Overview

Useful For
Diagnosis and treatment of the etiologic agents of fungemia

Select patient population that presents with signs and symptoms of sepsis, especially fever of unknown origin

Reflex Tests

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Reporting Name</th>
<th>Available Separately</th>
<th>Always Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2F</td>
<td>D2 Fungal Sequencing Identification</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
<tr>
<td>FUNA</td>
<td>Fungal Ident Panel A</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
<tr>
<td>FUNB</td>
<td>Fungal Ident Panel B</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
<tr>
<td>LCCI</td>
<td>Ident Rapid PCR Coccidioides</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
<tr>
<td>LCHB</td>
<td>Id, Histoplasma/Blastomyces PCR</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
<tr>
<td>RMALF</td>
<td>Id MALDI-TOF Mass Spec Fungi</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
<tr>
<td>RMALY</td>
<td>Id MALDI-TOF Mass Spec Yeast</td>
<td>No, (Bill Only)</td>
<td>No</td>
</tr>
</tbody>
</table>

Testing Algorithm
When this test is ordered, the reflex test may be performed and charged.

Method Name
Conventional broth culture technique with identification by macroscopic and microscopic morphology, nucleic acid hybridization probes, D2 rDNA gene sequencing, real-time polymerase chain reaction (rtPCR), or MALDI-TOF mass spectrometry. Dimorphic pathogen identification is confirmed using molecular methods (ie, nucleic acid hybridization probes, D2 rDNA gene sequencing, rtPCR or MALDI-TOF mass spectrometry).

NY State Available
Yes

Specimen

Specimen Type
Whole blood

Specimen Required

Container/Tube:

Preferred: Green top (heparin)
Test Definition: FBL
Fungal Culture, Blood

Acceptable: SPS/Isolator tube

Specimen Volume: 10-30 mL

Collection Instructions: Send specimen in original tube.

Forms
If not ordering electronically, complete, print, and send a Microbiology Test Request (T244) with the specimen.

Specimen Minimum Volume
5 mL
Pediatric: 1.5 mL

Reject Due To

<table>
<thead>
<tr>
<th></th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemolysis</td>
<td></td>
</tr>
<tr>
<td>Lipemia</td>
<td></td>
</tr>
<tr>
<td>Icterus</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole blood</td>
<td>Ambient (preferred)</td>
<td>7 days</td>
</tr>
<tr>
<td></td>
<td>Refrigerated</td>
<td>7 days</td>
</tr>
</tbody>
</table>

Clinical and Interpretive

Clinical Information
Due to the high mortality rate from fungemia, the expeditious detection and identification of fungi from the patient's blood can have great diagnostic prognostic importance. Risk factors for fungemia include, but are not limited to, extremes of age, immunosuppression, and those individuals with burns or indwelling intravascular devices.

Reference Values
Negative

If positive, notification is made as soon as the positive culture is detected or identified.

Interpretation
Positive cultures of yeast and filamentous fungi are reported with the organism identification.

Positive cultures are usually an indication of infection and are reported as soon as detected. Correlation of culture results and the clinical situation is required for optimal patient management. A final negative report is issued after 30 days of incubation.

Cautions
No significant cautionary statements
Test Definition: FBL
Fungal Culture, Blood

Clinical Reference

Performance

Method Description
Blood is inoculated into MycoF Lytic (Becton Dickinson) and Isolator (Wampole) tubes. Continuously monitored blood culture instruments provide for the detection of bloodstream infections due to most Candida species and Cryptococcus species. The Isolator tube contains saponin to lyse the blood cells, enabling the release of intracellular organisms. Centrifugation generates a concentrated layer of organisms that is inoculated onto solid media for recovery of fungi and this appears to be the most sensitive method for recovery of Histoplasma capsulatum, other dimorphic fungi, and filamentous fungi.(Sutton DA: Specimen collection, transport, and processing: Mycology. In Manual of Clinical Microbiology. Ninth edition. Edited by Murray PR, Baron EJ, Jorgensen JH, et al. ASM Press, Washington DC. 2007, pp 1728-1736)


PDF Report
No

Day(s) and Time(s) Test Performed
Monday through Sunday; Varies

Analytic Time
30 days/positive cultures reported as soon as detected.

Maximum Laboratory Time
33 days

Specimen Retention Time
24 days

Performing Laboratory Location
Rochester
Fees and Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification
This test uses a standard method. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information
87015-Concentration (any type) for infectious agents
87103-Blood
87106-Id MALDI-TOF Mass Spec Yeast (if appropriate)
87107-Id MALDI-TOF Mass Spec Fungi (if appropriate)
87106-Yeast identification panel D (if appropriate)87107-Fungal identification panel A (if appropriate)
87107-Fungal identification panel B (if appropriate)
87150-Identification rapid PCR coccidioides (if appropriate)
87150 x 2- Identification Histoplasma/Blastomyces, PCR (if appropriate)
87153- D2 fungal sequencing identification (if appropriate)

LOINC® Information

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBL</td>
<td>Fungal Culture, Blood</td>
<td>601-5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result ID</th>
<th>Test Result Name</th>
<th>Result LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBL</td>
<td>Fungal Culture, Blood</td>
<td>601-5</td>
</tr>
</tbody>
</table>