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**Lab Dept:** Microbiology/Virology

**Test Name:** BONE MARROW CULTURE, FUNGUS

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***General Information***

**Lab Order Codes:** BMCF

**Synonyms:** Culture, Bone Marrow for Fungus; Fungus Culture, Bone Marrow

**CPT Codes:** 87102 – Culture, fungi isolation, with presumptive identification of isolates; skin, hair or nail, other source

The following testing may be added if appropriate based on findings for organism identification (multiple additions are possible if more than one organism is identified) and to aid in patient treatment management.

87077 – Aerobic isolate, additional methods required for definitive identification, each isolate (if appropriate)

87106 – Culture, fungi, definitive identification, each organism, yeast (if appropriate)

87107 – Culture, mold, definitive identification, each organism, mold (if appropriate)

87147 – Culture, typing; immunologic method, other than immunofluorescence (e.g., agglutination grouping), per antiserum (if appropriate)

87184 – Susceptibility studies, disk method, per plate (if appropriate)

87186 – Susceptibility studies, microdilution or agar dilution, each multi-antimicrobial, per plate (if appropriate)

**Test Includes:** Culture for yeast and filamentous fungi. The physician or patient's nurse will be notified of all positive cultures.

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***Logistics***

**Lab Testing Sections:** Microbiology

**Phone Numbers:** MIN Lab: 612-813-5866

STP Lab: 651-220-6555

**Test Availability:** Daily, 24 hours

**Turnaround Time:** Positives are reported when detected. Negative cultures are final after 3 weeks.

**Special Instructions:**

- **Specimen site** and **date/time of collection** are required for processing.
- If a *Mycobacterium* species (AFB, TB) is suspected, request AFB Culture, Non-blood. Refer to [Bone Marrow Culture](#) for routine bacterial culture.

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### ***Specimen***

**Specimen Type:** Bone marrow

**Container:** Wampole ISOLATOR™ 1.5 microbial tube (yellow top). Obtain from Material (storeroom item #14892)

**Volume:** 1.5 mL (Minimum: 1.0 mL) bone marrow

**Collection:**

1. Disinfect the stopper of the ISOLATOR™ tube with 70% alcohol and allow to dry.
2. Prepare puncture site as for surgical incision.
3. Collect 1.5 mL of blood and aseptically inoculate the ISOLATOR™ tube by puncturing the stopper using a blood transfer device or place an 18-gauge needle on the syringe. Removing the stopper will increase the risk of contamination. **Do not force the blood into the ISOLATOR™ tube. This will cause the top to pop off.**
4. Gently invert the tube 4 - 5 times to mix contents.

**Transport/Storage:** Transport to the Microbiology Laboratory immediately at room temperature. **Do not refrigerate.**

**Sample Rejection:** Specimen with a transit time exceeding 2 hours after collection; specimen not submitted in appropriate transport container; improperly labeled specimen; insufficient volume; external contamination. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

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### ***Interpretive***

**Reference Range:** No fungus isolated

**Critical Values:** All positive results will be called to the physician or patient's nurse.

**Limitations:** Insufficient specimen volume decreases the recovery of organisms. The dilution of the SPS in the ISOLATOR™ will be inadequate and may inhibit growth.

**Methodology:** Wampole ISOLATOR™ system

**References:**

Cook, JH, and M Pezzlo (1992). Specimen receipt and accessioning. Section 1. Aerobic bacteriology, 1.2.1-4. In HD Isenberg (ed) Clinical Microbiology Procedures Handbook. American Society for Microbiology, Washington DC

Miller, J Michael (1999) A Guide To Specimen Management in Clinical Microbiology, American Society for Microbiology, Washington DC

Miller, J Michael, and HT Holmes (1999) Specimen Collection, Transport, and Storage In PR Murray et al, (ed), Manual of Clinical Microbiology, 7<sup>th</sup> edition, American Society for Microbiology, Washington DC, pp 33-104

**Updates:**

3/23/2010: CPT updates