A Global Evaluation of Voriconazole Activity Against Recent Clinical Isolates of Candida spp.

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SUMMARY

Voriconazole is highly active in vitro against a recent collection of Candida isolates.

In comparison with a large global collection of invasive Candida isolates from prior to voriconazole availability, there was no evidence for emerging resistance or shifts in MIC distribution.

The vast majority of Candida isolates not susceptible to voriconazole (MIC≥1 mg/L) are C. glabrata from centers in Europe and North America.

REFERENCES


ACKNOWLEDGEMENTS

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Table 1. Distribution of voriconazole MICs overall and by region, from the ARTEMIS global surveillance program

<table>
<thead>
<tr>
<th>Species</th>
<th>% of total for each time period, stratified by region for recent (2004-2006)</th>
<th>% of total for recent (2004-2006)</th>
<th>% (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. albicans</td>
<td>54.5 91.7 47.8 55.9 96.6 52.6 55.5 32.6</td>
<td>55.5 98.3 55.5 98.3</td>
<td>32.6 55.5</td>
</tr>
<tr>
<td>C. glabrata</td>
<td>13.9 22.7 4.5 13.9 5.9 14.7 13.9 13.9</td>
<td>90 13.9 90 13.9</td>
<td>13.9 90</td>
</tr>
<tr>
<td>C. krusei</td>
<td>11.4 17.2 20.0 7.3 18.0 10.0 11.4 11.4</td>
<td>97.8 11.4 97.8 11.4</td>
<td>11.4 97.8</td>
</tr>
<tr>
<td>C. parapsilosis</td>
<td>2.6 1.4 1.6 5.0 1.3 2.5</td>
<td>97.4 2.6 97.4 2.6</td>
<td>2.6 97.4</td>
</tr>
<tr>
<td>C. tropicalis</td>
<td>1.0 3.4 0.7 1.0 0.9 1.0 1.0 1.0</td>
<td>99.0 1.0 99.0 1.0</td>
<td>1.0 99.0</td>
</tr>
<tr>
<td>C. glabrata</td>
<td>0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0</td>
<td>100 0.0 100 0.0</td>
<td>0.0 100</td>
</tr>
<tr>
<td>C. glabrata</td>
<td>0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0</td>
<td>100 0.0 100 0.0</td>
<td>0.0 100</td>
</tr>
<tr>
<td>Other</td>
<td>0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0</td>
<td>100 0.0 100 0.0</td>
<td>0.0 100</td>
</tr>
</tbody>
</table>

*CLSI breakpoints for voriconazole susceptibility were applied: susceptible (S): ≤0.01 mg/L, susceptible-dose-dependent (S-DD): 0.02-2 mg/L, and resistant (R): ≥4 mg/L.

Table 2. Susceptibility of a recent global collection of invasive Candida isolates (2004-06) to voriconazole, by region and country

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>No. of isolates</th>
<th>S</th>
<th>S-DD</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>United States</td>
<td>1345</td>
<td>97.0</td>
<td>0.7</td>
<td>2.4</td>
</tr>
<tr>
<td>South America</td>
<td>Colombia</td>
<td>917</td>
<td>95.0</td>
<td>1.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Asia</td>
<td>Japan</td>
<td>126</td>
<td>95.0</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Europe</td>
<td>Argentina</td>
<td>193</td>
<td>97.0</td>
<td>0.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Europe</td>
<td>Belgium</td>
<td>156</td>
<td>99.7</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Europe</td>
<td>Germany</td>
<td>176</td>
<td>95.0</td>
<td>1.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Europe</td>
<td>Hungary</td>
<td>84</td>
<td>99.1</td>
<td>0.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Europe</td>
<td>Italy</td>
<td>100</td>
<td>99.2</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Europe</td>
<td>Russia</td>
<td>91</td>
<td>99.0</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Europe</td>
<td>Singapore</td>
<td>150</td>
<td>99.0</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Europe</td>
<td>Switzerland</td>
<td>112</td>
<td>98.2</td>
<td>1.8</td>
<td>0.0</td>
</tr>
<tr>
<td>South America</td>
<td>Argentina</td>
<td>265</td>
<td>95.7</td>
<td>4.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Europe</td>
<td>Spain</td>
<td>30</td>
<td>100</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>South America</td>
<td>Brazil</td>
<td>285</td>
<td>96.7</td>
<td>3.3</td>
<td>0.0</td>
</tr>
<tr>
<td>South America</td>
<td>United Kingdom</td>
<td>175</td>
<td>100</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>Europe</td>
<td>1738</td>
<td>96.1</td>
<td>3.8</td>
<td>0.1</td>
</tr>
</tbody>
</table>

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