RESULTS

<table>
<thead>
<tr>
<th>Organism</th>
<th>Concentration</th>
<th>Blood Added</th>
<th>VT Media</th>
<th>BD Media</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>S. pneumoniae</em></td>
<td>1 x 10^3 CFU/ml</td>
<td>0.1 ml</td>
<td>REDOX 1</td>
<td>BACTEC Peds Plus</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>2 x 10^4 CFU/ml</td>
<td>0.1 ml</td>
<td>REDOX 1</td>
<td>BACTEC Peds Plus</td>
</tr>
<tr>
<td><em>H. influenzae</em></td>
<td>1 x 10^4 CFU/ml</td>
<td>0.1 ml</td>
<td>REDOX 1</td>
<td>BACTEC Peds Plus</td>
</tr>
</tbody>
</table>

Overall, both the VersaTREK and BACTEC continuous monitoring blood culture systems performed well and were able to detect positive cultures in the first 24 hours of incubation when initially seeded with 1 x 10⁸ CFU/ml of bacteria. The VersaTREK system, in general, had a slightly shorter time to detection compared to the BACTEC system. When this comparison was made we found the VersaTREK the most cost effective system for our laboratory.

CONCLUSION

Continuous monitoring blood culture systems improve the quality of this important culture for the detection of bacteremia in patients, with the exception of *H. influenzae* (17 strains). A TCC strains were included as controls.

Blood cultures continue to be a high volume and high priority sample in the clinical microbiology laboratory. In this study we compared two automated blood culture systems for their ability to detect positive cultures in the first 24 hours of incubation when initially seeded with 1 x 10⁸ CFU/ml of bacteria. The VersaTREK system, in general, had a slightly shorter time to detection compared to the BACTEC system. We found the VersaTREK the most cost effective system for our laboratory.

REFERENCES