GENXAMOX

ANTIBIOTIC

INJECTABLE SOLUTION

Health Registration No.: RIP-02-FAR-01968

Formula:

Each 100 mL contains:

Amoxicillin Trihydrate	12 g
Gentamicin Sulfate	4 g
Excipients q.s.	100 mL

SPECIES AND DOSAGE:



DOSAGE

ROUTE OF ADMINISTRATION: Deep intramuscular injection.

Administer every 24 hours. The duration of treatment is 3 to 5 days.

SPECIES	REFERENCE DOSE	PRACTICAL DOSE
Cattle / Equines / Sheep / Goats / Swine	Gentamicin: 2.5 mg/kg Amoxicillin: 8 mg/kg	1 mL/15 kg body weight

INIDICATIONS

GENXAMOX is an antibiotic combination of gentamicin and amoxicillin with bactericidal action. Thanks to their synergistic effect, it has a broad spectrum of activity against Gram-positive and Gram-negative bacteria, making it indicated for the treatment of mixed, severe, or complicated infections.

Shake the product well before use.

ROUTE OF ADMINISTRATION: Deep intramuscular injection

PHARMACOKINETICS

Gentamicin:

Following intramuscular administration, it reaches peak concentrations within 30 to 60 minutes and maintains therapeutic levels for up to 12 hours. It has a half-life of 1 to 2 hours and a volume of distribution of 0.2 to 0.3 L/kg. Excretion is primarily renal, with some accumulation in the body; therefore, its clearance is reduced in patients with impaired renal function.

Amoxicillin:

It is readily absorbed following intramuscular administration, reaching peak plasma concentrations between 0.5 and 1.5 hours. Its volume of distribution increases in cases of edema or fluid overload and decreases in states of dehydration. It exhibits low penetration into the eyes, central nervous system, bronchial secretions, peritoneal fluid, bone, and prostate. The gentamicin is distributed in pleural and synovial fluids, as well as in lung and kidney tissues, and crosses the placenta. It is rapidly eliminated via the urinary tract, with more than 90% of the dose excreted as unchanged drug.

MECHANISM OF ACTION

Gentamicin:
The mechanism of action involves irreversible binding to the bacterial 30S ribosomal subunit, interfering with protein synthesis and causing errors in messenger RNA translation. This leads to the production of defective proteins and, ultimately, bacterial death. Its action is bactericidal and concentration-dependent. Furthermore, it has no activity against fungi, viruses, or most anaerobic bacteria.

Amoxicillin:
The mechanism of action is based on binding to penicillin-binding proteins (PBPs), such as transpeptidases and carboxypeptidases, thereby interfering with the formation of cell wall mucopeptides and causing bacterial death. It is most effective against bacteria in the active growth phase. Differences in affinity for PBPs contribute to variations in its antimicrobial activity.

PRECAUTIONS – WARNINGS - CONTRAINDICATIONS

- Do not administer to animals with hypersensitivity to any of the components.
- Do not administer to animals with impaired renal function.
- Do not administer to pregnant females.
- Do not administer to species other than those authorized.

DRUG INTERACTIONS

None reported.

ADVERSE REACTIONS

- Doses higher than those recommended may cause neurotoxicity and nephrotoxicity.
- Use with caution in animals with neuromuscular disorders. Do not administer to animals with botulism.

WITHDRAWAL

Cattle: Meat: 30 days. Milk: 4 days.
Sheep: Milk: 10 days.
Goats: Milk: 10 days.
Pigs: Meat: 40 days.

Do not consume the kidneys of animals treated with gentamicin.

COMMERCIAL PRESENTATIONS

20 mL bottle
50 mL bottle
100 mL bottle
250 mL bottle
500 mL bottle.