

Memorandum - Micro #235

To: UNC Health Attending Physicians, Faculty Practice Physicians,

Housestaff, Clinical Nurse Coordinators, Department Heads and

Supervisors

From:

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Subject: Update to Fungal Antibody Order

Beginning April 29, 2024, the "Fungal Antibodies" order set (LAB5632) will be discontinued. This will be replaced with a new panel focusing on non-invasive testing for dimorphic fungi endemic to North Carolina. The new panel "Histoplasma/Blastomyces Ab/Ag" will consist of Histoplasma antibody and Histoplasma/Blastomyces Urine Antigen testing (see table). This panel is offered in response to updated clinical testing guidelines from the CDC, Mycoses Study Group, and Coccidioidomycosis Study Group for patients with Community-Acquired Pneumonia. The new panel can be ordered by searching for "Histoplasma/Blastomyces Ab/Ag" (order codes in table). Both tests within the panel will be automatically checked. If convalescent Histoplasma antibody titers are desired, the antigen test will need to be unchecked.

Coccidioides antibody has been separated from the panel to avoid testing patients who have not had exposure to an endemic region. This test will remain available to order individually for patients who live in or have traveled to known endemic areas (Arizona, California, Nevada, New Mexico, Texas, Utah, Washington State, Central and South America).

Aspergillus fumigatus antibody has also been separated from the panel and is now available as an individual test (see table). This test should be considered to support the diagnosis of Chronic Pulmonary Aspergillosis. If testing of Aspergillus fumigatus IgG is indicated for workup of Allergic Bronchopulmonary Aspergillosis, please use the "ABPA panel" (LAB5390) which is sent to Viracor and has alternative cut-off values for positivity.

EPIC test name	Clinical Indication	Test(s) included (hyperlinks to Mayo website)	EPIC order code
Histoplasma/Blastomyces Ab/Ag ^{1,2,3}	Diagnosis of Histoplasmosis and/or Blastomycosis	Histoplasma Antibody, Serum Histoplasma/Blastomyces Antigen, Urine	Inpatient: O1231000556 Outpatient: O1231000555
Histo/Blasto Ag, Serum ⁴	Diagnosis of Histoplasmosis and/or Blastomycosis for anuric patients	Histoplasma/Blastomyces Antigen, Serum	LAB909
Histoplasma Antibodies	Convalescent serologic testing performed 2-3 weeks after initial testing by antibody/antigen	Order Histoplasma/Blastomyces Ab/Ag and unselect antigen test	Inpatient: O1231000556 Outpatient: O1231000555
Coccidioides Antibodies	Diagnosis of Coccidioidomycosis	Coccidioides Antibody, Complement Fixation and Immunodiffusion, serum	LAB791
Aspergillus fumigatus IgG	Supportive for diagnosis of Chronic Pulmonary Aspergillosis	Aspergillus fumigatus, IgG Antibodies, Serum	LAB784

¹Initial non-invasive testing for *Histoplasma* should include combined antibody and antigen testing. If clinical suspicion persists despite initial negative tests, order convalescent titers with *Histoplasma* antibody titers 2-3 weeks after the original test. Antibody titers are not recommended to monitor response to treatment. Histo/Blasto Urine or Serum Antigen levels can be followed to assess treatment response after antifungal administration.

²For initial noninvasive testing of Blastomycosis, *Blastomyces* Urine Antigen testing is recommended. *Blastomyces* has extensive cross-reactivity with *Histoplasma* and are now combined into one urinary antigen test. *Blastomyces* antibody detection is not recommended for screening.

³Culture/biopsy remains the gold standard for diagnosis.

⁴Histoplasma/Blastomyces Serum Antigen is available as an alternative to urine antigen for anuric patients. In all other cases, urinary antigen has higher sensitivity and is preferred. Combination Histo/Blasto Urine and Serum Ag testing should be considered as an alternative for patients who are significantly immunocompromised and unlikely to mount an antibody response. This alternative approach should be discussed with an Infectious Disease specialist.

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