

European Committee on Antimicrobial Susceptibility Testing (EUCAST)

Minutes of the General Committee Meeting on 12 May 2014 at 24th European Congress of Clinical Microbiology and Infectious Diseases, Barcelona, Spain

A list of attendees who signed the register is attached.

1. Apologies for absence

None.

2. Minutes of meeting in Berlin, 29 April 2013

With minor corrections, the unratiated minutes were approved as a true record.

3. Matters arising

None.

4. EUCAST Steering Committee membership

4.1 The current membership of the Steering Committee is attached.

4.2 Rafael Canton reported that Claude-James Soussy had retired as the CA-SFM representative (France) and his place taken by Luc Dubreuil. Luc Dubreuil will also retire early in 2015 and his place will be taken by Francois Jehl. The terms of membership of Robert Skov (Denmark) and Luis Martinez-Martinez (Spain) will finish at this meeting and Jan Verhaegen (Belgium) and Iztok Strumbelj (Slovenia) will take over as representatives of the General Committee after this meeting. Claude-James, Robert and Luis were thanked for their significant contributions to the work of the committee.

4.3 Up to two additional "visiting" General Committee members may now attend each Steering Committee meeting by prior agreement. Three visiting members have attended Steering Committee meetings in the past year.

4.4 Rafael Canton reminded the committee that there are now five annual ECCMID observerships, each with a maximum value of 1000 Euros, to support attendance of visiting members to EUCAST Steering Committee meetings. Applications should be made by email to the Chairman or Scientific Secretary of EUCAST.

5. EUCAST General Committee membership

5.1 The up-to-date membership list is on the EUCAST website (the current list is attached). Representatives should inform the Scientific Secretary (email derek.brown222@btinternet.com) if the representative for their country has changed.

5.2 The pharmaceutical and susceptibility device manufacturing industries email networks have proved very difficult to maintain as company representatives appear to be very mobile and failure to deliver notices for emails no longer active are very common. Companies should regularly consult the EUCAST website for news and consultations as EUCAST cannot be responsible for ensuring that email lists are current.

6. EUCAST and ECDC

6.1 The current EUCAST contract with ECDC runs until October 2014. The principal EUCAST objectives for ECDC are the harmonization of European breakpoints, establishment of ECOFFs and methodology for antimicrobial resistance surveillance. EUCAST also sets breakpoints for new agents for the EMA and advises EFSA on antimicrobial aspects of food and feed safety.

7. EUCAST Chairperson's report

Rafael Canton summarised activities over the past year.

7.1 Structure and organisation

The structure and organisation of EUCAST were reviewed. In the last year there have been five meetings of the Steering Committee. The General Committee meets once a year, at ECCMID.

7.2 EUCAST National Antimicrobial Susceptibility Testing Committees (NACs)

National Antimicrobial Susceptibility Testing Committees (NACs) linked to EUCAST have now been established in most European countries and some countries outside Europe, including Australia and the USA. Dr Bob Rennie reported that Canada is in the process of forming a NAC.

7.3 New breakpoint tables

7.3.1 Version 4.0 (January, 2014) of breakpoint tables is on the EUCAST website.

7.3.2 The format of the index has been improved, with links to different pages for different groups of organisms and to EUCAST guidance documents, expert rules and the document on detection of resistance mechanisms documents.

7.3.3 There is a page explaining the terminology and links used in the breakpoint tables.

7.3.4 There are new or revised breakpoints for several organisms.

- Enterobacteriaceae Amox-clav (uncomplicated UTI only)
Ciprofloxacin and *Salmonella* spp.
Doripenem
- *P. aeruginosa* Doripenem
- *S. lugdunensis* Benzylpenicillin
- *Enterococcus* spp. Ciprofloxacin, levofloxacin (uncomplicated UTI)
- *H. influenzae* Cefaclor (removed)
- *M. catarrhalis* Cefaclor (removed)
- *Corynebacterium* spp. Several antimicrobials

7.3.5 Some new screen tests have been added.

- Pefloxacin *Salmonella* spp.
- Norfloxacin *Enterococcus* spp.
- Cefoxitin *Staphylococcus pseudintermedius*
- HLAR Viridans group streptococci

7.3.6 Some breakpoint notes have been reworded and some new notes added.

- Doripenem Gram-negatives
- Benzylpenicillin Coagulase negative staphylococci
- Benzylpenicillin Streptococcus groups A, B, C and D
- Benzylpenicillin, penicillinase Streptococcus groups A, B, C and D
- Clindamycin *Staphylococcus* spp., *Streptococcus* spp.

7.3.7 There has been some rewording of supplementary tables

- *S. pneumoniae* Oxacillin screen
- *H. influenzae* Benzylpenicillin 1-unit, β -lactam resistance

7.4 EUCAST presentations

7.4.1 At ECCMID this year there has been the annual EUCAST workshop on antimicrobial susceptibility testing, a EUCAST "meet the experts" session on common questions and answers relating to EUCAST breakpoints and methods and many EUCAST-related papers and posters.

7.4.2 There have been multiple presentations by EUCAST representatives at national meetings in Europe and outside, including Australia, Japan, China, Indonesia, Israel, UA Emirates, Colombia, USA, South Africa and Morocco.

7.4.3 In Linz, Austria in September 2014 there will be an ESCMID Postgraduate Educational Workshop, with lectures and laboratory sessions covering the EUCAST breakpoint setting process, antimicrobial susceptibility testing methods, differences between EUCAST and CLSI, EUCAST expert rules, antimicrobial surveillance systems, epidemiological cut-off values (ECOFFs), and implementation of

EUCAST breakpoints and methodology. ESCMID attendance grants for “young scientist members” are available.

7.5 Implementation of EUCAST breakpoints

An updated map based on a survey undertaken by EUCAST at the start of 2014 shows that EUCAST breakpoints continue to be implemented widely, but to various degrees, in most European countries and some outside Europe. In the UKNEQAS External Quality Assessment Scheme, over 80% of participating laboratories reported that they followed EUCAST breakpoint guidelines. The EUCAST survey also showed that the EUCAST disk diffusion method is increasingly used in most European countries.

7.6 EUCAST website

7.6.1 The EUCAST website is frequently updated with new and revised documents and data. Gunnar Kahlmeter pointed out that there is a link at the bottom of the index on the home page to a table of website changes, where all website changes are recorded. All EUCAST documents can be freely downloaded from the website. In addition to the new breakpoint tables a few points were highlighted.

7.6.2 The principal EUCAST documents are now available in several languages. Translations are done by the respective NACs, which are responsible for updating the documents when updates to the English versions are released.

7.6.3 The website file of frequent questions and answers related to EUCAST has been reviewed and many answers updated.

7.6.4 The website is heavily used, with around 50000 visitors per month, with 60% from Europe.

7.7 EUCAST documents and publications

7.7.1 Three new Standard Operating Procedures (SOPs) have been released on the EUCAST website:

- SOP 4.1 EUCAST Committees and subcommittees.
- SOP 6.0 Organisation and maintenance of EUCAST website.
- SOP 7.0 Preparation and handling of EUCAST minutes.

7.7.2 About 50 rationale documents are now available on the website.

7.7.3 EUCAST publications in scientific journals were as follows:

- Matuschek E, Brown DF, Kahlmeter G. Development of the EUCAST disk diffusion antimicrobial susceptibility testing method and its implementation in routine microbiology laboratories. *Clin Microbiol Infect.* 2014; 20:O255-66.
- Bengtsson S, Bjelkenbrant C, Kahlmeter G. Validation of EUCAST zone diameter breakpoints against reference broth microdilution. *Clin Microbiol Infect.* 2013 Oct 3. doi: 10.1111/1469-0691.12414. [Epub ahead of print]

7.7.4 EUCAST-related publications have increased steadily in recent years and in 2013 there were around 90 publications listed in PubMed mentioning EUCAST in the title or abstract.

7.8.1 What is coming in 2014-1015?

- Breakpoints set through the EMA process for new agents including ceftobiprole, β -lactam- β -lactamase inhibitor combinations, macrolides, tetracyclines, glycopeptides, oxazolidinones, delamanid and other antimycobacterial agent.
- Colistin breakpoint revision in collaboration with CLSI (under the TATFAR initiative).
- Harmonised breakpoints for temocillin, nitroxoline and spiramycin.
- Review of tigecycline and aztreonam breakpoints.
- Review of ciprofloxacin breakpoints for *N. meningitidis*.
- Review of various antimicrobial breakpoints for *N. gonorrhoeae*.
- Assessment of daptomycin breakpoints for enterococci.
- Listing of organisms-agent combinations lacking clinical data supporting breakpoints.
- New and revised rationale documents.
- New version of expert rules (v3).
- Guidance/discussion documents (e.g. dissociated clindamycin resistance).
- New SOPs.

8. EUCAST subcommittee reports

8.1 Antifungal Susceptibility Testing Subcommittee (AFST)

Maiken Cavling Arendrup, the subcommittee chairperson, presented a summary of activity of the subcommittee over the past year. Membership of the subcommittee is attached.

- 8.1.1 The structure of the AFST Steering Committee has been reorganised to ensure that there is a core of members with expertise but also some rotation of members. The AFST Steering Committee is now comprised of a Chair and a EUCAST Steering Committee representative, both appointed by the EUCAST Steering Committee for a three year period (can be reappointed), a Secretary and a Data Manager, both appointed by the EUCAST Steering Committee in collaboration with the AFST Chair for a three year period (can be reappointed) and two country representatives, appointed by the EUCAST Steering Committee in collaboration with the AFST Steering Committee for a two year period (preference is given to representatives of countries not previously represented on the AFST Steering Committee).
- 8.1.2 New itraconazole breakpoints for *Candida* spp. are currently under consideration.
- 8.1.3 A technical note was published in CMI on voriconazole for *Aspergillus* spp.; and a note is in press in Mycoses on anidulafungin, fluconazole and micafungin for *Candida* spp.
- 8.1.4 The EUCAST definitive document "Method for the determination of broth dilution minimum inhibitory concentrations of antifungal agents for conidia forming moulds" has been revised and the new version E.Def 9.2 has recently been released on the EUCAST website.
- 8.1.5 Areas requiring further work include:
- *Aspergillus* and isavuconazole rationale document. MICs are being collected for ECOFF and breakpoint determinations.
 - For *Aspergillus* and azoles a new document on the agar screening method is being developed.
 - For *Aspergillus* echinocandin testing there are methodological issues and a protocol is under development.
 - Systematic revision of existing documents three or more years old is required.
 - Missing QC ranges are to be established.
 - Remaining breakpoints to be established.
 - *Candida* and topical agents.
- 8.1.6 All AFST documents are in the revised AFST section on the EUCAST website.
- 8.1.7 In response to questions Maiken Cavling Arendrup confirmed that there is a reference MIC method for yeasts and is available from the EUCAST website. It was also noted that there has been no evaluation of commercial tests against the EUCAST reference method and this was not within the EUCAST remit. There may be issues with commercial systems if they are calibrated to the CLSI rather than the EUCAST reference method.
- 8.2 **Subcommittee on methods for detection of resistance mechanisms of clinical and/or epidemiological importance**
- 8.2.1 Christian Giske, chairman of the subcommittee, presented a summary of the published document giving guidance on methods of detection and characterization of resistance mechanisms and resistances of clinical and epidemiological importance. The document is available at http://www.eucast.org/resistance_mechanisms.
- 8.2.2 The document covers acquired carbapenemases in Enterobacteriaceae, extended-spectrum β -lactamase producing Enterobacteriaceae, acquired AmpC-producing Enterobacteriaceae, methicillin-resistant *S. aureus*, vancomycin low-level resistance in *S. aureus* (VISA/heteroVISA), vancomycin-resistant enterococci and penicillin non-susceptible *S. pneumoniae*.
- 8.2.3 It was noted that these pan-European guidelines need scrutiny and constructive feedback from national methodology committees to ensure that the guidelines are improved over time. European standardization will be helpful for the EARS-Net resistance surveillance programme, but even more so for laboratories, patients and infection control.

9. The EUCAST disk diffusion method

A summary was presented by Erika Matuschek, from the EUCAST Development Laboratory, Växjö, Sweden.

- 9.1 Development of the EUCAST disk diffusion method continues.
- 9.2 New zone diameter breakpoints have been added for Enterobacteriaceae (amoxicillin-clavulanic acid in uncomplicated UTI), *Salmonella* spp. (pefloxacin screen to detect ciprofloxacin resistance, described in ECCMID posters P279 and P285), *Staphylococcus* spp. (benzylpenicillin for coagulase-negative staphylococci and *S. lugdunensis*, and cefoxitin screen for *S. pseudintermedius*), *Enterococcus* spp. (ciprofloxacin, levofloxacin and norfloxacin screen for uncomplicated UTI, described in ECCMID poster P282), and *Corynebacterium* spp. (described in ECCMID poster P280).

- 9.3 Doripenem resistant breakpoints have been adjusted for Enterobacteriaceae, *Pseudomonas* spp., and *Acinetobacter* spp.
- 9.4 Zone diameter breakpoints have been revised for Enterobacteriaceae and amoxicillin-clavulanic acid for systemic infections, for *S. saprophyticus* and ampicillin, and for *Pseudomonas* spp. and several β -lactam agents (described in ECCMID poster P283).
- 9.5 Several inter-laboratory studies have been coordinated by the EUCAST Development Laboratory, with 5-13 laboratories per study, in the following areas:
- Testing of inducible clindamycin resistance in staphylococci and streptococci by the "D-test".
 - Reproducibility of ceftaroline susceptibility tests by disk diffusion and gradient tests.
 - Retapamulin gradient MIC tests (described in ECCMID poster P281).
 - Pefloxacin disk screen test for *Salmonella* spp. (described in ECCMID posters P279, P285).
 - Validation of QC ranges for new agents.
 - Inter-laboratory variation for new agents vs. clinical isolates.
- 9.6 Ongoing studies include establishment of disk contents for new agents, MIC-zone diameter correlates for new agents, zone diameter breakpoints for agents with "in preparation" in the breakpoint tables (e.g. fosfomycin), organisms with no method or disk diffusion breakpoints (e.g. anaerobes and *N. gonorrhoeae*), quality control ranges for new agents and organism-agent combinations without current control ranges, and broth microdilution studies on a wide range of organisms.
- 9.7 From 1 September 2014 a broth microdilution MIC service will be available from the EUCAST Development Laboratory, Växjö, Sweden.
- 9.8 Gunnar Kahlmeter noted that recent studies showing differences in disk content between manufacturers would be published without naming the manufacturers. All manufacturers have been informed of the results with their disks and the study would be repeated in the next year with the intention of then publishing results with manufacturers named. There was some discussion regarding whether manufacturers should be named.

10. Compliance of manufacturers of materials for AST by EUCAST methods

- 10.1 The file on the EUCAST website recording manufacturers' compliance for EUCAST breakpoints and methods has again been updated. It was noted that the data in these tables are not verified by EUCAST and inclusion of commercial products does not indicate endorsement by EUCAST.

11. Any other business

- 11.1 None.

12. Next meeting of the EUCAST General Committee

Scheduled for 25th ECCMID, Copenhagen, Denmark, 24-28 April 2015.

EUCAST General Committee Meeting attendees signing the register, 12 May 2014

Jenny Åhman	Sweden
Maiken Cavling Arendrup	Denmark
Fabio Brocco	Liofilchem
Derek Brown	UK
Iva Butic	Croatia
Samantha Cain	Thermofisher Scientific
Rafael Canton	Spain
William Craig	USA
Christian Giske	Sweden
Andrea Gough	Thermofisher Scientific
Hakan Hanbergen	Sweden
Ron Jones	JMI Labs
Manette Juvín	Bio-Rad
Gunnar Kahlmeter	Sweden
Greeta Kampinga	Netherlands
Onur Karatuna	Acibadem Turkey
Yoram Keness	Israel
Laura Koeth	Laboratory Specialists Inc
Katalin Kristof	Hungary
Brandi Limbago	CDC, USA
Christoffer Lindemann	Norway
Maureen Mansfield	Thermofisher Scientific
Erika Matuschek	Sweden
Sally Maysent	Thermofisher Scientific
Steve Michalik	bioMérieux
Linda Miller	GSK
Jos Monen	Netherlands
Johan Mouton	Netherlands
Milan Niks	Slovakia
Kaisu Rantakokko-Jalava	Tykslab, Finland
Bob Rennie	Canada
Jorge Sampaio	Brazil
Alisa Serio	Archaogen, USA
Dee Shortridge	bioMérieux
Martin Steinbakk	Norway
Greg Stone	Astra Zeneca Pharma
Iztok Štrumbelj	Slovenia
Marina Sukhorukova	Russia
Silva Tafaj	Albania
John Turnidge	Australia
Thierry Vidalenc	Bio-Rad Laboratories
Christine Walton	UK NEQAS
Reinhard Zbinden	Switzerland

EUCAST Steering Committee 12 May 2014

Chairperson	Dr Rafael Canton	Sweden
Scientific Secretary	Dr Derek Brown	UK
Clinical Data Coordinator	Prof Gunnar Kahlmeter	Spain
BSAC	Prof Alasdair MacGowan	UK
SWAB	Prof Johan W. Mouton	Netherlands
NWGA	Martin Steinbakk	Norway
CA-SFM	Prof Claude-James Soussy/ Prof Luc Dubreuil	France
SRGA	Dr Christan Giske	Sweden
General Committee	Prof Sören Gatermann	Germany
General Committee	Dr Robert Skov	Denmark
General Committee	Prof Luis Martinez-Martinez	Spain

EUCAST General Committee 12 May 2014

Chairperson	Dr Rafael Canton
Scientific Secretary	Dr Derek Brown
Clinical Data Coordinator	Prof Gunnar Kahlmeter
National representatives	
Australia	Prof. John Turnidge
Austria	Dr Petra Apfalter
Belgium	Prof. Jan Verhaegen
Bosnia	Dr Selma Uzunovic-Kamberovic
Bulgaria	Prof. Krassimir Metodiev
Croatia	Dr Arjana Tambic-Andrasevic
Czech Republic	Dr Helena Zemlickova
Denmark	Dr Robert Skov
Estonia	Dr Marina Ivanova
Finland	Dr Antti Hakkanen
France	Prof. Luc Dubreuil
Germany	Prof. Sören Gatermann
Greece	Prof. Alkiviadis Vatopoulos
Hungary	Dr Ákos Tóth
Iceland	Dr Karl Gustaf Kristinsson
Ireland	Dr Michael Mulhern
Israel	Dr Yoram Keness
Italy	Prof. Pietro Varaldo
Latvia	Dr Arta Balode
Lithuania	Dr Jolante Miciuleviciene
Luxemburg	Dr Monique Perrin
Netherlands	Dr Greeta Kampinga
Norway	Dr Christofer Lindemann
Poland	Prof. Waleria Hryniewicz
Portugal	Prof. Jose Melo Cristino
Romania	Dr Irina codita
Russia	Dr Marina Sukhorukova
Serbia	Dr Lazar Ranin
Slovak Republic	Prof. Milan Niks
Slovenia	Dr Iztok Strumbelj
Spain	Dr Luis Martinez-Martinez
Sweden	Dr Barbro Olsson-Liljequist
Switzerland	Prof. Reinhard Zbinden
Turkey	Dr Deniz Gür
UK	Prof Alasdair MacGowan
USA	Prof Paul Ambrose
ISC	Dr Paul Tulkens
FESCI	Dr David Livermore

EUCAST subcommittees

Antifungal Susceptibility Testing Subcommittee

Steering Committee

Maiken Cavling Arendrup, Denmark (Chairperson)
Susan Howard, UK (Secretary)
Joseph Meletiadis, Greece (Data Coordinator)
Manuel Cuenca-Estrella, Spain (NAC representative)
Cornelia Lass-Floerl, Austria (NAC representative)
Johan Mouton, The Netherlands (EUCAST Steering Committee Representative)

Full Committee members

Maiken Cavling Arendrup, Denmark (Chairperson)
Susan Howard, UK (Secretary)
Joseph Meletiadis, Greece (Data Coordinator)
Manuel Cuenca-Estrella, Spain
Cornelia Lass-Floerl, Austria
Johan Mouton, The Netherlands (EUCAST Steering Committee Representative)
S Arikan-Akdagli, Turkey
F Barchiesi, Italy
J Bille, Switzerland
E Chryssanthou, Sweden
P Gaustad, Norway
A Groll, Germany
P Haml, Czech Republic
H Järv, Estonia
P Koukila-Kähkölä, Finland
K Lagrou, Belgium
O Lortholary, France
N Klimko, Russia
T Matos, Slovenia
C Moore, UK
A Velegraki, Greece
P Verweij, The Netherlands

Subcommittee on methods for detection of resistance mechanisms and resistances of clinical and/or epidemiological importance

Christian G. Giske (Chairperson; Sweden, EUCAST and EARS-Net)
Luis Martinez-Martinez (Spain and EUCAST)
Rafael Canton (Spain and EUCAST)
Stefania Stefani (Italy)
Robert Skov (Denmark and EUCAST)
Youri Glupczynski (Belgium)
Patrice Nordmann (France)
Mandy Wootton (UK)
Vivi Miriagou (Greece)
Gunnar Skov Simonsen (Norway and EARS-Net)
Helena Zemlickova (Czech republic and EARS-Net)
James Cohen-Stuart (Netherlands)
Marek Gniadkowski (Poland)