Stenotrophomonas maltophilia

Calibration of zone diameter breakpoints to MIC values
Stenotrophomonas maltophilia
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. 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.
Stenotrophomonas maltophilia
Materials and methods

• Antimicrobial susceptibility testing was performed on clinical isolates of *Stenotrophomonas maltophilia*. Disk diffusion was performed according to EUCAST methodology and MIC determination was performed with broth microdilution.

• This presentation is based on EUCAST Clinical Breakpoint Tables v. 9.0.
Changes from previous version (1.0)

<table>
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<td>• No changes. Breakpoints checked against latest version of EUCAST Clinical Breakpoint Tables.</td>
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Trimethoprim-sulfamethoxazole 1.25-23.75 µg vs. MIC
*Stenotrophomonas maltophilia*, 43 isolates

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

Explanation of graphs:

- **Zone diameter breakpoint**
- **MIC (mg/L)**
  - Red: ≥16
  - Orange: 8
  - Yellow: 4
  - Green: 2
  - Light green: 1
  - Light olive: 0.5
  - Olive: 0.25
  - Dark olive: ≤0.125

- **Susceptible by EUCAST MIC breakpoints**
- **Resistant by EUCAST MIC breakpoints**

No of observations

Inhibition zone diameter (mm)
Trimethoprim-sulfamethoxazole 1.25-23.75 µg vs. MIC
Stenotrophomonas maltophilia, 43 isolates

(1 data source)

For *S. maltophilia* and trimethoprim-sulfamethoxazole, growth within the inhibition zone should be ignored whenever there is any sign of an inhibition zone.

**Breakpoints**
- **MIC**
  - S≤4, R>4 mg/L
- **Zone diameter**
  - S≥16, R<16 mm

**ECOFF**
- 2 mg/L