

Compliance of manufacturers of AST materials and devices with EUCAST guidelines

- Data are based on questionnaires to manufacturers of materials and devices for antimicrobial susceptibility testing.
- The tables will be updated when manufacturers report changes (contact erika.matuschek@ltkronoberg.se).
- The accuracy of data in these tables is not verified by EUCAST and the inclusion of any materials or devices does not indicate endorsement by EUCAST.

Last updated 29 January 2014

EUCAST disk diffusion method

Manufacturer	Disks available	MH-F plates available
Abtek	All	No
BD	All except: Ceftibuten 30µg	No
Bio-Rad	All	Yes
bioMérieux	No disks marketed	Yes
I2a	All	No
Liofilchem	All	Yes
MAST Group	All	No but supply β -NAD supplement
Thermo Fisher Scientific (Oxoid)	All	Yes
Rosco	All (Neo-Sensitabs)	No

Automated systems for reading antimicrobial susceptibility testing plates

Manufacturer	System	EUCAST breakpoints implemented	EUCAST Expert Rules implemented	EUCAST terminology implemented			
				S≤	R>	-	IE
Bio-Rad	OSIRIS/ADAGIO	Yes	Yes. There are additional rules but EUCAST rules have priority.	Yes	Yes	Yes	Yes
Giles Scientific	BIOMIC V3	Yes	Yes. No exceptions	Yes	Yes	Yes	Yes
I2a	SIRSCAN: 2000 2000 automatic Micro	Yes	Yes. There are additional rules but none should be contrary to EUCAST rules.	Yes	Yes	Yes	Yes

Gradient tests: Etest

Manufacturer	Agents in EUCAST tables but not available	Agents validated for MH-F
bioMérieux	Amoxicillin-clavulanic acid (fixed 2 mg/L clavulanic acid)*, ** Ampicillin-sulbactam (fixed 4 mg/L sulbactam)*, ** Cefadroxil Cefalexin Cefazolin Ceftibuten Roxithromycin Ticarcillin	Ampicillin Benzylpenicillin Cefaclor Cefotaxime Ceftriaxone Cefuroxime Doripenem Ertapenem Imipenem Meropenem Chloramphenicol Clindamycin Erythromycin Levofloxacin Moxifloxacin Ofloxacin Tetracycline Trimethoprim-sulfamethoxazole (not for <i>H. influenzae</i> and <i>M. catarrhalis</i>) Vancomycin

*Gradient tests with the agent:inhibitor in a 2:1 ratio are not acceptable using EUCAST methods and breakpoints

** Expected during 2014

Gradient tests: MIC Test Strip

Manufacturer	Agents in EUCAST tables but not available	Agents validated for MH-F	
Liofilchem	Cefadroxil Cefalexin Cefazolin Ceftibuten Roxithromycin Telithromycin Ticarcillin	Amoxicillin Amoxicillin-clavulanic acid (fixed 2 mg/L clavulanic acid)* Ampicillin Ampicillin-sulbactam (fixed 4 mg/L sulbactam)* Azithromycin Benzylpenicillin Cefaclor Cefepime Cefixime Cefotaxime Cefpodoxime Ceftaroline Ceftriaxone Cefuroxime Cephalothin Chloramphenicol Ciprofloxacin	Clarithromycin Clindamycin Doripenem Doxycycline Ertapenem Erythromycin Imipenem Levofloxacin Linezolid Meropenem Minocycline Moxifloxacin Ofloxacin Rifampicin Teicoplanin Tetracycline Trimethoprim-sulfamethoxazole Vancomycin

*Gradient tests with the agent:inhibitor in a 2:1 ratio are not acceptable using EUCAST methods and breakpoints

Gradient tests: M.I.C.Evaluator

Manufacturer	Agents in EUCAST tables but not available		Agents validated for MH-F
Thermo Fisher Scientific (Oxoid)	Amoxicillin-clavulanic acid (fixed 2 mg/L clavulanic acid)* Ampicillin-sulbactam (fixed 4 mg/L sulbactam)* Azithromycin Aztreonam Cefaclor Cefadroxil Cefalexin Cefazolin Cefepime Cefixime Cefoxitin Cefpodoxime Ceftibuten Cefuroxime Chloramphenicol Clarithromycin Colistin Doripenem Doxycycline Ertapenem Fosfomicin Fusidic acid	Mecillinam Minocycline Moxifloxacin Mupirocin Nalidixic acid Netilmicin Nitrofurantoin Norfloxacin Ofloxacin Piperacillin Piperacillin-tazobactam Quinupristin-dalfopristin Rifampicin Roxithromycin Spectinomycin Streptomycin Telavancin Telithromycin Ticarcillin Ticarcillin-clavulanate Tobramycin Trimethoprim Trimethoprim-sulfamethoxazole	Amoxicillin Ampicillin Benzylpenicillin Oxacillin Cefotaxime Ceftazidime Ceftaroline Levofloxacin Amikacin Teicoplanin Vancomycin Erythromycin Tetracycline Tigecycline Linezolid

*Gradient tests with the agent:inhibitor in a 2:1 ratio are not acceptable using EUCAST methods and breakpoints

Phoenix/EpiCenter automated system (BD)

EUCAST terminology implemented	In computer database	S ≤	Yes
		R >	No (R ≥)
		-	Yes
		IE	Yes
	In reports	S ≤	Yes
		R >	Yes (≥ converted to R >)
		-	Yes (MICs reported for agents with no EUCAST breakpoints)
		IE	Yes (MICs reported for agents with no EUCAST breakpoints)
EUCAST Expert Rules implemented	All rules incorporated. There are additional rules but EUCAST rules have priority.		
EUCAST organism groups with no test in the system	<i>H. influenzae</i> <i>M. catarrhalis</i>	<i>N. meningitidis</i> <i>N. gonorrhoeae</i>	Gram-negative anaerobes Gram-positive anaerobes
Agents in EUCAST tables but not available in the system	Ampicillin-sulbactam (fixed 4 mg/l sulbactam)*		
Agents available but EUCAST breakpoints not implemented in the system	Rifampicin (<i>Staphylococcus</i> spp. cannot be reported susceptible) Trimethoprim (<i>Enterococcus</i> spp. cannot be reported susceptible) Trimethoprim-sulfamethoxazole (<i>Enterococcus</i> spp. cannot be reported susceptible)		

*Tests with the agent:inhibitor in a 2:1 ratio are not acceptable using EUCAST methods and breakpoints

Microscan automated system (Siemens Healthcare Diagnostics)

EUCAST terminology implemented	In computer database	S ≤	Yes
		R >	Yes
		-	No
		IE	No
	In reports	S ≤	Yes
		R >	Yes
		-	Most "-" do not have interpretations reported
		IE	No
EUCAST Expert Rules implemented	Some exceptions in current rules will be corrected in new software release Jan-March 2013. All rules can be customised by user.		
EUCAST organism groups with no test in the system	<i>H. influenzae</i> <i>M. catarrhalis</i> Strep A, C and G	<i>N. meningitidis</i> <i>N. gonorrhoeae</i> <i>S. pneumoniae</i>	Gram-negative anaerobes Gram-positive anaerobes Viridans streptococci (except <i>S. bovis</i>)
Agents in EUCAST tables but not available in the system	Chloramphenicol Fusidic acid Rifampicin Trimethoprim	Ampicillin-sulbactam (fixed 4 mg/l sulbactam)* Amoxicillin-clavulanic acid (fixed 2 mg/l clavulanic acid)* All agents for anaerobes	
Agents available but EUCAST breakpoints not implemented in the system	Roxithromycin Doxycycline	Telithromycin Tigecycline (Gram-positive organisms)	

*Tests with the agent:inhibitor in a 2:1 ratio are not acceptable using EUCAST methods and breakpoints

Vitek 2 automated system (bioMérieux)

EUCAST terminology implemented	In computer database	S ≤	Yes
		R >	No. Will be in V2S 7.01 s/w, due Q1 2014.
		-	No. Will be in V2S 7.01 s/w, due in Q1 2014.
		IE	No. Will be in V2S 7.01 s/w, due in Q1 2014.
	In reports	S ≤	Yes
		R >	No. Will be in V2S 7.01 s/w, due Q1 2014.
		-	Reported "blank". Will be in V2S 7.01 s/w, due Q1 2014.
		IE	Reported "blank". Will be in V2S 7.01 s/w, due Q1 2014.
EUCAST Expert Rules implemented	All applicable rules dealing with intrinsic resistance, therapeutic interpretation and deduction are implemented in software version V2S 5.03 (2011), 5.04(2011), & 6.01 (2012). There are additional rules but none should be contrary to EUCAST rules in these software version.		
EUCAST organism groups with no test in the system	<i>H. influenzae</i> <i>M. catarrhalis</i>	<i>N. meningitidis</i> <i>N. Gonorrhoeae</i>	Gram-negative anaerobes Gram-positive anaerobes
Agents in EUCAST tables but not available in the system	Azithromycin Roxithromycin Amoxicillin-clavulanic acid (fixed 2 mg/L clavulanic acid)* in development Ampicillin-sulbactam (fixed 4 mg/L sulbactam) * will be available for Gram negative AST in V2S 7.01 s/w, due in Q1 2014) Cefadroxil Ceftibuten		Ceftaroline Cefepime (<i>S. pneumoniae</i>) Cefpodoxime (<i>S. pneumoniae</i>) Cefuroxime (<i>S. pneumoniae</i>) Teicoplanin (<i>S. pneumoniae</i>) Doxycycline (<i>S. pneumoniae</i>) Minocycline (<i>S. pneumoniae</i>)
Agents available but EUCAST breakpoints not implemented in the system	Rifampicin (Strep spp.) Will be in V2S 7.01 s/w, due in Q1 2014 Trimethoprim (<i>Enterococcus</i> spp. & Gr. B strep) Vancomycin (CNS) Will be in V2S 7.01 s/w due in Q1 2014 Linezolid (<i>S. pneumoniae</i>) Will be in V2S 7.01 s/w due in Q1 2014 Gentamicin (<i>Enterococcus</i> spp.) in development Mupirocin (<i>S. aureus</i>) Will be in V2S 7.01 s/w due in Q1 2014		Netilmicin (<i>Staphylococcus</i> spp.) Tri-sulfa (<i>Enterococcus</i> spp.) Ofloxacin (<i>S. pneumoniae</i>) Streptomycin (<i>Enterococcus</i> spp.) Antifungals All agents with <i>P. multocida</i>

*Tests with the agent:inhibitor in a 2:1 ratio are not acceptable using EUCAST methods and breakpoints