

# UBRICINA LACTACIÓN PLUS

Q-0209-124



## Local suspension

Cephalosporin of broad spectrum, antimastitic and steroidal anti-inflammatory in lactation period.



### Formula

Each 6 g contains	
Ceftiofur hydrochloride	250 mg
Prednisolone acetate	10 mg
Excipient c.b.p.	6 g

### Use in species



Cattle (meat and milk) during lactation

### INDICATIONS

For the treatment of clinical, subclinical, acute or chronic mastitis, caused by Gram-positive and Gram-negative organisms, including Beta-lactamase producing varieties in dairy cattle.

### CLINICAL PHARMACOLOGY

#### • PHARMACOKINETICS:

After its administration, it is rapidly metabolized to desfloyl ceftiofur, which contains a sulfhydryl group and furoic acid. The desfuroil ceftiofur contains an intact  $\beta$ -lactam ring and is the main microbiologically equipotent active residue to ceftiofur against most of the pathogens that affect domestic animals. The concentrations in the plasma reached a maximum of  $2.85 \pm 1.11$  mg / ml two hours after the injection, and decreased during the following 22 hours to reach  $0.64 \pm 0.14$  mg / ml at 24 hours after treatment. The concentrations in the lochia or fluids reached a maximum concentration of  $0.98 \pm 0.25$  mg / g at 4 hours after the injection, and decreased  $0.22 \pm 0.21$  mg / g at 24 hours after treatment. The serum level is determined by the binding to plasma proteins and the rate of renal elimination, the distribution of this is limited to extracellular fluids, while we find high concentrations in liver, kidney, intestine, bile, lymph and semen; penetrate well the pleural, pericardial and synovial fluids. Urinary concentrations of active form are extremely high, although they penetrate poorly into the prostatic fluid.

Elimination is almost completely through the renal pathway, through glomerular filtration and tubular secretion, where high levels are explained in the urine, which exceed the blood values. It is metabolized at the hepatic level to desfuroyl ceftiofur as the primary metabolite and furoic acid. Prednisolone is rapidly absorbed. Maximum plasma concentrations after administration take place at 1-2 hours. Once absorbed, prednisolone is widely distributed. The drug binds extensively to plasma proteins, only the fraction that remains free is active. Prednisolone, like all corticosteroids, crosses the placenta and is excreted in milk. The drug is metabolized in the liver and eliminated in the urine in the form of sulfates and conjugated glucuronides.

#### • PHARMACODYNAMICS:

The bacterial cell wall is fundamental for bacterial growth and development, and has a heteropolymer or peptidoglycan component that provides mechanical stability by virtue of its lattice structure.

This peptidoglycan is composed of glucan chains that are linear branches of two alternating amino sugars: N-acetyl glucosamine and N-murine acetyl, and which are interlinked by peptide chains. The biosynthesis of this peptidoglycan involves about thirty bacterial enzymes and is generated in three phases, namely:

The formation of the precursor in the cytoplasm.

UDP acetylmuramyl-pentapeptide and UDP acetylglucosamine, to form a long polymer.

A transpeptidation reaction is generated, carried by a transpeptidase, bound to the cell membrane, giving as a final product the peptidoglycan.



## • PHARMACODYNAMICS:

In such a way that the action of ceftiofur consists of blocking the formation of the cell wall, inhibiting the action of transpeptidase, blocking the development of the mechanism of transpeptidation of the amino sugars, therefore the bacterial cell wall is not formed dies by the forces of external pressures.

Prednisolone is a synthetic glucocorticoid that combines all the general properties of corticosteroids. It has an anti-inflammatory and glucocorticoid activity greater than hydrocortisone, is three times more potent than the hormone from the adrenal cortex and manifests a marked decrease in mineralocorticoid activity in relation to hydrocortisone, which exerts its biochemical effect at the cellular level and not in the plasma. Prednisolone is bound to plasma proteins by 70 to 90% and its half-life is 2 to 4 hours.

## DOSE

Cattle: A 6 g syringe in each affected mammary gland.

Apply immediately after having milked and disinfected the nipple sphincter, give a gentle massage on the mammary gland to achieve a better diffusion of the medicine in this. It is recommended to seal the nipples.

The dose should be repeated every 24 hours, at the discretion of the veterinarian.

## ROUTE OF ADMINISTRATION:

Intramamaria

## WARNINGS

Do not administer in animals sensitive to the ingredients of the formula.

Keep at room temperature and in a cool, dry place protected from sunlight.

Do not leave it within the reach of children and pets.

Consult the veterinarian.

Your purchase requires a medical prescription.

## DRUG INTERACTIONS

Sulfonamides antagonize the effects of penicillins.

Penicillins are antagonists with chloramphenicol, erythromycin and tetracyclines.

## WITHDRAWAL TIME

The milk of treated animals should not be used for human consumption or elaboration of derivatives, until 32 hours have elapsed since the last

## PRESENTATION:

Box with 24 syringes of 6 g each