The new macrolide in CLAS vial

COMPARATIVE BREAKAGE STUDY OF INJECTABLE ANTI-INFECTIVES VIALS UNDER VERTICAL DROP TEST BY FREE FALL IN STANDARDIZED CONDITIONS

In current veterinary products use, the resistance to breakage of vials, either of products packed in glass or CLAS vials in standardized conditions, is a feature of economical, practical and environmental interest.

The goal of the study was to compare resistance to breakage under vertical free fall of products packed in glass or CLAS vials in standardized conditions.

100% CLAS VIALS (N=33)

CONSEQUENCE

WITHOUT ANY VISIBLE RESISTED THE DROP TEST

100% GLASS VIALS (N=33)

RESULTED BROKEN

IPVS 2012

FULL RANGE OF PRACTICAL ANTI-INFECTIVES INJECTABLES

SPIRAMYCIN AMOXICILLIN FLORFENICOL MARBOFLOXACIN CEFTIOFUR OXYTETRACYCLIN BENZYLPENICILLIN

WITHDRAWAL PERIODS:

Pigs: Intramuscular use: 5ml/40 kg. The injection may be repeated once after 24 hours.

Cattle: Milk: 10 days; Meat and offal: 7 days. Intramuscular use: 5ml/100 kg.

INDICATIONS:


REFERENCES:

**Spiramycin:**
High diffusion in infected tissues

**IN-DEPTH TISSUE CONCENTRATION AND PERSISTANCE**
- Optimized diffusion through the cell membranes: high liposolubility of spiramycin.
- Intracellular Ionic-Trapping: the acid intracellular pH captures the ionized form of spiramycin. In this ionized form the spiramycin remains captured inside the cell.

**PHAGOCYTE CARRYING INTO INFECTED TISSUES**
The marked liposolubility deriving from the weak base spiramycin enables an excellent penetration into tissues. Spiramycin accumulates in phagocytes, where concentrations may be 10 to 20 fold higher than in serum. In case of infection, the local inflammatory process attracts spiramycin-carrier phagocytes, and reinforces the local antimicrobial effect of spiramycin.

**SPECTRUM OF ACTIVITY OF SPIRAMYCIN FOR SWINE**

- **Bovine respiratory disease**
- **Staphylococcus spp**
- **Streptococcus suis**
- **Pasteurella multocida**
- **Mycoplasma hyopneumoniae**

**LONG DURATION OF ACTIVITY**
Due to high liposolubility and reinforced by phagocyte concentration.

**POST-ANTIBIOTIC EFFECT**: the antimicrobial effect prolongs beyond the period over MIC levels.

**ANTI-ADHESINE EFFECT**, high efficacy on Gram +.

**Mastitis Treatment**
- The pathology of the piglet is mainly linked to a clinical or a subclinical status of the mother sow.
- The sow suffering from mastitis can be affected by anorexia and a bad start of the milk secretion. This can result in high piglet mortality and heterogeneousness of litters/weaning weight.

**Optimized diffusion through the cell membranes: high liposolubility of spiramycin.**

**Intracellular Ionic-Trapping**: the acid intracellular pH captures the ionized form of spiramycin. In this ionized form the spiramycin remains captured inside the cell.

**Spiramycin**:
Broad set of actions

**A targeted use**

**Inflamma**
- Bacteriostatic to bactericidal activity
- Long post-antibiotic effect
- Phagocytosis
- Anti-adhesine effect
- Anti-toxic effect (Inhibition of protein synthesis)
- Intracellular concentration in phagocytes
- Recruitment of phagocytes on infection site (IL)

**Antimicrobial effect**
- Spiramycin
- Pathogenic bacteria
- Phagocyte
- Interleukins

**Spectrum of Activity**

- **MASTITIS**
- **RESPIRATORY DISEASE**

- Streptococcus spp
- Streptococcus suis
- Pasteurella multocida
- Mycoplasma hyopneumoniae