- female minks (during lactation in spring): intramuscular or subcutaneous injection at a dose of 0.15 ml per animal;
- mink pups (at the age of 6-12 weeks): intramuscular or subcutaneous injection at a dose of 0.1 ml per animal.



Oxytocin
(oxytocin)

solution for subcutaneous, intramuscular, intravenous, epidural administration

Indications

- obstetric aid and stimulation of complicated delivery;
- uterine bleeding, retention of placenta, atony, hypotonia and metritis;
- mastitis and agalactia.

Composition

1 ml of OXYTOCIN solution for injection contains 10 IU of oxytocin.

Pharmacological properties

OXYTOCIN is a synthetic analogue of polypeptide hormone secreted by the posterior lobe of the pituitary gland. Oxytocin causes contraction of the uterine smooth muscle and myoepithelium of the mammary cells.

Dosage

The drug is administered by subcutaneous, intramuscular, intravenous, epidural injection:

Animal species	Route of administration and dose (IU)		
	Intramuscular or subcutaneous	Intravenous	Epidural
Mares and cows	30-60	20-40	15-30
Sows weighing up to 200 kg	30	20	10-15
Sheep and goats	10-15	8-10	-
Dogs	5-10	2-7	-
Cats	3	3	2

Flexoprofen® 10%
(ketoprofen)

solution for injection
intramuscular and intravenous administration

Indications

The drug is used to treat cattle, pigs, horses, cats and dogs for inflammatory diseases of musculoskeletal system (arthritis, osteoarthritis, joint dislocation, synovitis, tendinous synovitis, etc.), pain syndromes of various etiologies (traumatic and postsurgical pain, colic), and also hyperthermia.

Advantages

- high stability and safety;
- shelf life is 1.5 higher than the shelf life of analogues;
- maximum concentration in the blood in 30 minutes;
- can be used as a solvent for TIOCEFUR®.

Composition

1 ml of FLEXOPROFEN® 10% solution for injection contains 100 mg of ketoprofen.

Pharmacological properties

Ketoprofen has anti-inflammatory, analgesic and antipyretic effects. It is effective for the treatment of acute, subacute and chronic inflammations accompanied by pain syndrome. Ketoprofen inhibits prostaglandin synthesis by disrupting arachidonic acid metabolism. After intramuscular administration, ketoprofen reaches the maximum concentration in 30 minutes. The bioavailability is 85-100%.

Ketoprofen is mainly excreted by kidneys. In recommended doses, the drug is not accumulated in the body and has no sensitizing action.

Dosage

- cattle: intramuscular or intravenous injection at a dose of 3 mg of ketoprofen per 1 kg bw, once a day for 1-5 days;
- pigs: intramuscular injection at a dose of 3 mg of ketoprofen per 1 kg bw, once a day for 1-3 days;
- horses: intravenous injection at a dose of 2.2 mg of ketoprofen per 1 kg bw, once a day for 1-5 days;
- cats and dogs: subcutaneous, intramuscular or intravenous injection at a dose of 2 mg of ketoprofen per 1 kg bw, once a day for 1-5 days.

Paraterm
(acetylsalicylic acid)

water-soluble powder for oral administration

Indications

PARATERM (water-soluble powder) is used as an analgesic, anti-inflammatory and antipyretic drug for poultry, pigs and calves in pathological conditions accompanied by inflammatory and pain symptoms, including respiratory and gastrointestinal diseases, metritis-mastitis-agalactiae syndrome, rheumatoid arthritis, osteoarthritis, muscle and postoperative pain and heat stress.

Advantages

- antipyretic, anti-inflammatory and anti-aggregation effect;
- contributes to the rapid adaptation of animals and birds to high ambient temperatures;
- high efficiency in the complex therapy of infectious diseases;
- compatible with antibiotic therapy;
- appropriate dose for each clinical condition or disease;
- high solution stability even in hard water;
- the maximum effect is achieved after 2 hours;
- favorable cost and a broad spectrum effects compared to competitive nonsteroidal anti-inflammatory drugs.

Composition

1 g of PARATERM (water-soluble powder) contains
active substance: 750 mg of acetylsalicylic acid;

excipients: sodium carbonate – 150 mg, potassium carbonate – 100 mg.

Pharmacological properties

Acetylsalicylic acid has an anti-inflammatory, antipyretic, analgesic effect, and prevents thrombosis.
The mechanism of anti-inflammatory and analgesic action is based on a disruption of the synthesis of bradykinin and prostaglandins, as well as on the effect on pain receptors in the peripheral nervous system. The antipyretic effect is due to the effect on the production of endogenous pyrogen (interleukin 1) by leukocytes and increased heat elimination.
The anti-aggregatory effect of acetylsalicylic acid is associated with blocking the metabolism of arachidonic acid, which activates the synthesis of prostacyclin, which inhibits platelet aggregation and thereby prevents thrombosis.
After oral administration of PARATERM (water-soluble powder), acetylsalicylic acid is rapidly absorbed in the gastrointestinal tract and distributed to most organs and tissues of the body. The drug metabolized in the liver with the formation of salicyluric acid, salicylglucuronide and gentisic acid.
PARATERM is excreted from the body mainly with urine.

Dosage

PARATERM is administered with drinking water for 3-5 days at a dose per day:
- for poultry: 0.07 g of the drug/kg of bw, which corresponds to 50 mg of acetylsalicylic acid/kg of bw, or 250-550 g of the drug per ton of water;
- pigs: 0.13 g of the drug/kg of bw, which corresponds to 100 mg of acetylsalicylic acid/kg of bw, or 1300-2000 g of the drug per ton of water;
- calves: 0.07 g of the drug/kg of bw per day, which corresponds to 50 mg of acetylsalicylic acid/kg of live weight.

Fresh solution of the drug should be prepared daily.
Avoid missing the next dose of the drug, as this may lead to a decrease in therapeutic efficacy. In case of missing one dose, the use of the drug is resumed in the same dosage and according to the same schedule.

Flomecol
(florfenicol, methyluracil)

topical ointment

Indications

FLOMECOL is used to treat livestock,cats and dogs for skin pathologies (wounds, ulcers, burns, etc.)

Composition

1 g of the drug contains 7.5 mg of florfenicol, 40 mg methyluracil and excipients.

Pharmacological properties

FLOMECOL has antibacterial, regeneration and anti-inflammatory effects.
Florfenicol is a synthetic antibiotic, thiamphenicol derivative, where hydroxyl groups are substituted by fluorine atoms.
Florfenicol has a bacteriostatic effect on gram-positive and gram-negative bacteria, *Staphylococcus spp., Streptococcus spp., Escherichia coli, Salmonella spp., Pasteurella multocida, Haemophilus spp., Proteus spp., Enterobacter spp., Klebsiella spp., Bordetella spp.* and *Mycoplasma spp.* The antibiotic is effective against bacteria producing acetyltransferase. Florfenicol binds to the 50S ribosomal subunit in the bacterial protoplasm, where the antibiotic blocks the enzyme peptidyl transferase, which leads to the inhibition of protein synthesis.
Methyluracil is a pyrimidine derivative. It normalizes nucleic acid metabolism and stimulates cellular regeneration in wounds,

accelerates the growth and granulation maturation of tissues and epithelization.
The drug has no local irritant effect.

Dosage

Before use, the area must be cleared of any contamination, necrotic tissues, pus and wound exudate.
The ointment is administered to the surface of the damaged skin 1-2 times a day after the pre-treatment with antiseptics. The recommended course of treatment is 10 days.

Mizofen®-F

(florfenicol, levamisole hydrochloride)

topical ointment

Indications

- to treat cattle, sheep and goats for thelaziosis;
- to treat livestock, cats and dogs for conjunctivitis;
- to treat infected wounds in livestock and pets.

Advantages

- antibiotic and anthelmintic in one drug;
- systematic approach: antiparasitic, immunomodulatory effects and antibacterial therapy;
- wide range of application;
- local immunostimulating effect.

Composition

1 g of MIZOFEN®-F contains 10 mg of florfenicol and 10 mg of levamisole hydrochloride.

Pharmacological properties

Florfenicol is a synthetic antibiotic, thiamphenicol derivative, where hydroxyl groups are substituted by fluorine atoms.
Florfenicol has a bacteriostatic effect on gram-positive (*Staphylococcus spp., Streptococcus spp.*,) and gram-negative (*Escherichia coli, Salmonella spp., Pasteurella multocida, Haemophilus spp., Proteus spp., Enterobacter spp., Klebsiella spp., Bordetella spp., Moraxella spp.* and *Mycoplasma spp.*) bacteria. Florfenicol is active against

bacteria producing acetyltransferase and bacteria resistant to chloramphenicol. Florfenicol binds to the 50S ribosomal subunit in the bacterial protoplasm, where the antibiotic blocks the enzyme peptidyl transferase, as a result it inhibits protein synthesis.
Levamisole belongs to anthelmintics of the imidazole group, it is active against nematodes. Levamisole affects the neuromuscular system, inhibits fumarate reductase, which causes paralysis and death of parasites. Levamisole is an immunostimulant, it stimulates regeneration processes in tissues, has no cumulative, embryotoxic, teratogenic, mutagenic, carcinogenic effects.

Dosage

To treat thelaziosis and conjunctivitis, MIZOFEN®-F is administered to the conjunctival sac of the infected eye at a dose of 0.1-0.5 g twice a day. The treatment course must not exceed 5-7 days.
To treat infected wounds, MIZOFEN®-F is administered to the affected area 1-2 times a day, until the wound is completely cleared of purulonecrotic masses. The average course of treatment is 10 days.

Activiton

(butafosfan, carnitine, nicotinamide, tocopherol acetate, pyridoxine, dexpanthenol, folic acid, cyanocobalamin)

solution for injection

Indications

ACTIVITON solution for injection is a restorative tonic for cows during calving, sows, to prevent postpartum complications (tetany, parturient fever). It is used as a restorative tonic for horses during overexertion and exhaustion 2-3 days before competitions. ACTIVITON is also used to improve resistance to diseases and as an additional remedy to treat diseases caused by calcium and magnesium deficiency.

Advantages

- unique combination of vitamins and organic phosphorus derivative;
- active stimulation of erythropoiesis due to the high concentration of folic acid;
- immunotropic effect, stimulation of non-specific resistance;
- anti-stress effect;
- metabolic activator;
- antioxidant defense.

Composition

ACTIVITON solution for injection contains 10% of butafosfan, 4% of carnitine, 4% of nicotinamide, 3% of tocopherol acetate, 1% of pyridoxine, 1% of dexpanthenol, 0.5% of folic acid, 0.01% of cyanocobalamin and excipients – up to 100%.

Pharmacological properties

ACTIVITON solution for injection is a vitamin complex, metabolic stimulator and restorative tonic.

Butafosfan is an organic phosphorus compound, has an effect on assimilation, including CNS activity, metabolism, in particular, fat and protein metabolism, processes in the membranes of intracellular systems and muscles (including cardiac muscle).

Butafosfan improves the utilization of glucose in the blood, which stimulates energy metabolism. It promotes metabolism by stimulating the ATP/ADP energy cycle, improves hepatic function, increases non-specific resistance, stimulates smooth muscle and increases its motor activity, stimulates fatigued cardiac muscle, bone formation, protein synthesis, normalizes cortisol levels, accelerates growth and development of animals and reparative properties of the body as well.

Carnitine is a natural substance closely related to B vitamins. It is a cofactor of metabolic processes supporting coenzyme A activity. It reduces basal metabolism rate, slows the dissipation of protein and carbohydrate molecules, promotes the penetration through the membranes of mitochondria and splitting of long chain fatty acids resulting in the formation of acetyl-CoA, which is essential for the activation of pyruvate carboxylase during gluconeogenesis process, formation of ketone bodies, synthesis of choline and its esters, oxidative phosphorylation and formation of ATP.

Nicotinamide (vitamin PP) stimulates the synthesis of nicotinamide adenine dinucleotide (NAD) and nicotinamide adenine dinucleotide phosphate (NADP), the cofactors that are essential for the redox reactions.

Tocopherol acetate (vitamin E) is an active antioxidant, it inhibits lipid peroxidation, prevents cellular structures from damage induced by free radicals, participates in the process of tissue respiration, biosynthesis of heme and proteins, fat and carbohydrate metabolism, cell proliferation and other metabolic processes.

Pyridoxine (vitamin B_6) is phosphorylated to pyridoxal phosphate, which is part of the enzymes catalyzing decarboxylation and transamination. It plays an essential role in the metabolism of tryptophan, glutamic acid, cysteine, methionine and it is also involved in the transport of amino acids across the cell membranes. It is essential for the activation of phosphorylase, formation of neurotransmitters, gamma-aminobutyric acid, glycine, serotonin. Pyridoxine participates in the metabolism of vitamin B_{12}, folic acid, in the synthesis of porphyrins, in the metabolism of unsaturated fatty acid.

Dexpanthenol belongs to the vitamin B complex group. It is a derivative of pantothenic acid. Dexpanthenol participates in acetylation

and oxidation processes, carbohydrate and fat metabolism, in the synthesis of acetylcholine, corticosteroids, porphyrins, stimulates the formation and function of the epithelial tissue, exhibits anti-inflammatory activity.

In the body, folic acid (vitamin B_9) converts to tetrahydrofolic acid, which is a coenzyme in various metabolic reactions. It is essential for the normal maturation of megaloblasts and formation of normoblasts. It also stimulates erythropoiesis, participates in the synthesis of amino-acids (methionine, serine, etc.), nucleic acids, purine and pyrimidine metabolism and in choline metabolism.

Cyanocobalamin (vitamin B_{12}) is a water-soluble vitamin, has high biological activity. Cyanocobalamin is necessary for normal hematopoiesis (promotes maturation of erythrocytes), it is involved in the processes of transmethylation, hydrogen transport, synthesis of methionine, nucleic acids, choline, creatine, it facilitates erythrocyte accumulation of compounds containing sulfhydryl groups, has a positive effect on the liver function and nervous system, activates blood coagulation. Administered in high doses, cyanocobalamin increases the activity of thromboplastin and prothrombin.

Dosage

ACTIVITON solution for injection is administered intramuscularly or subcutaneously, once a day for 4-5 days. In case of the acute diseases, single doses (ml per animal) are:

- cattle – 10-25 ml;
- calves, foals – 5-12 ml;
- sheep, goats – 2.5-8 ml;
- lambs, goatlings – 1.5-2.5 ml;
- pigs – 2.5-10 ml;
- suckling piglets – 1-2.5 ml;
- dogs – 0.5-5 ml;
- cats – 0.5-2.5 ml.

Productive® AD_3E

(vitamin A, D_3, E (D, L-α-Tocopherol acetate)

feed additive

Indications

PRODUCTIVE® AD_3E is a feed additive for cattle, sheep, goats, pigs, fur-bearing animals and poultry. The feed additive is intended for prevention of metabolic disorders under stressful situations during vaccination, transportation, etc., it increases the resistance to various diseases. PRODUCTIVE® AD_3E is also used as a non-hormonal promoter of growth and productivity during pregnancy, lactation, diet changes and diseases associated with softening and weakening of bones.

Composition

1 L of PRODUCTIVE® AD_3E contains
100 000 000 IU of vitamin A, 20 000 000 IU of vitamin D_3, 20 000 mg of vitamin E.

Biological properties

PRODUCTIVE® AD_3E is a source of vitamins, microelements and essential amino acids for livestock and poultry. Vitamins are catalysts for metabolic reactions. The feed additive stimulates the immune system, maintenances reproductive function, prevents diseases associated with softening and weakening of bones, keeps productivity at the high level under stressful conditions (vaccination, transportation, diet changes and latent diseases). The feed additive has restorative and anti-stress effects, improves digestibility of feed

and increases the productivity of livestock and poultry. Due to the high bioavailability, PRODUCTIVE® AD_3E is well digested in the body. The feed additive has no sensitizing, embryotoxic, teratogenic or mutagenic effects.

Dosage

PRODUCTIVE® AD_3E is administered via water at the following doses:

- poultry, rabbits – 0.5-1 ml per 1 L of water, for 3-5 days;
- cattle, pigs, horses, sheep and goats: 0.5-1 ml per 20 kg bw, for 3-5 days.

Productive® E/Se/Zn

(vitamin E (D, L-α-Tocopheryl acetate) selenium (sodium selenite), zinc (zinc glycinate chelate)

feed additive

Indications

PRODUCTIVE® E/Se/Zn is a feed additive for cattle, sheep, goats, pigs, fur-bearing animals and poultry. The feed additive is used to keep productivity at the high level, to prevent deficiency of vitamin E, selenium and zinc under stressful conditions (vaccination, weak immune system, reproductive disoders, latent diseases, diet changes, etc.).

Composition

1 L of PRODUCTIVE® E/Se/Zn contains
100 000 mg of vitamin E (D, L-α-Tocopheryl acetate), 200 mg of selenium (sodium selenite), 10 000 mg of zinc (zinc glycinate chelate).

Biological properties

PRODUCTIVE® E/Se/Zn is a source of vitamin E, selenium and zinc for livestock and poultry. Vitamin E is an antioxidant nutrient. Due to the oxidation, it slows cell aging. Vitamin E improves cell nutrition, strengthens blood vessel walls, prevents blood clots and promotes its absorption, strengthens the myocardium, participates in cell proliferation, cellular respiration and other metabolic processes in cells.

Selenium ensures proper operation of the immune system, since it contributes to the production of antibodies, white blood cells and red blood cells, stimulates the formation of macrophages. Selenium participates in the synthesis of glutathione peroxidase, protects cell membranes, prevents their deformation and damage in the DNA structures, restores damaged cells and stimulates the formation and growth of new one. Selenium increases the efficacy of vitamin E, participates in oxidation-reduction reactions. Selenium is a component of glutathione peroxidase, which is essential for cell protection.
Zinc is a component of hormones, enzymes. It participates in the tissue formation, hematopoiesis, stimulates the growth and development of animals, has an impact on the reproductive system. Zinc is essential for hormone activation, skin health and synthesis of vitamin A from carotene. It is recommended for treatment and prevention of hoof diseases. Zinc is also used to reduce the number of somatic cells in milk in case of ketosis. Poultry needs zinc for the formation of eggshell and plumage, to increase fertilization of eggs. In PRODUCTIVE® E/Se/Zn, Zinc is in high available form, which is an essential condition for easy digestibility.

Dosage

PRODUCTIVE® E/Se/Zn is administered to
cattle, sheep and goats:
- deficiency of selenium and vitamin E in the feed – 2 ml per animal per day, for 3-5 days;
- prevention – 1 ml per animal per day, for 3-5 days.

pigs:
- deficiency of selenium in the feed – 1 L per 500 L of water per day, or 1 ml per 3-5 kg bw (below 50 kg) and 6-8 kg bw (over 50 kg) per day, for 3-5 days;
- prevention – half of the therapeutic dose for 3-5 days.

poultry:
- for prevention – 1 L per 2000 L of water, or 1 ml per 20 kg bw per day, for 3-5 days;
- total lack of selenium in the feed – 1 L per 1000 L of water, or 1 ml per 10 kg bw per day, for 3-5 days.

Productive® Forte

(vitamin A, D_3, E, B_1, B_2, B_6, B_{12}, K_3, biotin, nicotinamide, folic acid, lysine, methionine, threonine, tryptophan, glycine, selenium, copper, zinc, D-Ca-Pantothenate)

feed additive

Indications

PRODUCTIVE® FORTE is a feed additive for cattle, sheep, goats, pigs, fur-bearing animals and poultry. The feed additive is intended for prevention of metabolic disorders and stressful situations during vaccination, transportation, etc., it increases the resistance to various diseases. PRODUCTIVE® FORTE is also used as a non-hormonal promoter of growth and productivity during pregnancy, lactation, diet changes and diseases associated with liver dysfunction.

Advantages

- optimal composition of vitamins, amino acids and microelements;
- high bioavailability of all components;
- high stability of the solution even in hard water;
- improves taste quality of meat and eggs;
- increases stress resistance;
- provides effective functioning of immune system.

Composition

1 L of PRODUCTIVE® FORTE contains
10 000 000 IU of vitamin A, 0,1 g of folic acid, 2 000 000 IU of vitamin D_3, 20 g of lysine, 5 000 mg of vitamin E, 10 g of

methionine, 1.25 g of vitamin B_1, 10 g of threonine, 2.0 g of vitamin B_2, 2.0 g of tryptophan, 1.5 g of vitamin B_6, 5 g of glycine, 0.005 g of vitamin B_{12}, 33 mg of selenium, 0.6 g of vitamin K_3, 35 mg of copper, 0.015 g of biotin, 45 mg of zinc, 10 g of nicotinamide, 3.28 g of D-Ca-Pantothenate.

Biological properties

PRODUCTIVE® FORTE is a source of vitamins, microelements and essential amino acids for livestock and poultry. Vitamins are catalysts for metabolic reactions. Amino acids are structural units of tissues proteins, enzymes, peptide hormones and other biologically active compounds. In combination with chelated forms of microelements, PRODUCTIVE® FORTE maintenances the immunity and keeps productivity at the high level under stressful conditions (vaccination, transportation, diet changes and latent diseases). The feed additive has restorative and anti-stress effects, improves digestibility of feed and increases the productivity of livestock and poultry. Due to the high bioavailability, PRODUCTIVE® HEPATO is well digested in the body. The feed additive has no sensitizing, embryotoxic, teratogenic or mutagenic effects.

Dosage

PRODUCTIVE® FORTE is administered to
poultry:
- under stressful conditions (overheating, vaccination, diet changes, transportation) – 0.5 ml per 1 L of water;
- mycotoxicosis, during the recovery period after the disease – 1.0 ml per 1 L of water;
- to increase egg production – 0.1-0.25 ml per 1 L of water.

pigs and horses:
- under stressful conditions (weaning, overheating, vaccination, diet changes, transportation) – 0.2-0.5 ml per 1 L of water;
- pregnant sows and pregnant mares – 0.5 ml per 1 L of water in two courses, 7 days each, 30 and 14 days before delivery;

cattle:
- newborn calves – 0.5-1.0 ml per 1 L of colostrum or water, within the first 7 days of life;
- calves with signs of diarrhea – 1.0 ml per 1 L of water or milk;
- dry cows – 0.5 ml per 1 L of water in two courses, 5 days each, 30 and 14 days before delivery.

If necessary, it is recommended to repeat the administration of the feed additive in 20-30 days.
For prevention of vitamin deficiency, the feed additive is administered 4-5 days every 6 months.

Productive® Hepato

(vitamin B_1, B_2, B_6, B_{12}, betaine, lysine, methionine, L-carnitine, inositol (vitamin B_8)

feed additive

Indications

PRODUCTIVE® HEPATO is a feed additive for cattle, sheep, goats, pigs and poultry. The feed additive is used to ensure normal growth and metabolism, to treat vitamin B deficiency and amino acid deficiency and for prevention of fatty liver disease. PRODUCTIVE® HEPATO improves metabolism of proteins and carbohydrates, prevents fatty liver, increases resistance to infectious diseases, lowers cholesterol in the blood, enhances immune function, improves digestion processes and has a positive effect on the nervous system.

Advantages

- high hepatoprotective effect;
- optimal composition of vitamins, amino acids and microelements;
- high bioavailability of all components;
- high stability of the solution even in hard water;
- improves taste quality of meat and eggs;
- increases stress resistance;
- provides effective functioning of immune system.

Composition

1 L of PRODUCTIVE® HEPATO contains
0.02 g of vitamin B_1, 0.005 g of vitamin B_2, 0.04 g of vitamin B_6, 0.006 g of vitamin B_{12}, 150 g of betaine, 50 g of lysine, 10 g of methionine, 50 g of L-carnitine, 1 g of inositol (vitamin B_8).

Biological properties

PRODUCTIVE® HEPATO is a source of vitamins and essential amino acids for livestock and poultry. Vitamins are catalysts for metabolic reactions. Amino acids are structural units of tissues proteins, enzymes, peptide hormones and other biologically active compounds. Betaine is a source of labile methyl groups to methylate homocysteine in the liver. PRODUCTIVE® HEPATO reduces the risk of fatty liver disease and other liver damage, maintenances the immunity and keeps productivity at the high level under stressful conditions (vaccination, transportation, diet changes and latent diseases). The feed additive has restorative and anti-stress effects, improves digestibility of feed and increases the productivity of livestock and poultry. Due to the high bioavailability, PRODUCTIVE® HEPATO is well digested in the body. The feed additive has no sensitizing, embryotoxic, teratogenic or mutagenic effects.

Dosage

For prevention of fatty liver disease and other liver damage, PRODUCTIVE® HEPATO is administered via drinking water once or twice a week for 4-5 days in a row.
poultry: 0.1-1.0 ml per 1 L of water;
cattle, pigs, sheep and goats: 0.25-1 ml per 1 L of water.
It is recommended to administer PRODUCTIVE® HEPATO to pregnant animals twice at a dose of 0.5 ml per 1 L of water for 5 days: first time – 30 days before delivery, the second one – 14 days before delivery. If necessary, it is recommended to repeat the administration of the feed additive in 20-30 days.
For prevention of vitamin deficiency, the feed additive is administered within 4-5 days every 6 months.

Productive Acid SE

(formic acid, propionic acid, lactic acid, citric acid, acetic acid)

feed additive

Indications

PRODUCTIVE ACID SE is used to reduce the level of pathogenic microflora in drinking water and feed and to increase productivity of pigs and poultry.

Composition

The additive contains formic acid (not less than 61%), propionic acid (not less than 5%), lactic acid (not less than 8%), acetic acid (not less than 2%), citric acid (not less than 3%) and distilled water or highly purified water (up to 100%).

Biological properties

Organic acids participate in tricarboxylic acid cycle, provide rapid energy production, activate gastrointestinal enzymes. Formic and propionic acids inhibit growth of pathogenic microflora in the feed, drinking water and gastrointestinal tract, without inhibiting the growth and development of useful lactic acid microflora.
PRODUCTIVE ACID SE decreases the population of Salmonella spp., Staphylococcus spp., Proteus spp. and other pathogens in drinking water and feed. The feed additive contributes to the normalization of the intestinal microflora and production of energy in weakened animals, improves the digestion processes. The administration of PRODUCTIVE ACID SE increases productivity of pigs and poultry and improves feed conversion.

Dosage

PRODUCTIVE ACID SE is administered to pigs and poultry at the following doses:

- via drinking water: 0.2-2 ml/L of water;
- via feed: 1-2 L/t of feed;
- via milk: 0.5-2.0 L/1000L (pH – 4.5).

Chicken-patrol
(sodium thiosulfate, Patent Blue V)

powder or granules
for oral administration

Indications

CHICKEN-PATROL is used to prepare water during immunization of livestock and poultry with viral and bacterial vaccines, vaccines against mycoplasmosis, and other veterinary drugs administered via drinking water or by spraying. CHICKEN-PATROL dyes vaccine solution and other veterinary drugs blue.
CHICKEN-PATROL replaces skimmed milk powder, reduces the risk of bacterial infection. It does not block water supply through a water supply system.

Composition

1 g of CHICKEN-PATROL contains 100 mg of sodium thiosulfate, 100 mg of Patent Blue V and excipients including chelating agents – up to 1 g.

Pharmacological properties

Due to sodium thiosulfate, CHICKEN-PATROL removes hardness of water and reduces free chlorine content.
CHICKEN-PATROL adjusts pH of water to physiological values, neutralizes free chlorine to 10 ppm within 10 minutes, thereby preventing vaccines from inactivation.
The components of CHICKEN-PATROL contain chelating agents providing precipitation of heavy metals (iron, bromine, cyanides, copper, silver, mercury, zinc), which can inactivate vaccines.

Stabilizers and dyes for vaccines

CHICKEN-PATROL helps to control distribution of vaccines and other veterinary drugs in a water supply system, it also helps to visually evaluate the number of livestock and poultry vaccinated or treated with drugs. CHICKEN-PATROL dyes tongues, noses, lips, beaks blue. The effect persists for 2-3 hours.
CHICKEN-PATROL has no impact on water intake.
It is harmless, has no medical properties.

Dosage

1 sachet or 15 g per 100-500 L of water.

Vac-marker
(brilliant blue)

sterile agent to dye injection sites during immunization

Indications

VAC-MARKER is used to dye injection sites during immunization of chicken embryos and day-old chickens, it helps to control the number of vaccinated birds and quality of vaccination as well.
VAC-MARKER is used together with live, inactivated, vector, immune complex vaccines.

Composition

VAC-MARKER contains
active substance: brilliant blue;
excipients: potassium phosphate monobasic and water for injection.

Pharmacological properties

Brilliant blue helps to control the number of vaccinated birds and the quality of vaccination at the injection site.
It is harmless, has no medical properties.

Dosage

VAC-MARKER is administered at a dose of 1 ml per 1000 ml of vaccine solution.

Didicid

(potassium peroxomonosulfate (triple salt) – 52%)

disinfectant

Indications

DIDICID is a pink powder with a slight specific odor, soluble in water. DIDICID is used for preventive and forced (current and final) disinfection of objects of veterinary supervision in infectious diseases of bacterial and viral and fungal etiology.

Composition

1 g contains 520 mg (52%) of potassium potassium peroxomonosulfate (triple salt) and excipients (surface active substance – sulfonol, organic acids, buffer components (sodium chloride, sodium hexametaphosphate), dye, aerosil A380 and flavouring).

Disinfecting properties

DIDICID has a broad spectrum of antimicrobial activity and is active against bacteria, viruses and fungi. DIDICID has a bactericidal effect on pathogens that belong to the group of low-resistant (group of *Escherichia coli bacteria – Escherichia, Citrobacter, Enterobacter),* resistant (group of staphylococci – *St. aureus, St. epidermatis, St. saprophiticus*) and highly resistant (group of mycobacteria) to chemical disinfectants.

DIDICID acts as a strong oxidizer. Organic acids in combination with an inorganic buffer create an acidic environment and optimize the activity of potassium peroxomosulfate, in this regard, the product is also effective in hard water, in the presence of organic contaminants and at low ambient temperatures.

Working solutions do not cause skin irritation, do not have corrosive activity, do not have a negative effect on the materials of the treated surfaces (does not cause corrosion of stainless steel and aluminum, acid-resistant plastics, rubber, enamel, glass).
According to the degree of impact on the body, DIDICID is classified as a moderately hazardous substance. In the recommended concentrations, it does not have a sensitizing and local irritating effect on the skin, slightly irritates the mucous membranes.
According to the degree of impact on the body, working solutions are classified as marginally hazardous substances.
After application, the product is easily washed off and quickly decomposes in wastewater to inactive components and, as a result, does not pollute the environment.

Application procedure

Disinfection with DIDICID working solutions is carried out in the absence of animals by a wet method (irrigation, wiping, immersion) or aerosol.
For preventive and forced (current and final) disinfection for infections of bacterial (excluding tuberculosis), viral and fungal etiology, pathogens of which belong to 1 (low-resistant) and 2 (resistant) groups of resistance to disinfectants, wet or aerosol pre-cleaned surfaces and equipment, as well as in disinfection barriers and mats, a 1% working solution of the product is used.
For thermal aerosol disinfection (preventive and forced) of livestock and auxiliary premises, incubators, feed processing and storage facilities, slaughterhouses, a 4% working solution of the product is used.
To prepare a 1% working solution, 100 g of the product is dissolved in 10 L of preferably warm water.
To prepare a 4% working solution for thermal aerosol disinfection, an aerosol stabilizer (monopropylene glycol, etc.) is first mixed with water at the rate of 15 parts of the stabilizer per 85 parts of water, then 4 parts of the DIDICID are added to the resulting solution.
To prepare working solutions for the purpose of preventive and forced disinfection at low temperatures (up to minus 18° C), the required amount of DIDICID is taken and dissolved in 60% of the warm water required for the preparation of the solution. Then the volume of the solution is brought up to 100% by propylene glycol.

Diseptin
(povidone iodine)

product for the treatment of the udder and external genitalia

Indications

DISEPTIN is used for regular treatment of teats and udders in cows after milking and external genitalia.

Composition

1 ml contains 85 mg of povidone iodine (0.85% active iodine) and excipients.

Pharmacological properties

DISEPTIN is a red-brown liquid. It is active in relation to all types of microorganisms. It has a pronounced antimicrobial and wound healing agent.

Application procedure

To prepare a working solution:
1 part of DISEPTIN is mixed with 4 parts of water. For one treatment of the udder teats, 5 ml of working solution is required.

SENSITIVITY OF BACTERIA TO THE ANTIBACTERIAL DRUGS OF VIC ANIMAL HEALTH

No.	Name of the drug	E. coli	Salmonella spp.	Streptococcus spp.	Staphylococcus spp.	Erysipelothrix spp.	Pasteurella spp.	Haemophilus spp.	Actinobacillus spp.	Bordetella spp.	Mycoplasma spp.	Ornithobacterium	Enterobacter spp.	Klebsiella spp.	Pseudomonas spp.	Proteus spp.	Shigella spp.	Corynebacterium spp.	Clostridium spp.	Fusobacterium spp.	Campylobacter spp.	Citrobacter spp.	Listeria spp.	Bacillus spp.	Leptospira	Chlamydia	Lawsonia	Spirochaeta	Brachyspira (Serpulina)	Rickettsia
Solution for injection																														
1	Zitrex®	X	X	X	X		X	X	X	X	X								X	X	X		X			X				
2	Tiacyclin®	X	X	X	X	X	X	X	X	X	X							X	X				X	X	X	X	X	X	X	X
3	Oxylong® 20% retard	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X						X				X
4	Floricol® 30%	X	X	X	X		X	X	X	X	X	X	X	X		X	X			X		X								
5	Tiocefur®	X	X	X	X		X	X	X					X	X	X		X	X	X		X		X						
6	Klindaspectin®	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X			X	X			X	X	
7	Lincovic®			X	X	X					X							X	X	X	X			X				X	X	
8	Enroflon® 5% and 10%	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X							X
9	Gentamicin 4% and 5%	X	X		X		X	X	X	X			X	X	X	X	X	X	X		X		X	X				X	X	
10	Tilanic® 5% and 20%			X	X	X	X	X		X	X							X	X	X					X	X	X	X	X	
Powders																														
11	Solutistin®	X	X	X	X	X	X	X			X		X	X			X	X	X			X			X	X	X	X	X	
12	Clavuxicin®	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X				X	X	X

No.	Name of the drug	E. coli	Salmonella spp.	Streptococcus spp.	Staphylococcus spp.	Erysipelothrix spp.	Pasteurella spp.	Haemophilus spp.	Actinobacillus spp.	Bordetella spp.	Mycoplasma spp.	Ornithobacterium	Enterobacter spp.	Klebsiella spp.	Pseudomonas spp.	Proteus spp.	Shigella spp.	Corynebacterium spp.	Clostridium spp.	Fusobacterium spp.	Campylobacter spp.	Citrobacter spp.	Listeria spp.	Bacillus spp.	Leptospira	Chlamydia	Lawsonia	Spirochaeta	Brachyspira (Serpulina)	Rickettsia
13	Colimixol®	X	X										X	X	X	X	X					X								
14	Terpentiam 45%	X	X	X	X	X	X	X	X	X	X							X	X	X	X					X	X	X	X	X
15	Terpentiam premix	X		X	X	X	X	X	X	X	X							X	X	X						X	X	X	X	X
16	Spelinc®660	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X		X	X				X	X	
17	Pulmosol®	X	X	X	X	X	X	X	X	X	X			X			X	X	X		X	X	X	X	X	X		X	X	X
18	Solamox®	X	X	X	X	X	X	X			X	X				X	X	X	X	X		X	X	X				X	X	X
19	Soladoxy® 500	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X	X	X	X	X	X	X
20	Tiacyclin®	X	X	X	X	X	X	X	X	X	X	X					X	X	X	X	X		X	X	X	X		X	X	
21	Klindaspectin®	X	X	X	X	X	X	X	X	X	X			X		X	X	X	X				X	X						
22	Spelinc®-44	X	X	X	X	X	X	X		X	X	X	X	X			X	X	X					X	X			X		
23	Oxytetracycline hydrochloride 1000	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X				X	X	X	X		X		
24	Pulmokit®	X	X	X	X	X	X	X	X	X	X			X				X					X	X	X					
25	Sulteprim®	X	X	X	X	X	X	X	X	X	X		X	X		X	X	X		X	X		X	X				X		
26	Tylanic®			X	X	X	X	X		X	X							X	X	X			X	X	X	X	X			
27	Enroflon®	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X							X
28	Neomycin	X	X		X											X	X	X				X	X					X		

No.	Name of the drug	E. coli	Salmonella spp.	Streptococcus spp.	Staphylococcus spp.	Erysipelothrix spp.	Pasteurella spp.	Haemophilus spp.	Actinobacillus spp.	Bordetella spp.	Mycoplasma spp.	Ornithobacterium	Enterobacter spp.	Klebsiella spp.	Pseudomonas spp.	Proteus spp.	Shigella spp.	Corynebacterium spp.	Clostridium spp.	Fusobacterium spp.	Campylobacter spp.	Citrobacter spp.	Listeria spp.	Bacillus spp.	Leptospira	Chlamydia	Lawsonia	Spirochaeta	Brachyspira (Serpulina)	Rickettsia
Granules and tablets																														
29	Amoxiprem® 200	X	X	X	X	X	X	X	X		X				X		X	X	X			X	X				X			
30	Doxyprem® 100, 200	X	X	X	X	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X	X	X	X			
31	Colimixol®	X	X									X	X	X	X					X										
32	Lincoprem® 150			X	X	X					X						X	X	X	X			X		X	X	X			
33	Terpentiam® premix			X	X	X	X	X	X	X	X		X				X	X	X			X	X		X	X				
34	Floriprem® 40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X		X									
35	VIC-AMOX	X	X	X	X		X	X	X	X	X				X			X	X	X										
Oral solutions																														
36	Coliquinol	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X					X	X	
37	Sulteprim® oral solution	X	X	X	X	X	X	X	X	X	X						X	X		X	X		X						X	
38	Quinoline®	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X						X	
39	Tiacyclin			X	X	X	X	X	X	X	X						X	X	X		X		X	X				X	X	
40	Tilmipul®	X		X	X		X	X	X	X	X	X					X	X	X						X			X		
41	Quinocycline®	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X		X							
42	Flox-O-Quin®	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X									

No.	Name of the drug	E. coli	Salmonella spp.	Streptococcus spp.	Staphylococcus spp.	Erysipelothrix spp.	Pasteurella spp.	Haemophilus spp.	Actinobacillus spp.	Bordetella spp.	Mycoplasma spp.	Ornithobacterium	Enterobacter spp.	Klebsiella spp.	Pseudomonas spp.	Proteus spp.	Shigella spp.	Corynebacterium spp.	Clostridium spp.	Fusobacterium spp.	Campylobacter spp.	Citrobacter spp.	Listeria spp.	Bacillus spp.	Leptospira	Chlamydia	Lawsonia	Spirochaeta	Brachyspira (Serpulina)	Rickettsia
43	Dolinc®	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		X	X		X		X	X	X
44	Floricol®	X	X	X	X		X	X	X	X	X	X	X	X		X	X			X		X								
45	Enroflon®	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X							X
46	Enroflon®-K	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X			X				X
Preparations for the treatment of endometritis																														
47	Enroflon® foaming tablets	X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X							X
Anti-mastitis drugs																														
48	Enroflon gel	X		X	X		X								X			X						X						
49	Lactico	X		X	X		X							X				X			X			X						
50	Lactico profi			X	X													X												
51	Mammilacti profi	X		X	X									X				X												

* – gram-positive bacteria

* – gram negative bacteria

Feed additive	Description
Seletok	Seletok is a combination sorbent of mycotoxins, contains inner membranes of inactivated yeast cells of Saccharomyces cerevisiae (min 80%), dry live yeast Saccharomyces cerevisiae – min 2.0 x 10^8 CFU (colony-forming units), covered with stearic acid and filler – coretron. Seletok absorbs mycotoxins (aflatoxin B1, zearalenone, T-2 toxin, deoxynivalenol, ochratoxin A, fumonisin B1) in feed, improves digestion, digestibility of nutrients, also improves the conversion of plant feed.
Contratherm powder	1.0 g contains 300 mg of succinic acid, 350 mg of salicylic acid, 20 mg malonic acid, 100 mg DL-malic acid, 180 g of sodium citrate 3-substituted, 10 mg of pyridoxine hydrochloride (vitamin B6) and excipients. The feed additive mitigates the negative effects of heat stress, improves digestibility of feed nutrients, improves the performance and survival rate of farm animals and poultry.
Contratherm solution	1 ml contains 38 mg of succinic acid, 30 mg of salicylic acid, 5 mg of malonic acid, 30 mg of DL-malic acid, 31 mg of citric acid, 10 mg of betaine hydrochloride, 50 mg of levocarnitine (L-carnitine) and excipients. The feed additive mitigates the negative effects of heat stress, improves digestibility of feed nutrients, improves the performance and survival rate of farm animals and poultry.
Levibio	Contains dry live yeast Saccharomyces cerevisiae – min 1.0 x 10^9 CFU (colony-forming units) covered with stearic acid, inner membranes of inactivated yeast cells of Saccharomyces cerevisiae (2.0%) and filler – coretron. Saccharomyces cerevisiae boosts the growth of beneficial microflora that cleaves fiber and improves the digestibility of roughage, boosts the metabolism of lactic acid in the rumen, improves pH, reduces the risk of acidosis, yeast glucomannans and diatomite have a large absorption surface.
Ecocell	Contains dry live yeast Saccharomyces cerevisiae var. boulardii – min 2.0 x 10^9 CFU (colony-forming units), covered with stearic acid, inner membranes of Saccharomyces cerevisiae (2.0 %), and filler – coretron. Saccharomyces cerevisiae var. boulardii boosts the growth of beneficial microflora in the gastrointestinal tract, improves the digestibility of nutrients, yeast glucomannans and diatomite have a large absorption surface.

Anti-mastitis drugs	Description
Laktico profi long	3.6 g contains 600 mg of cloxacillin. Cloxacillin is effective against gram-positive bacteria. It provides a prolonged effect for 7 weeks in cows. The drug is used to treat dry cows for mastitis.
Mammilacti	8.0 g contains 75 mg of ampicillin, 200 mg of cloxacillin. The drug is effective against most gram-positive and gram-negative bacteria. The drug is used to treat lactating cows for mastitis.

Disinfectants	Description
Acidez	Highly concentrated disinfectant effective against bacteria, pathogenic fungi, yeast and viruses. Versatile: processing in any way (foam, spray, spillage, aeration). Composition: 11% glutaraldehyde, 20% formaldehyde, 1% didecyldimethylammonium chloride, 3% alkyldimethylbenzylammonium chloride. High efficiency at low temperatures, in water with increased hardness, in the presence of partial surface contamination.
Gigadez	Concentrated disinfectant effective against bacteria, pathogenic fungi, yeast and viruses (including CSF, ASF, Aujeszky, NB, foot and mouth disease, Rota, Corona, Reo, Parvo and Paramikso viruses). Composition: 12% glutaraldehyde, 4% alkyldimethylbenzylammonium chloride, 17% isopropanol, 17% ethylene glycol, 5% proprietary foam component.
Cidaqua	Remedy for the water supply system cleaning, sanitation and water acidification for poultry and animals based on hydrogen peroxide and organic acid. Possesses enhanced disinfecting and detergent properties. Composition: 35% hydrogen peroxide, 17% peracetic acid, 5% acetic acid.

Fatum Fly

An insect exterminator for professional use against flies by treating walls and ceilings in barns, stables, pigsties, poultry houses and other animal enclosures.
Apply on surfaces where flies are observed by painting or spraying.
Composition: Thiamethoxam 10%.

Cidez

Alkaline disinfecting foamy detergent with a wide range of applications. Designed for use in agriculture, food and processing industries for cleaning contaminated surfaces, equipment and tools from protein and fatty contamination. Possesses a pronounced disinfecting effect due to the content of active chlorine.

Cidez Super

Highly alkaline foamy detergent with a wide range of applications. It is intended for use in agriculture, food and processing industry for cleaning contaminated surfaces, equipment and tools from protein and fatty contaminants, as well as contaminants of complex composition and nature.

Cidez F

Highly foamy acidic detergent based on phosphoric acid with a wide range of applications. Designed for use in agriculture, food and processing industries for cleaning contaminated surfaces, equipment and tools from mineral contamination, as well as contamination of complex composition and nature. Effectively removes limescale, sediments of iron, proteins and sugars.

Cideco-Bio

Chlorine-containing alkaline non-foaming detergent based on potassium hydroxide, sodium hypochlorite. Designed for cleaning and disinfection of liquid feeding systems, circulation systems and washing installations, to remove organic contaminants.

Cideco

An acidic non-foaming detergent based on phosphoric acid. Designed for cleaning and disinfection of milking equipment, liquid feeding systems, circulation systems and washing plants. Contains a complex of phosphoric, nitric and sulfuric acids.

Foodsun-Bio

Disinfectant based on NAA and hydrogen peroxide. It is used as an auxiliary component for processing poultry carcasses in drip air chillers and chilling baths. And also for the equipment and implements disinfection at agricultural enterprises and the processing industry. Ingredients: peracetic acid 16%, hydrogen peroxide 25%, acetic acid 5%, excipients.

VIC GROUP –

leader in the Russian veterinary
pharmaceutical market and largest manufacturer
of veterinary drugs in the former USSR

Moscow
+7 (495) 777-67-67

Saint Petersburg
+7 (812) 249-92-51

Yekaterinburg
+7 (343) 382-22-77

Penza
+7 (8412) 999-424

Nizhny Novgorod
+7 (910) 799-07-20

Belgorod
+7 (4722) 21-81-51

Kursk
+7 (920) 561-35-01

Oryol
+7 (4862) 44-36-50/54/55

Voronezh
+7 (495) 777-67-67

Rostov-on-Don
+7 (863) 268-88-59/61

Krasnodar
+7 (861) 290-03-98

Omsk
+7 (3812) 29-41-16

Novosibirsk
+7 (383) 262-17-76

Tyumen
+7 (922) 261-06-00

Kazan
+7 (917) 929-33-55

Krasnoyarsk
+7 (905) 990-24-68

Irkutsk
+7 (914) 933-33-71

Belarus, Minsk
+375 (17) 252-52-54

Belarus, Vitebsk
+375 (212) 60-02-35

Kazakhstan, Astana
+7 (747) 848-65-44
+7 (923) 763-61-33

www.vicgroup.ru

Consultations on veterinary drugs, feed additives and hygiene products for livestock and poultry:
+7 (495) 777-67-67; www.vicgroup.ru.

Consultations on veterinary drugs for pets VETMARKET:
+ 7 (499) 769-20-77;
+ 7 (499) 769-30-77;
+ 7 (499) 769-31-77; www.vetmarket.ru

Consultations on veterinary instruments and equipment VETPRIBOR:
+7 (495) 777-67-67; www.vetpribor.ru.

HUMAN AND ANIMAL HEALTH IS OUR PASSION