



SAC information and recommendations after the 23rd session

Friday, 28 March 2025, 10.30-12.30, at Sorell Hotel Ador in Bern

Information regarding category I ‘Susceptible, increased exposure’:

The SAC will soon publish an informative article regarding the category I (Susceptible, increased exposure) introduced by EUCAST in 2019 in the SAC website and the interim digital version of FAEZ (Schweizerische Ärztezeitung, Swiss Medical Forum, <https://www.fmh.ch/politik-medien/schweizerische-aerztezeitung.cfm>). In this document, the SAC acknowledges the variability in reporting this category among Swiss laboratories and recommends aligning with EUCAST guidelines wherever possible. Moreover, the SAC provides scientific explanations and highlights that this category is sometimes improperly considered as ‘not susceptible’, in line with the previous definition of EUCAST category ‘I’. An example is provided where misinterpretation of this category may lead to the overuse of broad-spectrum antibiotics, such as meropenem, at the expense of equally effective alternatives, such as third- and fourth-generation cephalosporins, for the treatment of *Pseudomonas aeruginosa* infections, despite lacking scientific justification. The SAC strongly recommends close collaboration between laboratories and clinicians to raise awareness and prevent misinterpretations. Laboratories are encouraged to share the test results with their referring medical partners.



Recommendations:

1) Reporting ESBL/AmpC-production

The SAC has identified significant variability in how microbiology laboratories report antimicrobial susceptibility testing data, particularly concerning 3rd and 4th generation cephalosporins for ESBL-producing Enterobacterales and AmpC-intrinsic producers. In this regard, the SAC and the Swiss Society for Microbiology (SSI) strongly recommend adherence to EUCAST guidelines, which are summarized in the EUCAST Expert Rules v3.3 on Enterobacterales

https://www.eucast.org/fileadmin/src/media/PDFs/EUCAST_files/Expert_Rules/2024/Expert_Rules_V3.3_20240630_Enterobacterales.pdf

The SAC recommendations explicitly and exclusively refer to:

- The reporting of 3rd-generation cephalosporins and piperacillin-tazobactam for intrinsic AmpC producers,
- The reporting of 3rd- and 4th-generation cephalosporins for ESBL producers.

ESBL-producers (Rule No 7):

(*E. coli*, *Klebsiella* spp. except *K. aerogenes*, *Raoultella* spp.)

IF resistant to any 3rd generation (cefotaxime, ceftriaxone, ceftazidime) or 4th generation (cefepime) cephalosporin and susceptible to another 3rd or 4th generation cephalosporin,

EITHER: report each as tested and enclose a warning on uncertain therapeutic outcome

OR: suppress susceptibility testing results for the susceptible agent.*

AmpC-intrinsic producers (Rules No 3 and 4):

(*Enterobacter* spp., *K. aerogenes*, *Citrobacter freundii*, *Hafnia alvei*)

IF susceptible in vitro to cefotaxime, ceftriaxone, ceftazidime, or piperacillin-tazobactam,

EITHER: add a note that monotherapy with cefotaxime, ceftriaxone, ceftazidime or piperacillin-tazobactam should be discouraged owing to risk of selecting resistance

OR: suppress the susceptibility testing results for these agents.

(*Serratia* spp., *Morganella morganii*, *Providencia* spp)

IF susceptible to cefotaxime, ceftriaxone or ceftazidime,

EITHER: add a note that monotherapy with cefotaxime, ceftriaxone or ceftazidime may infrequently select resistant mutants

OR: suppress the susceptibility testing results for these agents.*

*Even though this is not included in the official guidelines, it may be implemented upon agreement with infectious disease specialists.



The SAC and the SSI strongly discourage modifying AST results. Both organizations advocate for adopting the EUCAST-based system for reporting ESBL and intrinsic AmpC producers to harmonize the reporting system across Switzerland. This approach also aims to avoid overestimation of resistance (*e.g.*, in national databases like Anresis).

2) Antifungal susceptibility testing of yeast

The SAC recommends strict adherence to the manufacturer's instructions when using commercial kits for antifungal susceptibility testing of yeast.

- Sensititre: Results should not be interpreted using EUCAST CBPs but rather according to the manufacturer's recommendations (CLSI M27 based method).
- Micronaut: results should be interpreted according to EUCAST CBPs.

Currently, there is insufficient data for SAC to take a definitive position on the implications and possible countermeasures related to the newly introduced anidulafungin CBP for *Candida albicans* when using the EUCAST-compliant method. The SAC will continue to monitor the issue and may revisit the discussion once more scientific data becomes available.

3) EUCAST warning against colistin gradient test

EUCAST has once again issued a warning against the Colistin MIC gradient test.

https://www.eucast.org/fileadmin/src/media/PDFs/EUCAST_files/Warnings/Warnings_docs/Warning_-_colistin_AST.pdf

The SAC strongly recommend against the use of E-tests for colistin susceptibility testing, in case there are still laboratories in Switzerland that rely on it.