

E001

4-hour Educational Workshop

Antimicrobial susceptibility testing with EUCAST breakpoints and methods

Update on EUCAST methods and breakpoints

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EUCAST (European Committee on Antimicrobial Susceptibility Testing) provides common European breakpoints and antimicrobial susceptibility testing methodology under the administrative, scientific and financial support of ECCMID. This financial support was also performed in 2014 by the European Centre for Disease prevention and Control (ECDC). Version 5.0 of the EUCAST breakpoint and EUCAST QC-tables were published on the EUCAST website (www.eucast.org) in Jan-2015. New breakpoints as part of the marketing authorisation process by the European Medicines Agency (EMA), including those for dalbavancin, were published. Harmonised nitrooxoline and temocillin breakpoints for Enterobacteriaceae and sulbactam breakpoints for *Acinetobacter* spp. were discussed, but new information will be necessary for final decisions. In the light of new information, linezolid breakpoints for staphylococci and enterococci, metronidazole breakpoints for anaerobes, fluoroquinolone breakpoints for *Corynebacterium* spp. and teicoplanin breakpoints for coagulase-negative staphylococci were reviewed and breakpoint changes were considered not to be justified. The methodology used for telavancin MICs determination was revised and breakpoints adjusted in line with changes in MIC distributions. Moreover, it was also decided methodology for colistin broth microdilution in conjunction with CLSI. For *Neisseria meningitidis*, it was agreed following wide consultation a proposal to remove the intermediate category for ciprofloxacin. Breakpoints currently being reviewed include: carbapenems and tigecycline for Enterobacteriaceae and fluoroquinolone for different organisms. A guidance note on breakpoints for topical agents was published. EUCAST disk-diffusion method is routinely developed at the EUCAST Development Laboratory (Växjö, Sweden) in collaboration with other laboratories (EUCAST Network Laboratories) and new QC ranges have been established. All this information is in the EUCAST website. Website statistics indicate approximately 54,000 visitors/month in 2014. The website is frequently updated (27 times during 2014) and expanded. As examples, the frequently asked questions has been revised and updated and links to translations in French, German, Spanish, Italian, Czech, Turkish and Scandinavian languages of main EUCAS documents have been included. Moreover, the "Compliance of manufacturers" section has been updated, in particular, data related to automated systems. Clinical breakpoints have been removed from the MIC database as the breakpoints are available in the main breakpoint tables on the EUCAST website and changes have been made to colour coding in histograms to avoid confusion between clinical breakpoints and ECOFFs. New standard operating procedure documents have been published: preparation and handling of minutes (SOP-7.0), format and update of documents (SOP-8.0) and procedures for establishing zone diameter breakpoints and QC ranges (SOP-9.0). The development of rationale documents continues and that for ceftobiprole has been released. Finally, following previous experience in setting breakpoints for delamanid and bedaquiline and *Mycobacterium tuberculosis*, EUCAST has the objective in collaboration with ESCMID study group for Mycobacterial Infections (ESGMYC) and EMA to develop guidelines for companies submitting new antimycobacterial agents.