INCOMYCN is an antibiotic belonging to the lincosamide class, with characteristics similar to the macrolides. Its spectrum of action includes principally Gram+ bacteria and mycoplasmas.

SPECTINOMYCIN belongs to the class of the aminocyclitol antibiotics, similar to the aminoglycosides. It is particularly active against Gram- bacteria and mycoplasmas, but also against some Gram+ bacteria.

The Lincomycin + Spectinomycin association, in addition to the complementary spectra of antibacterial activity of the two antibiotics, permits a potentiation of the pharmacological action and an anti-bacterial activity which is noticeably greater than when the two antibiotics are used alone.

The figure illustrates the complementary activities and the synergy of action of the Lincomycin + Spectinomycin association. The blue sector shows the microorganisms against which Lincomycin is active, the yellow sector those against which Spectinomycin is efficacious, while the green sector indicates the microorganisms inhibited by the synergic action of both antibiotics.
THE MECHANISM OF ACTION

The synergism of the association is due to the complementary mechanism of action: both antibiotics act by inhibiting protein synthesis; Lincomycin blocks ribosomal subunits 50S, preventing the formation of the peptide bond between the various amino acids; Spectinomycin blocks subunit 30S and prevents the exact incorporation of the amino acids in the polypeptide chain which is forming.

The antibiotic activity of MICOSPECTONE is potentiated by an alkaline environment and by the presence of serum or whole blood, permitting an intense and efficacious action at the foci of phlogosis, even in the presence of exudates.

PHARMACOKINETICS

After intramuscular administration, the two antibiotics are readily and rapidly absorbed, while after oral administration, action is principally at the gastroenteric level.

The low degree of drug-protein binding permits a rapid, massive distribution to the various organic systems, also favoured by the low molecular weight of the two active substances.

In particular, while Lincomycin, in virtue of its elevated lipophilia, tends to concentrate more in the various tissues of the organism, including bone, Spectinomycin distributes principally to the vascular and extravascular regions.

Elevated concentrations are also reached in milk, particularly if the milk tends to be on the alkaline side, as happens in cases of mastitis.

Elimination of Lincomycin, after hepatic inactivation, takes place predominantly by the hepatobiliary route, where it reaches concentrations 5-10 times greater than in the serum; Spectinomycin, on the other hand, is eliminated for the most part in unmodified form, via the urine.

LOCAL AND GENERAL TOLERANCE

The association is characterised by an excellent local and general tolerance, even after repeated administrations.

Studies carried out on laboratory animals have demonstrated that the two active substances are not teratogenic and do not have any negative effect on fertility.

WITHDRAWAL TIME

Milk: 2 days
Meat: bovine - swine - ovine 14 days • birds 7 days

* The animals were treated with the two drugs by the intramuscular route, each at a dose of 20 mg/Kg b.w.
MICOSPECTONE is efficacious in the various forms of bacterial enteritis in neonates and in the post-weaning period in the swine and calf, also due to the establishment of the enterohepatic circulation, which permits a prolonged action in the intestine.

MICOSPECTONE also efficaciously combats the symptoms of superficial necrotic enteritis which affects fattening swine.

MICOSPECTONE IN ENTERIC PATHOLOGIES

MICOSPECTONE, thanks to its specific activity against Staphylococci, and its capacity to reach appropriate concentrations even in peripheral zones, is the drug of choice in therapy against cutaneous diseases of a bacterial nature; of these, exudative epidermitis in piglets takes on a particular importance due to its severity and widespread nature.

MICOSPECTONE IN RESPIRATORY DISORDERS

MICOSPECTONE, owing to its immediate, broad-spectrum action, its excellent local and general tolerance and its simplicity of use, is the drug of preference in the various forms of:

- Septicaemia
- Omphalitis
- Pneumonia
- Diarrhoea
- Polyarthritis

MICOSPECTONE IN LOCOMOTOR DISORDERS

MICOSPECTONE, owing to its high tropism for bone tissue and serous membranes, and owing to its capacity to act optimally even in the presence of exudates, shows itself to be excellent instrument in systemic therapy of inflammatory articular processes and hoof diseases:

- Arthritis
- Septic Arthritis
- Polyarthritis in Bovines, Swines, Ovines-Caprines
- Polyarthritis Polyserositis due to Mycoplasmas in Piglets
- Interdigital Phlegmon in Cattle
- Ovine Foot Rot

MICOSPECTONE IN CUTANEOUS PATHOLOGIES

MICOSPECTONE, owing to its specific activity against Staphylococci, and its capacity to reach appropriate concentrations even in peripheral zones, is the drug of choice in therapy against cutaneous diseases of a bacterial nature; of these, exudative epidermitis in piglets takes on a particular importance due to its severity and widespread nature.

POSOLOGIES

CATTLE, SHEEP, GOATS AND SWINE:

- Injectable solution: 1 ml/10 Kg b.w.
- Powder for oral use

CALVES:

- 6 g/100 Kg b.w.
- 0.3 g/10 Kg b.w.

PIGLETS:

- Powder for oral use

WITHDRAWAL PERIODS

- Milk: 2 DAYS
- Meat: 14 DAYS
MICOSPECTONE in Avian Pathology

MICOSPECTONE in powder form, owing to its broad spectrum of action which electively includes mycoplasmas, administered in the drinking water, is an excellent means of treatment and control of the most frequent infectious pathologies of a bacterial nature in Avian species.

In particular, MICOSPECTONE possesses a high degree of efficacy against:

**AVIAN MYCOPLASMAS**
- C.R.D. due to Mycoplasma gallisepticum
- Synovitis due to Mycoplasma synoviae
- Infections due Mycoplasma meleagridis

**COLIBACILLOSIS**
- Pulmonary disease
- Fowl typhoid
- Arizona disease
- Salmonellosis in general

**MICOSPECTONE IN AVIAN PATHOLOGY**

- Pullorum disease
- Salmonellosis in general
- Arizona disease
- Fowl typhoid
- Salmonellosis in general

**POSOLOGIES**

- **Up to 3 weeks of age:**
  - 3 g/10 Kg b.w. powder for oral use

- **After 3 weeks of age:**
  - 1 g/10 Kg b.w.

**WITHDRAWAL PERIODS**

- MEAT: 7 DAYS

**MICOSPECTONE**
- Two active substances with a synergic effect in one single intramuscular administration
- Excellent local and general tolerance even in neonate animals
- Rapid, elevated absorption of the active substances
- Maximum distribution with elevated tropism for foci of phlogosis
- Short withdrawal periods for meat and milk