Lab Dept: Hematology

Test Name: MALARIA PREP

General Information

Lab Order Codes: MALP
Note: MALAR orders both the rapid test and smear. See Malaria, Rapid Test for specific information on the rapid test.

Synonyms: Blood Parasite Smears; Microfilariae Smears; Malaria Smears; Babesia Smears; Leishmania Smears; Ehrlichia Smears

CPT Codes:
87207 – Smear; special stain for inclusion bodies or intracellular parasites
87015 – Concentration (any type), for infectious agents
85023 – Hemogram and platelet count, automated, and manual differential WBC count (CBC), if appropriate
85025 – Hemogram and platelet count, automated, and automated complete differential WBC count (CBC), if appropriate
85045 – Reticulocyte count, flow cytometry, if appropriate
85044 – Reticulocyte count, manual, if appropriate

Test Includes: CBC, with automated or manual differential, reticulocyte count and preparation and review of thin and thick smears.

Logistics

Test Indications: Useful for diagnosis of malaria, Ehrlichia, trypanosomiasis or microfilariasis, parasitic infestation of blood or evaluation of febrile disease of unknown origin.

Lab Testing Sections: Hematology

Phone Numbers:
MIN Lab: 612-813-6280
STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 - 4 days

Special Instructions:
If patient’s fever course is predictable, smears should be collected immediately before time of expected fever.

If fever is unpredictable, collect at the beginning of temperature rise.

NOTE: If the patient has traveled to a malaria endemic area, the date and destination of travel should be noted on the request form.
**Specimen**

**Specimen Type:** Whole blood or Smears  

**Container:** Lavender top tube (EDTA), Lavender Microtainer®, Slides  

**Draw Volume:** 2 mL blood in a 2 mL Lavender top tube  
OR  
0.5 mL in a EDTA Microtainer®  
AND  
Thin/Thick Smears  

**Processed Volume:** Same as Draw Volume  

**Collection:** Fill to mark on tube or Microtainer®. Mix thoroughly by gentle inversion.  

**Special Processing:** Lab Staff: Four thin peripheral blood smears (routine) and four thick blood preparations prepared by Hematology.  

The thick preps are made by placing one drop of blood on a glass slide and then spreading the blood over the slide in a circle to the size of a nickel, then air drying well (12 hours).  

**Patient Preparation:** None  

**Sample Rejection:** Improper tube; clotted sample; underfilled tube; mislabeled or unlabeled specimens  

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**Interpretive**

**Reference Range:** No parasites present  

**Critical Values:** Presence of parasites  

**Limitations:** One negative result does not rule out the possibility of parasitic infestation. If parasitic infection is strongly suspected, test should be performed at least three times with samples collected at different times in the fever cycle.  

**Methodology:** Light Microscopy of Wright-Giemsa Stained Smears  

Centers for Disease Control (CDC) (2004). Treatment of Malaria (Guidelines for Physicians), 2004, June 28


Various CDC Web Pages for Other Blood Parasites

**Updates:**

9/18/2013: A CBC and Reticulocyte count will now be done with Malaria screens. MALAR will order both the Rapid Test and the Malaria Prep. Added additional references.

8/26/2014: Updated lab order code.