

# Heartworm Treatment Plan

## August 10, 2022

### In a dog diagnosed and verified as heartworm positive

- Positive antigen (Ag) test verified with 2nd Ag or microfilaria (MF) test
- If no MF are detected, confirm with second Ag test from a different manufacturer
- Apply an EPA-registered canine topical product labeled to repel and kill mosquitoes
- Begin exercise restriction - the more pronounced the signs, the stricter the exercise restriction

### If the dog is symptomatic:

- Stabilize with appropriate therapy and nursing care
- Prednisone prescribed at 0.5 mg/kg BID 1st week, 0.5 mg/kg SID 2nd week, 0.5 mg/kg EOD 3rd and 4th week

## August 11, 2022

### Administer appropriate heartworm preventive

- If MF are detected, pre-treat with antihistamine and/or glucocorticosteroids, if not already on prednisone, to reduce risk of anaphylaxis
- Observe for at least 8 hours for signs of reaction

## August 11, 2022 - September 7, 2022

### Administer doxycycline 10 mg/kg BID for 4 weeks

- Reduces pathology associated with dead heartworms
- Disrupts heartworm transmission

## September 9, 2022

- Administer appropriate heartworm preventive
- Apply an EPA-registered canine topical product to repel and kill mosquitoes

## September 10, 2022

A one-month wait period following doxycycline before administering melarsomine is currently recommended as it is hypothesized to allow time for the Wolbachia surface proteins and other metabolites to dissipate before killing the adult worms. It also allows more time for the worms to wither as they become unthrifty after the Wolbachia endosymbionts are eliminated.

## October 10, 2022

- Administer appropriate heartworm preventive
- Administer first melarsomine injection, 2.5 mg/kg intramuscularly (IM)
- Prescribe prednisone 0.5 mg/kg BID first week, 0.5 mg/kg SID second week, 0.5 mg/kg EOD for the third and fourth weeks
- Decrease activity level even further: cage restriction; on leash when using yard

## November 8, 2022

- Administer appropriate heartworm preventive
- Administer second melarsomine injection 2.5 mg/kg IM
- Prescribe prednisone, 0.5 mg/kg BID first week, 0.5 mg/kg SID second week, 0.5 mg/kg EOD for the third and fourth weeks

## November 9, 2022

- Administer third melarsomine injection, 2.5 mg/kg IM
- Continue exercise restriction for 6 to 8 weeks following last melarsomine injections

## December 8, 2022

- Test for presence of MF
- If positive treat with a microfilaricide and retest in 4 weeks.
- Continue a year-round heartworm prevention program based on risk assessment

## August 10, 2023

Antigen test 9 months after last melarsomine injection; screen for MF

If still Ag positive, re-treat with doxycycline followed by two doses of melarsomine 24 hours apart

### Additional Notes

*\* This At-Home Treatment Plan is only meant to serve as a guide. Please consult your veterinarian for important information about the treatment and prevention of Heartworm Disease.*