



EUCAST

EUROPEAN COMMITTEE
ON ANTIMICROBIAL
SUSCEPTIBILITY TESTING

European Society of Clinical Microbiology and Infectious Diseases

**Antimicrobial susceptibility tests on groups of organisms or agents for
which there are no EUCAST breakpoints**

Updated 1 December 2021

https://www.eucast.org/clinical_breakpoints_and_dosing/when_there_are_no_breakpoints/

When are there no EUCAST breakpoints?

1. The **species is not** mentioned in breakpoint tables or notes in the tables
2. The **agent is not** mentioned in breakpoint tables or notes in the tables

For these, used in the breakpoint table, there **are** breakpoints:

“Dash” – is equivalent to “R” and should normally match “expected resistant phenotypes” (the old “intrinsic resistance”).

EUCAST has evaluated current literature and denied a breakpoint.

“IE” - is equivalent to “?” and informs that EUCAST has evaluated the issue and found insufficient evidence for a breakpoint. Perform an MIC and proceed with caution.

True lack of breakpoints among species and agents

- *Nocardia* spp
- Many anaerobic species
- *Erysipelothrix rhusopathiae*
- *Campylobacter lariidis*
-

- Josamycin
- Sparfloxacin
- Garenoxacin
- Spiramycin
-many cephalosporins
-

When there are no breakpoints for anaerobic bacteria

- Determine the **MIC using agar dilution** (if possible)
- Gradient tests – check with the manufacturer to ascertain that the test has been **validated for the species**.
- If the MIC is above the values presented in the table (next slides), **advise against the use** of the agent for treatment (alternatively “report as resistant”).
- If the MIC is equal to or below the value, interpret with caution and avoid categorical reporting. Reporting should instead be in the form of comments to guide (next slides).

Antimicrobial agent* relevant for the treatment of anaerobic bacteria**	Resistance (R>) for species lacking specific breakpoints*
Benzylpenicillin	0.5
Piperacillin-tazobactam	8
Meropenem	2
Vancomycin	2
Clindamycin	0.5
Metronidazole	4

*Agents will be added to this table late 2022 or early 2023.

**These breakpoints should not be used for species with specific breakpoints: Bacteroides spp, Prevotella spp, Fusobacterium necrophorum, Clostridium perfringens, Cutibacterium acnes, Clostridioides difficile – see the EUCAST breakpoint table.

Agents will be added to this table late 2022 or early 2023.

- Ampicillin/Amoxicillin
- Amoxicillin-clavulanic acid
- Ampicillin-sulbactam
- Imipenem
- Ertapenem
- Ceftriaxone (G+)
- Linezolid (G+)

Breakpoints and methods for some of the following species may be developed in the future

Gram-negative:

- Bilophila, Mobiluncus, Parabacteroides and Porphyromonas

Gram-positive:

- Actinomyces, Bifidobacterium, other clostridia, Eggerthella, Eubacterium, Finegoldia, Peptococcus and Lactobacillus.
Staphylococcus saccharolyticus.

For all these species, susceptibility testing should be performed in anaerobic environment.

Reporting susceptibility when there are no breakpoints

When one of the techniques proposed above have been used to evaluate whether an isolate is or is not likely to respond to therapy with a specific agent, you want to report the result:

If you failed to develop a recommendation one of the following comments may be used:

- Categorising the susceptibility of the organism is not possible. The MIC is X mg/L.
- Categorising the susceptibility of the organism is not possible. There is no approved method and breakpoints have not been determined.

Reporting susceptibility when there are no breakpoints

If the aim is to **discourage** the use of an agent, you may or may not want to add an R to the report with a comment:

- Formal categorising of the susceptibility of the organism is not possible. The MIC (of X mg/L) suggests that the agent should not be used for therapy.

If the aim is to **encourage** the use of an agent, you can add a comment:

- Formal categorising of the susceptibility of the organism is not possible. The MIC (of X mg/L) suggests that the agent may be used for treatment.