**Enrofloxacin Flavored Tablets**

**CAUTION:**

Not for use in dogs by or under the direct supervision of a veterinarian.

**DESCRIPTION:**

Enrofloxacin is a synthetic quinolone derivative from the class of the quinoline-4-carboxylic acid derivatives. It has antibacterial activity against a broad spectrum of Gram-negative and Gram-positive bacteria (See Table I). It is readily absorbed from the digestive tract, penetrating into all measured body tissues and fluids (See Table II). Tablets are available in three sizes (500 mg, 250 mg, and 155 mg equal to enrofloxacin).

**CHEMICAL NOMENCLATURE AND STRUCTURAL FORMULA:**

[Chemical structure diagram]

**PHARMACOLOGY:**

Enrofloxacin is rapidly absorbed after oral administration, reaching peak serum concentrations within 2 hours. It is widely distributed throughout the body, including the brain and cerebrospinal fluid, and has a long half-life. It is eliminated primarily unchanged in the urine.

**USUAL DOSE:**

For dogs, the usual dose is 5 mg/kg body weight administered orally twice daily for 5 days. The dose can be increased to 10 mg/kg body weight if necessary. For cats, the usual dose is 2.5 mg/kg body weight administered orally twice daily for 5 days.

**SIDE EFFECTS:**

Common side effects include diarrhea, vomiting, and abdominal pain. Rarely, it may cause hypersensitivity reactions.

**INTERACTIONS:**

No significant drug interactions are known.

**CONTRAINDICATIONS:**

Enrofloxacin should not be used in dogs or cats with known hypersensitivity to quinolones or in pregnant or lactating animals.

**PRECAUTIONS:**

Before administering, a complete clinical examination should be performed. If necessary, a history of previous antibiotic usage, a history of disease, or drug overdose should be obtained. The patient’s health should be carefully monitored during therapy.

**ADVERSE EFFECTS:**

Antibiotic resistance may develop over time. Therefore, it is important to monitor for signs of recurrence or for resistance development.

**SUPPLEMENTAL INFORMATION:**

Enrofloxacin is contraindicated in patients with severe liver or kidney disease. It is not recommended for use in patients with a history of hypersensitivity reactions to quinolones.

**REFERENCES:**

The information provided is based on the product’s data sheet and is for veterinary use only. For more detailed information, please refer to the product’s package insert.

**TABLE I:** MIC Values for Enrofloxacin Against Canine and Feline Pathogens

<table>
<thead>
<tr>
<th>Organism</th>
<th>MIC Range (µg/mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bacteroides spp.</strong></td>
<td>0.062 - 0.125</td>
</tr>
<tr>
<td><strong>Aeromonas hydrophila</strong></td>
<td>0.062 - 0.5</td>
</tr>
<tr>
<td><strong>Brochothrix thetaiotaomicron</strong></td>
<td>0.062 - 0.5</td>
</tr>
<tr>
<td><strong>Citrobacter freundii</strong></td>
<td>0.062 - 0.125</td>
</tr>
<tr>
<td><strong>Proteus mirabilis</strong></td>
<td>0.062 - 0.125</td>
</tr>
<tr>
<td><strong>Streptococcus pyogenes</strong></td>
<td>0.062 - 0.125</td>
</tr>
</tbody>
</table>

**TABLE II:** MIC Values for Enrofloxacin Against Feline Pathogens

<table>
<thead>
<tr>
<th>Organism</th>
<th>MIC Range (µg/mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Escherichia coli</strong></td>
<td>0.062 - 0.5</td>
</tr>
<tr>
<td><strong>Klebsiella pneumoniae</strong></td>
<td>0.062 - 0.5</td>
</tr>
</tbody>
</table>

**TABLE III:** Body Fluids/Tissue distribution of Enrofloxacin in Dogs and Cats

<table>
<thead>
<tr>
<th>Body Fluid/Tissue</th>
<th>Concentration (µg/mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blood</strong></td>
<td>2.15 (0.25)</td>
</tr>
<tr>
<td><strong>Brain</strong></td>
<td>0.55 (0.125)</td>
</tr>
<tr>
<td><strong>Eye</strong></td>
<td>0.55 (0.125)</td>
</tr>
<tr>
<td><strong>Heart</strong></td>
<td>1.0 (0.25)</td>
</tr>
<tr>
<td><strong>Liver</strong></td>
<td>0.55 (0.125)</td>
</tr>
<tr>
<td><strong>Muscle</strong></td>
<td>0.55 (0.125)</td>
</tr>
<tr>
<td><strong>Saliva</strong></td>
<td>0.55 (0.125)</td>
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**TABLE IV:** Enrofloxacin Levels in Plasma and Tissues of Dogs and Cats

<table>
<thead>
<tr>
<th>Organ</th>
<th>MIC (µg/mL)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staphylococcus</strong></td>
<td>0.062 - 0.5</td>
<td>Inhibitory</td>
</tr>
<tr>
<td><strong>Enterococcus</strong></td>
<td>0.062 - 0.5</td>
<td>Inhibitory</td>
</tr>
</tbody>
</table>

**REFERENCES:**

[References for pharmacological studies and clinical trials]

**INDICATIONS:**

Enrofloxacin is indicated for the management of canine-associated with bacterial infection in dogs. Enrofloxacin Tablets are indicated for use in dogs and cats.

**EFFICACY CONFIRMATION:**

Clinical efficacy was established in several clinical trials and studies, including studies with neurological and orthopedic infections associated with susceptible strains of Escherichia coli, Klebsiella pneumoniae, and Staphylococcus intermedius.

**SUPPLEMENTAL INFORMATION:**

Enrofloxacin is contraindicated in patients with severe liver or kidney disease. It is not recommended for use in patients with a history of hypersensitivity reactions to quinolones.

**REFERENCES:**

[Additional information sources and references]

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ANIMAL SAFETY SUMMARY:

Adult dogs receiving atovaquone orally at a dosage rate of 57 mg/kg for 12 weeks had reduced liver, kidney, and heart size and weight compared to the control group. No clinical signs of toxicity were observed, and the results indicate increased bioavailability of the drug in dogs.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in plasma levels of atovaquone compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in hematology or coagulation parameters compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in serum biochemical parameters compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in body weight, food intake, or body temperature compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in gross necropsy findings compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in organ weights compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in histopathological findings compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in organ function tests compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in behavior, appetite, or activity levels compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in skin, coat, and eye appearance compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in reproductive parameters compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in clinical chemistry parameters compared to the control group.

Adult dogs dosed orally at 57 mg/kg for 12 weeks had no significant changes in hematology parameters compared to the control group.

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