

To European laboratories

During 2009 EUCAST was tasked with developing a disk test calibrated to the recently harmonised European breakpoints. After consulting all European countries in a questionnaire it was decided to build the new agar diffusion test on known and frequently used systems – 0.5 MacFarland inoculum, Mueller Hinton Agar and paper disks. Disk diffusion breakpoints were published in December 2009. These will be tentative during 2010. Ongoing work will undoubtedly result in minor changes and refinements to the method. An update was published in April 2010 and another update is planned for late December 2010. During spring 2011 an addendum containing breakpoints for less commonly isolated microorganisms and less commonly used antimicrobials will be published.

We have offered to help manufacturers of AST materials and systems in every way we can; but have made it clear that EUCAST does not validate or endorse particular commercial systems for use with EUCAST breakpoints. Manufacturers have been advised to undertake and publish scientific evaluations of their products. At ECCMID in 2009 and 2010 such evaluations were presented and more are scheduled for ECCMID in 2011.

Users of European breakpoints are advised to consult with EUCAST before choosing AST systems other than:

1. MIC determination using European breakpoints.
2. The EUCAST disk diffusion test method or national disk diffusion methods (e.g. CA-SFM and BSAC) calibrated to European breakpoints.
3. Automated susceptibility testing with systems validated for use with European breakpoints.

Users of European breakpoints are advised to **require from the manufacturers** documentation that AST systems will perform according to the standards determined by EUCAST. This pertains not only to automated systems but also to materials such as disks, agar and industrially produced agar and MIC plates.

We remind users that in the terminology of EUCAST:

- dash (-) in the breakpoint table denotes “inappropriate drug – breakpoints denied”. Should there be a need for this antibiotic to appear in the report it is appropriate to include an “R” without testing.
- “IE” in the EUCAST tables denotes “insufficient evidence – breakpoints denied”. Should there be a need for this antibiotic to appear in the report it is appropriate to include an MIC without interpretation or with information on EUCAST non-species related breakpoints (see breakpoint table)
- In EUCAST tables, the intermediate category is not listed. It is implied as the values between the susceptible breakpoint and the resistant breakpoint.
For a breakpoint listed as $S \leq 1$ mg/L and $R > 8$ mg/L the intermediate category is 2 - 8 (technically $> 1 - 8$ mg/L).
For a breakpoint listed as $S \geq 22$ mm and $R < 18$ mm the intermediate category is 18-21 mm.

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