



Blastomycoses Diagnostic Guidance

Table 1: Tests Available for Ordering

Test (Designation in EPIC)	Indication	Sensitivity Specificity	Cost	Turn Around
Blastomycoses antibody by Immunodiffusion (LAB786)	Differentiate blastomycosis from histoplasmosis	Sens 28-65% Spec >95%	\$12	4-6 days
Blastomycoses urine and serum antigen (special procedure)	First choice for diagnosis in all patients	Sens 56-82% serum Sens 76-93% urine Spec 80%	\$107	4-6 days

Use of Diagnostic Testing:

Based on Presentation (Figure 1):

- Pulmonary - consider testing with solitary pulmonary nodule, cavitary lung lesion, nodular lung infiltrate, or CAP that fails to improve despite appropriate antibiotic treatment in patient from endemic area
- Disseminated – consider testing in patients with ulcerative skin lesions, bony lesions, GU symptoms (prostatitis, epididymitis), meningitis

Test Utility:

- Preferred diagnostic tests are antigen, pathology, and culture
- Antibody testing is not clinically useful for the diagnosis of blastomycosis due to poor sensitivity and specificity (also cross reacts with histoplasmosis)
- Antibody may be considered as an adjunct when:
 - Trying to differentiate blastomycosis from histoplasmosis OR
 - Antigen testing is negative and blastomycosis is still suspected (although other tests are higher yield)
- Immunocompromised patients
 - Blastomycosis less common than histoplasmosis and coccidiomycosis in SOT
 - Antibody testing even less useful due to very poor sensitivity

References:

1. [CDC. Blastomycosis. Testing Algorithm for Blastomycosis.](#) April 24, 2024.
2. McBride JA, Gauthier GM, Klein BS. Clinical Manifestations and Treatment of Blastomycosis. *Clin Chest Med.* 2017;38(3):435-449. doi:10.1016/j.ccm.2017.04.006

Blastomycosis

Pulmonary: pulmonary nodule, cavitary lung lesion, non-resolving CAP with recent travel or residence in endemic region

OR

Disseminated: skin lesions, bone lesions, GU symptoms, meningitis

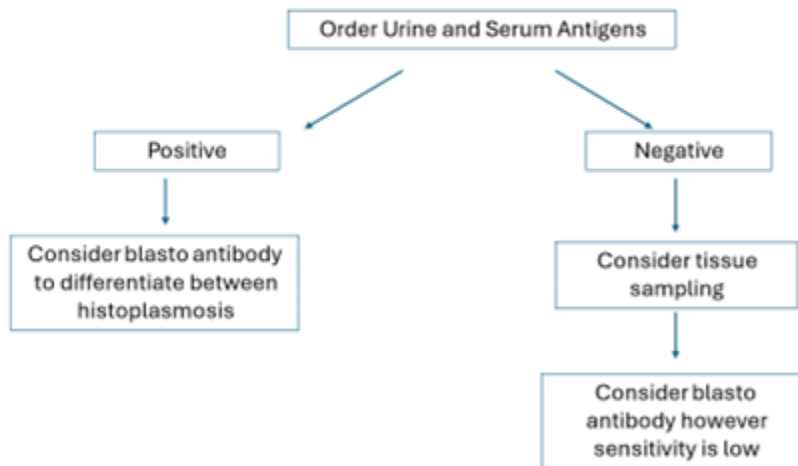


Figure 1: Diagnostic Algorithm for Blastomycosis