

Enhanced Fungal Culture and Susceptibility Testing



Department of Pathology and
Laboratory Medicine

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The information contained in this flyer is intended for healthcare professionals.

WHAT'S NEW

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The Aga Khan University Clinical Laboratories is introducing Enhanced Fungal Culture and Susceptibility testing. This test increases the value of current Fungal culture test by incorporating and reporting susceptibility testing for clinically relevant molds (*Aspergillus*, Mucorales and dermatophytes and other filamentous fungi) and yeasts (*Candida*, *Cryptococcus* and other rare yeasts).

INTRODUCTION:

Emergence of antifungal resistance in fungi such as *Aspergillus*, Mucorales, dermatophytes and *Candida* have resulted in a challenging situation for clinicians in selection of appropriate antifungal agents. The WHO has recently published fungal priority pathogens list that includes critical, high and medium priority health-threatening fungi¹. In Pakistan, although the burden of fungal infection is high², many laboratories are not routinely performing antifungal susceptibility testing. With the introduction of this test, the Aga Khan University Clinical Laboratories is addressing a diagnostic gap in the country. This test will be performed on clinical specimens and culture isolates using gold standard broth microdilution technique.

INTENDED USE:

This test is used to detect fungal pathogens and antifungal resistance in clinical samples and clinically relevant molds (*Aspergillus*, Mucorales and dermatophytes and other filamentous fungi) and yeasts (*Candida*, *Cryptococcus* and other rare yeasts).

IMPORTANT NOTE:

Susceptibility testing results will be performed only on clinically significant fungi and colonizers or contaminants will not be tested. Susceptibility testing will also not be performed in fungi for which susceptibility interpretative criteria are not available.

REFERENCES:

- WHO fungal priority pathogens list to guide research, development and public health action. Geneva: World Health Organization; 2022.
- Jabeen K, Farooqi J, Mirza S, Denning D, Zafar A. Serious fungal infections in Pakistan. *Eur J Clin Microbiol Infect Dis*. 2017; 36: 949-956.

SPECIMEN TYPE:

1. Clinical specimens: For e.g., sputum, tracheal aspirate, bronchoalveolar lavage, tissue, pus sterile fluids, CSF, blood, dermatology samples (skin, hair, nail), urine, HVS etc.
2. Fungal culture isolates

PRINCIPLE:

Culture and Broth Microdilution

CHARGES:

Rs.11,000

*Revisions may apply

SCHEDULE:

Daily after 30 days.

The assay will be performed on every second and fourth Wednesday of the month and reported on next Monday by 7.30 pm on isolates obtained on culture.

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