Test form for the External Quality Assessment (EQA) for laboratories participating in the European Antimicrobial Resistance Surveillance Network (EARS-Net), 2025 – *Escherichia coli*

Participating laboratories can only submit results online via the webtool.
This form cannot be submitted.

Kindly note, due to the Material Transfer Agreements (MTAs) between DTU and the original providers of the isolate:

1. Strains received for the 2025 EARS-Net EQA cannot be re-distributed further by the recipient laboratories.

2. It is not possible for DTU or the National EARS-Net EQA Coordinator to distribute strains to laboratories after the EQA exercise, e.g. for confirmatory, training, or reference purposes.

It is recommended to store the strain in your strain collection (e.g. in a -80°C freezer), at least until you have reviewed your results from this EQA exercise. This will allow for repetition of species identification and AST, if needed, in light of your individual performance.

This form is designed to help participating laboratories prepare their results before submission in the EARS-Net EQA webtool (https://earsnet.eqa.dtu.dk/). It is based on the test form for 2024. In 2021–2024, the EARS-Net EQA was coordinated by DTU Food, with ECDC, through a framework contract. From 2025, the EARS-Net EQA is coordinated by DTU Food, in their capacity as a consortium member of the EURL-PH-AMR, in consultation with ECDC.

When submitting the results online in the webtool, participants will be asked for the following information:

Escherichia coli - strain no. _____

The isolate should be considered as being obtained from a patient with a bloodstream infection.

For penicillins (amoxicillin and ampicillin), it should be assumed that intravenous administration will take place.

Amoxicillin should be tested, regardless of results obtained for ampicillin.

For colistin and aminoglycosides (amikacin, gentamicin and tobramycin), it should be assumed that the antimicrobials will be administered in combination with other agents.

Breakpoints currently based on ECOFF values can be used for interpretation of results, when applicable, if no other relevant EUCAST clinical breakpoints exist.

Currently, EUCAST recommends using disk diffusion for testing of cefiderocol, but only after consulting the EUCAST Warnings! page (Warning 12) about certain media and disks (https://www.eucast.org/ast-of-bacteria/warnings).

Non-reported results will not be scored, but the antimicrobials and respective empty result sections will still be visible in the individual evaluation reports.

TEST FORM METHODS

1. Please select a type of laboratory

- ☐ National reference laboratory (or laboratory with similar functions)
- ☐ Regional reference laboratory (or laboratory with similar functions)
- ☐ Local laboratory

2. Which methodology did you mainly use for antimicrobial susceptibility testing (AST) of this strain?

- ☐ Automated system
- ☐ Disk/Tablet diffusion
- ☐ Broth microdilution
- ☐ Gradient test
- ☐ Macro broth dilution (tubes)
- ☐ Agar dilution
- ☐ Other – specify: _____

If you have used a different AST method for some antibiotics, please change the method for the relevant antimicrobial(s) below.

In the webtool, the type of method will by default be set to the information already provided above, and be aware that the settings below will change, if you later change method above.

Antimicrobial	Method
Amikacin	
Amoxicillin	
Amoxicillin-clavulanic acid (fixed 2)	
Ampicillin	
Cefepime	
Cefotaxime	
Ceftazidime	
Ceftriaxone	
Ciprofloxacin	
Colistin	
Ertapenem	
Gentamicin	
Imipenem	
Levofloxacin	
Meropenem	
Moxifloxacin	
Ofloxacin	

Antimicrobial	Method
Piperacillin-tazobactam (fixed 4)	
Tigecycline	
Tobramycin	
Cefiderocol	
Ceftazidime-avibactam (fixed 4)	
Ceftolozane-tazobactam (fixed 4)	
Imipenem-relebactam (fixed 4)	
Meropenem-vaborbactam (fixed 8)	
Aztreonam-avibactam (fixed 4)	

If you selected Automated system in the table above, please specify the instrument

- Microscan Walkaway
- Phoenix
- VITEK
- Other – specify: _____

If you selected Disk/Tablet diffusion in the table above, please specify the origin of the disks/tablets

- BD/BBL sensi disc
- Liofilchem
- MAST
- Neo sensitabs
- Oxoid
- Other– specify: _____

If you selected Disk/Tablet diffusion in the table above, please specify the origin of the agar

- BD BBL MH II Agar (Becton Dickinson)
- Biolife MH Agar II (Biolife Italiana)
- bioMerieux MHE Agar (bioMérieux)
- Bio-Rad MH Agar (Bio-Rad Laboratories)
- E&O Laboratories MH Agar (E&O Laboratories)
- Hardy Diagnostics MH Agar (Hardy Diagnostics)
- HiMedia MH Agar (HiMedia)
- HiMedia MH Agar no. 2 (HiMedia)
- Liofilchem MH II Agar (Liofilchem)
- Oxoid MH Agar (Thermo Scientific)
- Other – specify: _____

If you selected Broth microdilution in the table above, please specify the test and origin

- ComASP
- Liofilchem
- Sensititre MIC plates
- UMIC (Bruker)
- MIC plates prepared in-house
- Other– specify: _____

If you selected Broth microdilution in the table above, please specify the origin of the broth

- BD BBL

- Oxoid
- Sensititre
- Sigma-Aldrich
- Other – specify: _____

If you selected Gradient test in the table above, please specify the test and origin

- E-test (bioMérieux)
- MIC strip (Liofilchem)
- Other – specify: _____

If you selected Gradient test in the table above, please specify the origin of the agar

- BD BBL MH II Agar (Becton Dickinson)
- Biolife MH Agar II (Biolife Italiana)
- bioMerieux MHE Agar (bioMérieux)
- Bio-Rad MH Agar (Bio-Rad Laboratories)
- E&O Laboratories MH Agar (E&O Laboratories)
- Hardy Diagnostics MH Agar (Hardy Diagnostics)
- HiMedia MH Agar (HiMedia)
- HiMedia MH Agar no. 2 (HiMedia)
- Liofilchem MH II Agar (Liofilchem)
- Oxoid MH Agar (Thermo Scientific)
- Other – specify: _____

***3*. Which standard/guideline did you use when performing AST?**

☐ EUCAST – specify breakpoint table version: _____

☐ Other – specify: _____

4. Would you normally send this (invasive!) strain to a reference or other laboratory? (Please note that the EQA strains cannot actually be redistributed further).

☐ Yes

☐ No

TEST FORM RESULTS

Strain ID	Antimicrobial	Results and interpretation		
		≤ / = / >	MIC value (mg/L) or zone diameter (mm)	S / I / R / NA
	Amikacin			
	Amoxicillin			
	Amoxicillin-clavulanic acid (fixed 2)			
	Ampicillin			
	Cefepime			
	Cefotaxime			
	Ceftazidime			
	Ceftriaxone			
	Ciprofloxacin			
	Colistin			
	Ertapenem			
	Gentamicin			
	Imipenem			
	Levofloxacin			
	Meropenem			
	Moxifloxacin			
	Ofloxacin			
	Piperacillin-tazobactam (fixed 4)			
	Tigecycline			
	Tobramycin			
	Cefiderocol			
	Ceftazidime-avibactam (fixed 4)			
	Ceftolozane-tazobactam (fixed 4)			
	Imipenem-relebactam (fixed 4)			
	Meropenem-vaborbactam (fixed 8)			
	Aztreonam-avibactam (fixed 4)			