

## Laboratory Technical Bulletin

**TEST:** Bacteria & Yeast Identification (from routine culture)

**METHODOLOGY:** Vitek MS (MALDI) Mass Spectrometry (“Rapid Microbiology”)

**EFFECTIVE DATE:** January 5, 2016

**EXPLANATION OF CHANGE:**

The Cayuga Medical Center Microbiology Department is making a significant and strategic clinical technology change from conventional biochemical identification of bacteria and yeast to rapid molecular identification using the Vitek MS (MALDI). This method provides highly accurate microorganism identification results within minutes versus the standard 0-3 days of conventional microbiology.

The new technology uses the matrix-assisted laser desorption/ionization (MALDI) mass spectrometry method. Microorganisms isolated from routine culture specimens are analyzed based on the dynamics of particles projected by a laser shot in a vacuum tube. The resulting spectrum of mass distribution is interpreted according to a knowledge database, which determines organism identification.

	Method	Turnaround Time
<b>Current</b>	Conventional biochemical testing/Vitek 2 identification cards	Bacteria or yeast identified 0-3 days after being isolated on culture media
<b>New</b>	Vitek MS (MALDI) mass spectrometry	Bacteria or yeast identified <u>same day</u> that it is isolated on culture media

***There is no change to how culture specimens are collected or ordered.***

Please contact the laboratory at (607)274-4474 with any questions.

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Date \_\_\_\_\_  
Dr. Daniel Sudilovsky, Laboratory Medical Director

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Date \_\_\_\_\_  
Toni Burger, Laboratory Administrative Director