**DIAGNOSE**

**Invasive Candidiasis (IC)**

To optimize diagnostics, knowledge of the patient population and the likelihood (pretest probability) of IC is essential.¹,²

Early, targeted treatment of IC reduces mortality. Early diagnosis is important.¹,²

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**Determine if Yeast/Candida Are Present**

<table>
<thead>
<tr>
<th>Traditional microbiology</th>
<th>Non-culture-based tests</th>
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<tbody>
<tr>
<td><strong>Blood Sample</strong></td>
<td><strong>Sterile-site biopsy</strong></td>
</tr>
<tr>
<td>Culture¹,²</td>
<td>For culture, direct microscopy, histopathology</td>
</tr>
<tr>
<td>Gold standard but...</td>
<td>Not always feasible¹,²</td>
</tr>
<tr>
<td>Slow (~2-3 days)</td>
<td>50% sensitivity</td>
</tr>
</tbody>
</table>

**Beta-D-Glucan**
- Pan-fungal marker
- Sensitivity: 75% - 80%
- Specificity: ~80%¹,²

**Molecular Tests**
- PCR not standardized in US
- But multiplex PCR tests available—allow for species-level detection (eg, T2 Candida)¹,²

**MALDI-TOF**
- Mass spectrometry
- Quick outcomes
- Allows speciation and some resistance patterns

**Blood Culture ID Panels**
- Faster results vs subculture
- Allows for resistance testing
- Requires positive culture

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Establish species & conduct antifungal susceptibility testing (AFST) to guide therapy.¹,²,³

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AFST is recommended on all sterile site Candida spp. isolates.¹,²

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AFST = antifungal susceptibility testing; MALDI-TOF = matrix-assisted laser desorption ionization time-of-flight mass spectrometry.

2. Gonzalez-Lara MF, Ostrosky-Zeichner L. Semin Respir Crit Care Med. 2020;41:3-12.

This educational initiative was funded in part by a cooperative agreement with the Centers for Disease Control and Prevention (CDC-RFA-CK20-2003) to the University of Alabama at Birmingham. The University of Alabama at Birmingham is collaborating with the Mycoses Study Group Education & Research Consortium and Terranova Medica, LLC, on this initiative. The Centers for Disease Control and Prevention is an agency within the Department of Health and Human Services (HHS). The contents of this resource center do not necessarily represent the policy of CDC or HHS and should not be considered an endorsement by the Federal Government.