Mycobacterium and Nocardia Culture Algorithm

CTB / Mycobacteria and Nocardia Culture

Tissue Processing

Fresh tissue

■ Sterile body fluid
■ Bone marrow

■ Respiratory (Bronchoalveolar lavage fluid, bronchial washing, or sputum)
■ Stool
■ Urine
■ Abscess

Mycobacterium Culture, Concentration

Culture to broth medium and solid agar medium

Growth in broth medium?

YES

Mycobacterium Probe Identification in Broth*

Organism identified?

YES

Preliminary interpretive report issued immediately

Final negative report issued after 42 days of no growth

NO

Mycobacterium or Nocardia identification by sequencing or MALDI-TOF mass spectrometry

Organism identified?

YES

Preliminary interpretive report issued immediately

Final negative report issued at 42 days

NO

Final negative report issued after 42 days of no growth

Growth on solid agar medium?

YES

Mycobacterium identification by matrix-assisted laser desorption ionization-time of flight (MALDI-TOF) mass spectrometry*

Organism identified?

YES

Preliminary interpretive report issued immediately

Final negative report issued at 42 days

NO

Mycobacterium or Nocardia identification by sequencing or Mycobacterium Probe Identification (Agar)

* Nucleic acid probes used for identification, when applicable, include those for Mycobacterium avium-intracellulare complex, Mycobacterium gordonae and Mycobacterium tuberculosis complex. MALDI-TOF mass spectrometry or 16S rDNA sequencing is used for identification, when applicable, for slowly and rapidly growing Mycobacterium species and aerobic actinomycetes (including Nocardia species and Streptomyces species).