This activity has not been approved for category 1 CME credit because the conflict indicated by the speaker could not be resolved according to guidelines from the Accreditation Council for Continuing Medical Education.
Utilizing IR Detection Technology in POCT Devices

Transforming the diagnostics industry with performance-driven solutions

Susan Selgren, Ph.D.
Point of Care Business Unit

October 6, 2012
## Agenda

<table>
<thead>
<tr>
<th></th>
<th>Agenda Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction to Siemens Point of Care</td>
</tr>
<tr>
<td>2.</td>
<td>Infrared Technology</td>
</tr>
<tr>
<td>3.</td>
<td>Real World Application</td>
</tr>
<tr>
<td>4.</td>
<td>Future Promise</td>
</tr>
</tbody>
</table>
1. Introduction to Siemens Point of Care
Siemens Healthcare Diagnostics

A Global Industry Leader

€3.7bn in sales

More than 14,000 employees

Serving 30,000 customers in more than 120 countries

Approximately 244,000 total instruments installed

R&D spending >9% of sales
Point of Care
Our Value Proposition & Strategy

Accurate and Actionable Information
Rapid Turnaround Time (TAT)
Improved Outcomes

- Make decisions within 30 minutes
- Ensure optimized clinical actions
- Provide better patient flow and outcomes

© 2012 Siemens Healthcare Diagnostics Inc. All rights reserved.
### End-to-End Solutions: Leveraging the portfolio strength of Siemens Diagnostics

<table>
<thead>
<tr>
<th>Central lab testing</th>
<th>Point-of-care testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Gas</td>
<td></td>
</tr>
<tr>
<td>Urinalysis</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Cardiac / IA</td>
<td></td>
</tr>
</tbody>
</table>

Stratus® CS200 Analyzer is under development and not available for sale.

Siemens Diagnostics offers a strong portfolio of end-to-end solutions for major modalities.
Siemens POC Portfolio and Connectivity

Blood Gas

Urinalysis

RAPIDComm® Data Management System

Diabetes

© 2012 Siemens Healthcare Diagnostics Inc. All rights reserved.
Agenda

1. Introduction to Siemens Point of Care
2. Infrared Technology
Wavelengths of Light

- Most wavelengths other than visible are not detected by human senses
- Infrared signal is emitted by specific chemical compounds
- When coated onto a white material the infrared containing solution is transparent
- Therefore the white material still appears white

Siemens has updated urine test strips to include a new identification (ID) band, which has been added near the strip handle. This ID band will appear as a white area on the strip, as shown in the figure. These banded strips can be used with the CLINITEK® line of analyzers and can be read visually.
Auto-Checks on Clinitek Status+® and Advantus® 3.0 systems
### Agenda

<table>
<thead>
<tr>
<th></th>
<th>Introduction to Siemens Point of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Infrared Technology</td>
</tr>
<tr>
<td>3</td>
<td>Real World Application</td>
</tr>
</tbody>
</table>
ID band enables Humidity Degradation Detection

Siemens urinalysis strips in combination with the CLINITEK instruments can:

- Reduce waste in terms of time and consumables.
- Improve the workflow in busy laboratory environments where multiple strip types are used.
- Prevent the reporting of false test results due to humidity degradation.
- Prevent treatment delays from environmentally compromised reagent strips.
- Avert the additional cost associated with increased testing.
ID band provided Sample Interference Notes

- High Specific Gravity may cause falsely lowered Glucose results
- Elevated Glucose may cause falsely lowered Leukocyte results
- Visibly bloody urine may cause falsely elevated Protein results
- High pH may cause falsely elevated Protein results
- High Specific Gravity may cause falsely lowered Leukocyte results
Agenda

1. Introduction to Siemens Point of Care
2. Infrared Technology
3. Real World Application
4. Future Promise
Future Possibility to Read Patterns

- Current technology detects Infrared or No Infrared in square block
- Potential to read line patterns
- Progress to block patterns
- Eventually 2D barcodes on strips
Over 100 Years of Innovation
A History of Bringing New Products to Market

“Our passion for innovation is what allows us to meet the needs of our customers all over the world—today and in the future.”

Michael Reitermann
Chief Executive Officer
Siemens Healthcare Diagnostics

>9%
Revenue Dedicated to R&D Spending