ProHeart® 6 (moxidectin)

Sustained Release Injectable for Dogs

**CAUTION** Federal (U.S.A) law restricts this drug to use by or on the order of a licensed veterinarian.

**DESCRIPTION** ProHeart® 6 (moxidectin) Sustained Release Injectable consists of two separate vials. One vial contains 10% moxidectin sterile microspheres and the second vial contains a specifically formulated sterile vehicle for constitution with the microspheres. No other diluent should be used. A clear or transparent appearance of the vehicle is normal. Each mL of constituted product contains 3.4 mg moxidectin, 3.1% glycerin tristearate, 2.4% hydroxypropyl methylcellulose, 0.87% sodium chloride, 0.17% methylparaben, 0.02% propylparaben and 0.0017% butylated hydroxytoluene. Hydrochloric acid is used to adjust pH.

**PROPERTIES** Moxidectin is a semi-synthetic methylamine derivative of nemacidin which is a fermentation product of Streptomyces cyaneogriseus subspecies noncyaneogriseus. Moxidectin is a pentacyclic 16-membered lactone macrolide.

**INDICATIONS** Following ProHeart with 6, peak moxidectin blood levels will be observed approximately 7–14 days after treatment. Administering one of the six month dosing intervals will result in drug concentrations that are negligible. Accordingly, little to no drug accumulation is expected to occur with repeated administrations.

**INDICATIONS** ProHeart 6 is indicated for use in dogs six months of age and older for the prevention of heartworm disease caused by *Dirofilaria immitis*.

**INDICATIONS** ProHeart 6 is indicated for the treatment of existing larval and adult hookworm (*Ancylostoma caninum* and *Uncinaria stenocephala*) infections.

**DOSAGE AND ADMINISTRATION**

**Owners should be given the Client Information Sheet for ProHeart 6 to read before the drug is administered and should be advised to observe their dogs for potential drug toxicity described in the sheet.**

**Frequency of treatment:** ProHeart 6 prevents infection by *D. immitis* for six months when administered within one month of the dog’s first exposure to mosquitoes. Follow-up treatments may be given every six months if the dog has continued exposure to mosquitoes and if the dog continues to be healthy and without weight loss. When replacing another heartworm preventive product, ProHeart 6 should be given 10 to 14 days prior to the first dose of the new product.

**ProHeart 6 eliminates the larval and adult stages of *A. caninum* and *U. stenocephala* present at the time of treatment. However, persistent effectiveness has not been established for this indication. Re-infection with *A. caninum* and *U. stenocephala* may occur soon after treatment.**

**Dose:** The recommended subcutaneous dose is 0.05 mL of the constituted suspension/kg body weight (0.0272 mL/Lb). This amount of suspension will provide 0.17 mg moxidectin/kg body weight (0.0773 mg/kg). To ensure accurate dosing, calculate each dose based on the dog’s weight at the time of treatment. Do not over-grow puppies in anticipation of their expected adult weight. The following dosage chart may be used as a guide.

<table>
<thead>
<tr>
<th>Dog Wt.</th>
<th>lb</th>
<th>kg</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.25</td>
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<td>1.25</td>
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<tr>
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<td>5.25</td>
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</tr>
</tbody>
</table>

**ADVERSE REACTIONS**

In field studies, the following adverse reactions were observed in dogs treated with ProHeart 6: anaphylaxis, vomiting, diarrhea (with and without blood), listlessness, weight loss, seizures, injection site pruritus, and elevated body temperature. Dogs with clinically significant weight loss (<10%) were more likely to experience a severe adverse reaction.

In a laboratory effectiveness study, dogs with 4- and 6-month-old heartworm infections experienced vomiting, lethargy and bloody diarrhea. These signs were more severe in the dogs with 4-month-old heartworm infections, including one dog that was recumbent and required supportive care, than in the dogs with older (6-month-old) infections.

**STORAGE INFORMATION** Store the unconstituted product at or below 25°C (77°F). Do not expose to light for extended periods of time. After constitution, the product is stable for 8 months at or below 25°C (77°F). Do not freeze.

**CONTRAINdications** ProHeart 6 is contraindicated in animals previously found to be hypersensitive to this drug.

**Human WARNINGS** Not for human use. Keep this and all drugs out of the reach of children.

**WArnings** ProHeart 6 should be administered with caution in dogs with pre-existing allergic disease, including food allergy, atopy, and flea allergy dermatitis. In these dogs, adverse reactions have resulted in liver disease and death. Anaphylactic and anaphylactoid reactions should be treated immediately with the same measures used to treat hypersensitivity reactions to vaccines and other injectable products.

**Owners should be given the Client Information Sheet for ProHeart 6 to read before the drug is administered and should be advised to observe their dogs for potential drug toxicity described in the sheet.** Do not administer ProHeart 6 to dogs who are sick, debilitated, overweight or who have a history of weight loss.

**Precautions** Owners should be given detailed occupational safety information. Accidental ingestion occurs, contact a Poison Control Center or a physician immediately. The Safety Data Sheet (SDS) contains more detailed occupational safety information.

** WARNINGS** ProHeart 6 should be administered at six-month intervals to client-owned dogs under field conditions. There were no reports of injection site reactions in these field studies and evaluations of the injection site revealed no abnormalities.

**Injection Site Reactions:** Injection site observations were recorded during effectiveness and safety studies. In clinical studies, ProHeart 6 was administered at six-month intervals to client-owned dogs under field conditions. There were no reports of injection site reactions in these field studies and evaluations of the injection site revealed no abnormalities.

**In a laboratory safety study, ProHeart 6 was administered at 1, 3 and 5 times the recommended dose to 7 to 8 month old puppies.** Injection site reactions included fluid/mucoid exudate and irritation. Some dogs developed transient, localized inflammatory injection reactions. Some dogs treated with ProHeart 6 in laboratory effectiveness studies developed transient, localized inflammatory injection site reactions. These injection site reactions were visible grossly for up to 3 weeks after injection. Histologically, well-defined granulomas were observed in some dogs at approximately 5 months after injection.

**CONSTRUCTION PROCEDURES** The two-part ProHeart 6 product must be mixed at least 30 minutes prior to the intended time of use. See CONSTRUCTION PROCEDURES (for initial mixing instructions). Once constituted, stir the Swirl the bottle gently before every use to uniformly re-suspend the microspheres. Withdraw 0.05 mL of suspension/kg body weight into an appropriately sized syringe fitted with an 18G or 20G hypodermic needle. Dose promptly after drawing into dosing syringe. If administration is delayed, gently roll the dosing syringe prior to injection to maintain a uniform suspension and accurate dosing.

Using aseptic technique, inject the product subcutaneously in the left or right side of the dorsum of the neck cranial to the scapula. No more than 3 mL should be administered in any one injection site (the location) of each injection (left or right side) should be noted so that prior injection sites can be identified and the next injection can be administered on the opposite side.

**INFORMATION FOR DOG OWNERS** Always provide Client Information Sheet and review with owners before administering ProHeart 6. Owners should be advised of the potential for allergic reactions, including anaphylaxis, and be informed of the clinical signs associated with drug toxicity (see WARNINGS, PRECAUTIONS and ADVERSE REACTIONS sections). Owners should be advised to contact their veterinarian immediately if signs of toxicity are observed. The vast majority of adverse reactions with drug related adverse reactions have recovered when the signs are recognized and veterinary care, if appropriate, is initiated.

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**Human WARNINGS** Not for human use. Keep this and all drugs out of the reach of children.

**WArnings** May cause slight irritation to the upper respiratory tract if inhaled. May be harmful if swallowed. If contact with the eyes occurs, rinse thoroughly with water for 15 minutes and seek medical attention immediately. If accidental ingestion occurs, contact a Poison Control Center or physician immediately. The Safety Data Sheet (SDS) contains more detailed occupational safety information.

**Precautions** Care should be used when administering ProHeart 6 concurrently with vaccinations. Adverse reactions, including anaphylaxis, have been reported following the concomitant use of ProHeart 6 and vaccinations (see WARNINGS).

**Prior to administration of ProHeart 6, the health of the patient should be assessed by a thorough medical history, physical examination and diagnostic testing as indicated (see WARNINGS).**

**ProHeart 6 should not be used more frequently than every 6 months.**

The safety and effectiveness of ProHeart 6 has not been evaluated in dogs less than 6 months of age.

Caution should be used when administering ProHeart 6 to heartworm positive dogs (see ADVERSE REACTIONS). Prior to administration of ProHeart 6, dogs should be tested for existing heartworm infections. Infected dogs should be treated to remove adult heartworms. ProHeart 6 is not effective against adult 0.2 mm and, while the number of circulating microfilariae may decrease following treatment, ProHeart 6 is not effective for microfilariae clearance.

**ADVERSE REACTIONS** In field studies, the following adverse reactions were observed in dogs treated with ProHeart 6: anaphylaxis, vomiting, diarrhea (with and without blood), listlessness, weight loss, seizures, injection site pruritus, and elevated body temperature. Dogs with clinically significant weight loss (<10%) were more likely to experience a severe adverse reaction.

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