## XPERT® MRSA/SA BC

<table>
<thead>
<tr>
<th>Test Reagent Kit</th>
<th>Xpert MRSA/SA BC</th>
<th>Xpert MRSA/SA BC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Real time PCR</td>
<td>Real time PCR</td>
</tr>
<tr>
<td>Targets (unique to Cepheid)</td>
<td>spa, mecA, SCCmec</td>
<td>spa, mecA, SCCmec</td>
</tr>
<tr>
<td>Batch or On Demand</td>
<td>On Demand</td>
<td>On Demand</td>
</tr>
<tr>
<td>Minimum Batch Size</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sample Extraction</td>
<td>Automated/Integrated</td>
<td>Automated/Integrated</td>
</tr>
<tr>
<td>Precision Pipetting</td>
<td>50 uL pipette included for sample to elution buffer transfer</td>
<td>50 uL pipette included for sample to elution buffer transfer</td>
</tr>
<tr>
<td>TAT</td>
<td>62 min</td>
<td>62 min</td>
</tr>
<tr>
<td>Hands-On Time</td>
<td>1 min</td>
<td>1 min</td>
</tr>
</tbody>
</table>

### Limit of Detection (LoD) For Common Strains

<table>
<thead>
<tr>
<th>Strain CFU/test</th>
<th>USA900</th>
<th>USA1200</th>
<th>USA500</th>
<th>USA1000</th>
<th>USA800</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA900</td>
<td>300</td>
<td>100</td>
<td>350</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>USA1200</td>
<td>150</td>
<td></td>
<td>175</td>
<td>225</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
<td>250</td>
<td></td>
<td>250</td>
</tr>
</tbody>
</table>

### Internal Controls: Process (SPC)

- ✓

### Internal Controls: Probe Function/Detection (PCC)

- ✓

### Bottle Types

- BD BACTEC™ Plus Aerobic/F BacT/ALERT® SA VersaTREK REDOX 1™
- BD BACTEC™ Plus Aerobic/F BacT/ALERT® SA VersaTREK REDOX 1™

### Positive Predictive Agreement*

- 99.6%
- 98.1%

### Negative Predictive Agreement*

- 99.5%
- 99.6%

### Sample Stability

- 24 hours at room temperature
- 24 hours at room temperature

### Kit Storage

- 2-28°C
- 2-28°C

### Commercial Controls

- Contact Cepheid Technical Support
- Contact Cepheid Technical Support

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*Xpert MRSA/SA Blood Culture Assay was compared to Reference Culture.
IMPACT ON PATIENT MANAGEMENT: “Test and Treat”

Pathway with GeneXpert® System vs. Pathway with Traditional Testing

4 to 36 hours vs. additional 1-2 days

Lab Processes

Patient Presents with Septicemia Symptoms

Collect Specimen

Implement Contact Precautions

Start Empiric Antibiotic Therapy

Inoculate BC Bottle

Gram Stain

GeneXpert PCR MRSA/SA BC On-Demand TAT < 1 hr

Report Results

Optimize or De-escalate Antibiotic Therapy

Modify Contact Precautions

Plate on Chromogenic Media

Read Plate @ 24hrs

Modify Contact Precautions

Optimize or De-escalate Antibiotic Therapy

+/-