

Memorandum Micro #192

To: UNCMC and Hillsborough Attending and Faculty Practice Physicians, Housestaff,

Clinical Nurse Coordinators, Department Heads, and Supervisors

From: Melissa B. Miller, PhD

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Date: April 2, 2020

Subject: Change in Screening Tests for Malaria

Effective April 6, 2020, the Clinical Microbiology Laboratory will perform the BinaxNOW Malarial Antigen test on all requests for Malaria Screen (Test Order LAB883). This test detects the presence of antigens specific for *Plasmodium falciparum* as well as general *Plasmodium* species antigens. Tests will be run upon sample receipt and a preliminary report will be issued 24/7. Sensitivity of the test depends on the level of parasitemia and is >99% for *Plasmodium falciparum (Pf)* and 81.6% for *Plasmodium vivax (Pv)*. Test sensitivity for other *Plasmodium* species (*P. ovale, P. malariae* and *P. knowlesi*) has not been established, but is lower than that of *P. falciparum and P. vivax* and reported to be <30%. Specificity for Pf and Pv is 95% and 99%, respectively. Presence of rheumatoid factor may cause a false positive with this assay. Thick and thin smears will continue to be performed before final results are issued.

Three orders are available depending on patient criteria:

TEST NAME	PATIENT PREREQUISITES	TEST INCLUDES
Malaria Screen (LAB883)	Appropriate Travel History	BinaxNOW; Malaria smear
Plasmodium Parasitemia (LAB88303)	Previous positive BinaxNow or malaria smear	Malaria smear only
Blood parasites, non- malaria (LAB88301) *only performed on day shift	Appropriate Travel History	Blood smear to rule out Babesia, trypanosomes and other microfilaria

Questions can be directed to the Microbiology Lab 984-974-1805 or Dr. Melissa Miller at Melissa.Miller@unchealth.unc.edu.