Duasol I A INJECTION

For Veterinary Use Only

COMPOSITION:

Each mi contains	
Oxytetracycline (as HCI)	300mg
Flunixin Meglumine	20mg

INDICATIONS:

Indicated for treatment of respiratory diseases (Particularly with Mannheimia and Pasteurella infections) where anti- inflammatory and antipyretic effect is required. Bovine respiratory disease (BRD) Hemorrhagic septicemia

Enteritis Mastitis Dinhtheria Anthrax

DOSAGE & ADMINISTRATION:

Duasol is administered by deep intramuscular injection to cattle. The recommended dosage is 1ml per 10Kg body weight. This dosage is in accordance with the individual recommended dosage for oxytetracycline and flunixin meglumine that are 30mg/kg and 2mg/kg respectively. It is single dose treatment with action upto 5-6 days. However, the effect of flunixin lasts only one day and after first day DUASOL inj (Flunixin meglumine) may be administered to have antipyretic or anti-inflammatory effects.

PHARMACOLOGY: PHARMACODYNAMICS:

Duasol has its activity as per its active ingredients

Oxytetracycline is bacteriostatic antibiotic.

It acts by inhibiting protein synthesis by reversibly binding to 30S ribosomes of amino acyltransfer-RNA It is also believed that some of its binding is with 50S also.

Mechanism of entering the bacterial cell is by diffusion and energy requiring active transport also.

Flunixin meglumine is a non-steroidal anti inflammatory drug. It acts through inhibition of Cyclo oxygenase enzymes (COX-1 & COX-2). Thereby, decreasing the formation of Prostaglandins, thromboxane and other pain mediators, results in analgesia, antipyretic and antiinflammatory effects. Suppression of eicosanoid formation also results in its anti-endotoxic effects.

PHARMACOKINETICS:

After the intramuscular administration of Duasol, oxytetracycline is absorbed slowly, that vests sustained action, but completely. Once absorbed, it is well distributed throughout the body with highest concentrations found in liver, spleen, kidney and lungs.

Duasol	Cmax	Tmax	T1/2
	mcg/ml	Hr	Hr
Oxytetracycline	11.11	5.1	36.54
Flunixin meglumine	2.4	1.0	4.51

Oxytetracycline is deposited irreversibly in the growing bones and in dentin and enamel of unerupted teeth of young animals, or even the fetus if transplacental passage occurs. Drug bound in this fashion is pharmacologically inactive Because of this property, it may serve as markers in developing bone or in proliferating bone tissue. Oxytetracycline is less protein bound as compared to other tetracyclines, eq, oxytetracycline, 30%: tetracycline, 60% doxycycline. 90%.

Oxytetracycline is slowly eliminated from body via urine. So is its sustained persistence in body and longer duration of action Flunixin meglumine exhibits a high degree of plasma protein binding (approx. 99%), however, free or unbound drug appears to readily partition into body tissues. Its elimination is primarily through bile excretion. Renal elimination is also extensive.

WARNINGS

CONTRAINDICATIONS:

Animals suffering from cardiac, hepatic or renal insufficiencies, gastric ulceration.

Avoid use in dehydrated, hypovolaemic or hypotensive animals as potential risk of renal toxicity

No evidence of teratogenicity, however. Not recommended in pregnant and lactating animals. Hypersensitivity to tetracyclines or NSAIDs.

SPECIAL PRECAUTIONS:

Use in less than 6 weeks of age or in aged animals may involve additional risk due to the anti-prostaglandin effects of flunixin on renal function

In case of accidental self injection, allergic reaction may occur, medical advice required.

In case of contact with eyes or skin, rinse with copious amounts of water

Maximum volume per injection site is 15ml. Exceeding dose should be administered at other side. Use another separate syringe for other injection.

ADVERSE REACTIONS:

A transient, mild reaction at the injection site may be observed following IM administration and may persist for up to 30 days.

In some cases, a mild increase in body temperature may be seen. Any increase will be transient and unlikely to be in animals already suffering from pyrexia The use of tetracyclines during the period of tooth and bone development may lead to discolorations. INTERACTIONS:

NSAIDs highly bound to plasma proteins, not to be given in 24 hours of administration of DUASOL. Concurrent use of nephrotoxic drugs & corticosteroids. Mixing of drug containing Al, Mg. Ca make chelate. WITHDRAWAL TIME:

Meat: 35 days.

Meat: 8 days.

PRECAUTIONS:

- Store between15-25°C in a cool & dry place away from liaht.
- Don't use the retained injection after 28 days of first Prick.
- Discard retained dose according to the local authority regulations.
- Keep out of the reach of children. Consult the veterinarian before use

PRESENTATION: 10ml, 50ml, 100ml

Selmore's Specs.





