Effective December 3, 2013, the clinical laboratory will switch methodologies for the Vancomycin assay. The switch will be from the Siemens ADVIA Centaur Chemiluminescent Immunoassay to the Abbott i1000 Chemiluminescent Microparticle Immunoassay.

The new Abbott method shows somewhat lower results in comparison studies. Deming regression statistics for the two inhouse studies (n=40 for each) were:

- Study 1: Abbott Vancomycin = 0.87 x Siemens Vancomycin – 0.72 with r = 0.99
- Study 2: Abbott Vancomycin = 0.89 x Siemens Vancomycin – 0.66 with r = 0.98

For samples tested, the overall average bias in moving from the Siemens Centaur to the Abbott Architect i1000 was negative (-16% for Study 1 and -18% for Study 2).

**Sample Requirements:**

- **Collect:** plain red top serum, 4 mL (no additives) or purple top EDTA blood, 4 mL. (It is not recommended that serum samples and EDTA samples from the same patient be used interchangeably.)

- **Patient Preparation:** Samples for trough levels should be drawn immediately before subsequent dosing. Please refer to pharmacy for specific treatment regimens and draw times.

- **Storage/Transport:** Samples from within the hospital can be delivered at room temperature to the laboratory for processing. Samples from outside the hospital should be transported refrigerated at 2-8°C. If the sample cannot be delivered to the laboratory within 8 hours of collection, centrifuge sample and transport separated serum or plasma refrigerated at 2-8°C.

- **Stability:** Ambient 8 hours. Separated serum/plasma; Refrigerated 2-8°C for up to 7 days or frozen at -20°C for longer storage.

- **Unacceptable Conditions:** Serum Separator tubes (SST), plasma separator tubes (PST), citrated plasma, grossly hemolyzed, or heat inactivated samples.

- **Therapeutic Intervals:** the new therapeutic ranges are slightly different from the previous ranges. Actual recommended therapeutic levels depend upon the treatment regimen for the patient.

<table>
<thead>
<tr>
<th></th>
<th>Previous (Siemens Centaur)</th>
<th>New (Abbott i1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak</td>
<td>30.0 – 40.0 ug/mL</td>
<td>20.0 – 40.0 ug/mL</td>
</tr>
<tr>
<td>Trough</td>
<td>5.0 – 10.0 ug/mL</td>
<td>5.0 – 10.0 ug/mL</td>
</tr>
</tbody>
</table>

- **Routine Testing:** 7 days a week, Day and Evening Shift in Tox/Special Chem in the Specialty Testing Center

If you have questions or need additional information please contact Laboratory Client Services at 734-7373.