**INDICATIONS**

**Swine**

Inject intramuscularly as a single dose in the neck at a dosage of 2.5 mg/kg BW. Do not inject more than 2.5 mL per injection site.

**DOSAGE AND ADMINISTRATION**

**Swine**

Inject intramuscularly as a single dose in the neck at a dosage of 2.5 mg/kg BW.

**CLINICAL PHARMACOLOGY**

At physiological pH, tulathromycin (a weak base) is approximately 50 times more soluble in hydrophilic than hydrophobic media. This solubility profile is consistent with the extracellular pathogen activity typically associated with the macrolides. Markedly higher tulathromycin concentrations are observed in the lungs as compared to the plasma. The extent to which lung concentrations represent free (active) drug was not examined. Therefore, the clinical relevance of these elevated lung concentrations is undetermined.

Although the relationship between tulathromycin and the characteristics of its antimicrobial effects has not been characterized, as a class, macrolides tend to be primarily bacteriostatic, but may be bactericidal against some pathogens. They also tend to exhibit concentration independent killing, the rate of bacterial eradication does not change once serum drug concentrations reach 2 to 3 times the minimum inhibitory concentration (MIC) of the targeted pathogen. Under these conditions, the time that serum concentrations remain above the MIC becomes the major determinant of antimicrobial activity. Macrolides also exhibit a post-antibiotic effect (PAE), the duration of which tends to be both drug and pathogen dependent. In general, by increasing the macrolide concentration and the exposure time, the PAE will increase to some maximal duration. Of the two variables, concentration and exposure time, drug concentration tends to be the most powerful determinant of the duration of PAE.


**Swine**

Following intramuscular administration to feeder pigs at a dosage of 2.5 mg/kg BW, tulathromycin is completely and rapidly absorbed. Following intramuscular administration to feeder pigs at a dosage of 2.5 mg/kg BW, tulathromycin is completely and rapidly absorbed. Typically associated with the macrolides.

**MICROBIOLOGY**

**Swine**

In vitro activity of tulathromycin has been demonstrated against Actinobacillus pleuropneumoniae, Pasteurella multocida, Bordetella bronchiseptica, Haemophilus parasuis, and Mycoplasma hypepneumoniae. The MICs of tulathromycin against isolated SRD pathogens were determined using methods recommended by the Clinical and Laboratory Standards Institute (CLSI, M31-A1 and M31-A2), MICs for Haemophilus parasuis were determined using Veterinary Fastidious Medium and were incubated up to 48 hours at 35 to 37°C in a CO2-enriched atmosphere. All MIC values were determined using the 1:2 isomer ratio of this compound. Isolates obtained in 2007 and 2008 were from lung samples from saline-treated pigs and non-treated sentinel pigs enrolled in the Control of SRD field study in the U.S. and Canada. Isolates obtained in 2007 and 2008 were from lung samples from saline-treated and DRAXXIN-treated pigs enrolled in the Control of SRD field study in the U.S. and Canada. The results are shown in Table 4.

**CONTRAINDICATIONS**

The use of DRAXXIN Injectable Solution is contraindicated in animals previously found to be hypersensitive to the drug.