Frequency of Occurrence and Antimicrobial Susceptibility of Bacteria Isolated from Patients Hospitalised with Community-Acquired Bacterial Pneumonia: Evaluation of Ceftaroline Potency and Antimicrobial Spectrum

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Table 1 List of isolates and number of participating centres surveyed in each geographic region

<table>
<thead>
<tr>
<th>Region</th>
<th>Isolates</th>
<th>Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Europe</td>
<td>2,267</td>
<td>81</td>
</tr>
<tr>
<td>Western Europe</td>
<td>4,257</td>
<td>107</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>3,459</td>
<td>102</td>
</tr>
<tr>
<td>Latin America</td>
<td>2,360</td>
<td>44</td>
</tr>
</tbody>
</table>

Figure 1 Frequency of occurrence of organisms isolated from patients hospitalised with community-acquired bacterial pneumonia (CABP) stratified by geographic region

- **A. Western Europe**
  - C. pneumoniae (25.5%)
  - P. mirabilis (22.3%)
  - C. albicans (8.5%)
  - E. coli (12.6%)

- **B. Eastern Europe**
  - C. pneumoniae (23.4%)
  - P. mirabilis (21.3%)
  - C. albicans (7.7%)
  - E. coli (13.5%)

- **C. Asia-Pacific**
  - C. pneumoniae (25.0%)
  - P. mirabilis (22.4%)
  - C. albicans (8.4%)
  - E. coli (12.1%)

- **D. Latin America**
  - C. pneumoniae (25.7%)
  - P. mirabilis (22.6%)
  - C. albicans (8.0%)
  - E. coli (12.2%)

Figure 2 Frequency of occurrence of susceptibility patterns among the main organisms isolated from patients hospitalised with CABP

- **A. Western Europe**
  - C. pneumoniae (25.5%)
  - P. mirabilis (22.3%)
  - C. albicans (8.5%)
  - E. coli (12.6%)

- **B. Eastern Europe**
  - C. pneumoniae (23.4%)
  - P. mirabilis (21.3%)
  - C. albicans (7.7%)
  - E. coli (13.5%)

- **C. Asia-Pacific**
  - C. pneumoniae (25.0%)
  - P. mirabilis (22.4%)
  - C. albicans (8.4%)
  - E. coli (12.1%)

- **D. Latin America**
  - C. pneumoniae (25.7%)
  - P. mirabilis (22.6%)
  - C. albicans (8.0%)
  - E. coli (12.2%)

Figure 3 Ceftaroline resistance rates (EUCAST criteria) among the main organisms isolated from patients hospitalised with CABP

- **Europe**
  - 98.6% for S. pneumoniae
  - 98.6% for C. pneumoniae
  - 97.2% for E. coli

- **Asia-Pacific**
  - 98.6% for S. pneumoniae
  - 98.6% for C. pneumoniae
  - 97.2% for E. coli

- **Latin America**
  - 98.6% for S. pneumoniae
  - 98.6% for C. pneumoniae
  - 97.2% for E. coli

Conclusions
- Ceftaroline was highly active against community-acquired pneumonia.
- Ceftaroline was active against methicillin-resistant Staphylococcus aureus (MRSA) and methicillin-susceptible Staphylococcus aureus (MSSA).
- Resistance rates to ceftriaxone were highest in Latin America.
- Ceftaroline resistance rates were lowest in the Asia-Pacific region.

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