Staphylococcus pseudintermedius

Oxacillin 1 µg as screen for methicillin resistance

Version 2.0
March 2017
Staphylococcus pseudintermedius MIC and zone diameter correlates

- The following histograms present inhibition zone diameter distributions from EUCAST antimicrobial susceptibility testing. In most, the different colours of the bars indicate different MIC values. In some, the colours of the bars indicate a resistance gene or a resistance mechanism.

- The distributions include data for wild-type isolates and for isolates with acquired resistance mechanisms. A large number of isolates with MIC values close to the edge of the wild-type distribution and/or close to EUCAST clinical breakpoints were intentionally included. These distributions can not be used to infer resistance rates or the performance of the tests with routine isolates.

- For some agents, isolates were tested on more than one occasion, including parallel tests with disks and media from several manufacturers. When this is the case, data are presented as both the “number of isolates tested” and the “total number of MIC-zone diameter correlates”, including replicate tests and parallel tests with disks and media from different sources.
Staphylococcus pseudintermedius
Materials and methods

• Antimicrobial susceptibility testing was performed on veterinary isolates of *Staphylococcus pseudintermedius*. Disk diffusion was performed according to EUCAST methodology using disks and media from several manufacturers. *mecA* Status was analysed with PCR.

• The distribution in this presentation is the result of a collaboration between EUCAST; National Veterinary Institute (SVA, Sweden); Norwegian Veterinary Institute, (Norway); UCLA David Geffen School of Medicine, Los Angeles (USA) and Weill Cornell Medical College, New York (USA).

• This presentation is based on EUCAST Clinical Breakpoint Tables v. 7.1.
Changes from previous version (1.2)

<table>
<thead>
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<th>Changes</th>
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<td>• Screening disk changed from cefoxitin 30 µg to oxacillin 1 µg.</td>
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Explanation of graphs:

Zone diameter distribution with MIC values or resistance mechanisms as coloured bars.

Oxacillin 1 µg vs. mecA status
*S. pseudintermedius*, 223 isolates (1707 correlates)

- Zone diameter breakpoint
- Positive
- Negative
- Non-wild type
- Wild type
Oxacillin 1 µg vs. mecA status
*S. pseudintermedius*, 223 isolates (1707 correlates)

**Breakpoints**
Zone diameter (screen)  $S \geq 20$, $R < 20$ mm

- Positive
- Negative

One isolate: mecA negative but hyperproducer of β-lactamase