



National survey on antimicrobial susceptibility practices in Swiss clinical microbiology laboratories

Poster
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1) Swiss Antimicrobial susceptibility testing Committee (SAC)

INTRODUCTION

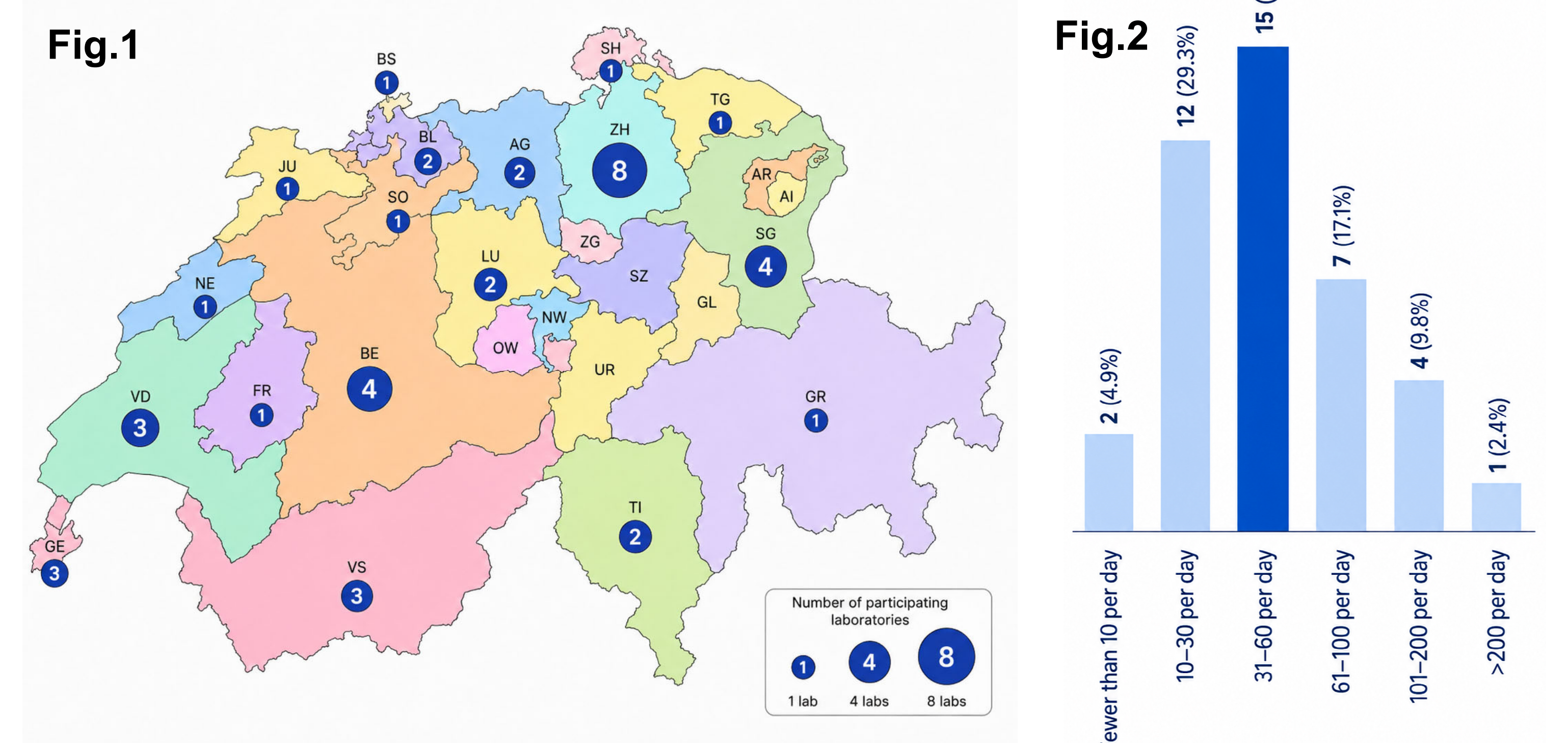
Harmonized antimicrobial susceptibility testing (AST) is essential to ensure comparable reporting, effective antimicrobial resistance surveillance, and optimal patient management across Swiss laboratories and hospitals.

AIMS

Conduct a national survey on current AST practices to support future discussions, guideline development, harmonization efforts, and educational activities, enabling anonymous benchmarking.

RESULTS – I

41 laboratories across Switzerland participated (Fig.1), mostly processing 30–60 antibiograms per day (Fig.2).



VITEK 2 dominate first-line AST (27/41; 66%), followed by disc diffusion (10/41; 24%); BD Phoenix/MicroScan are rarely used (Fig.3).

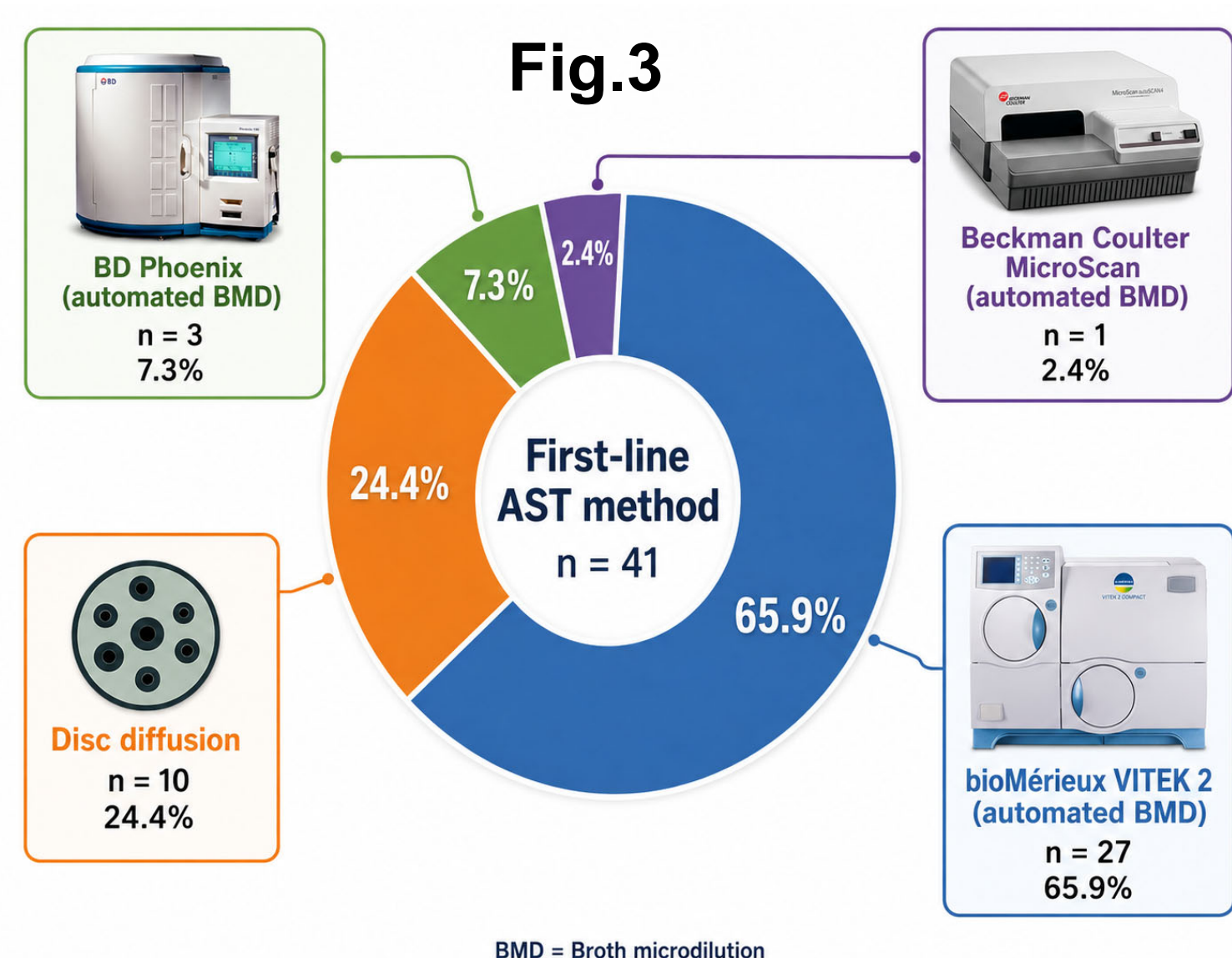
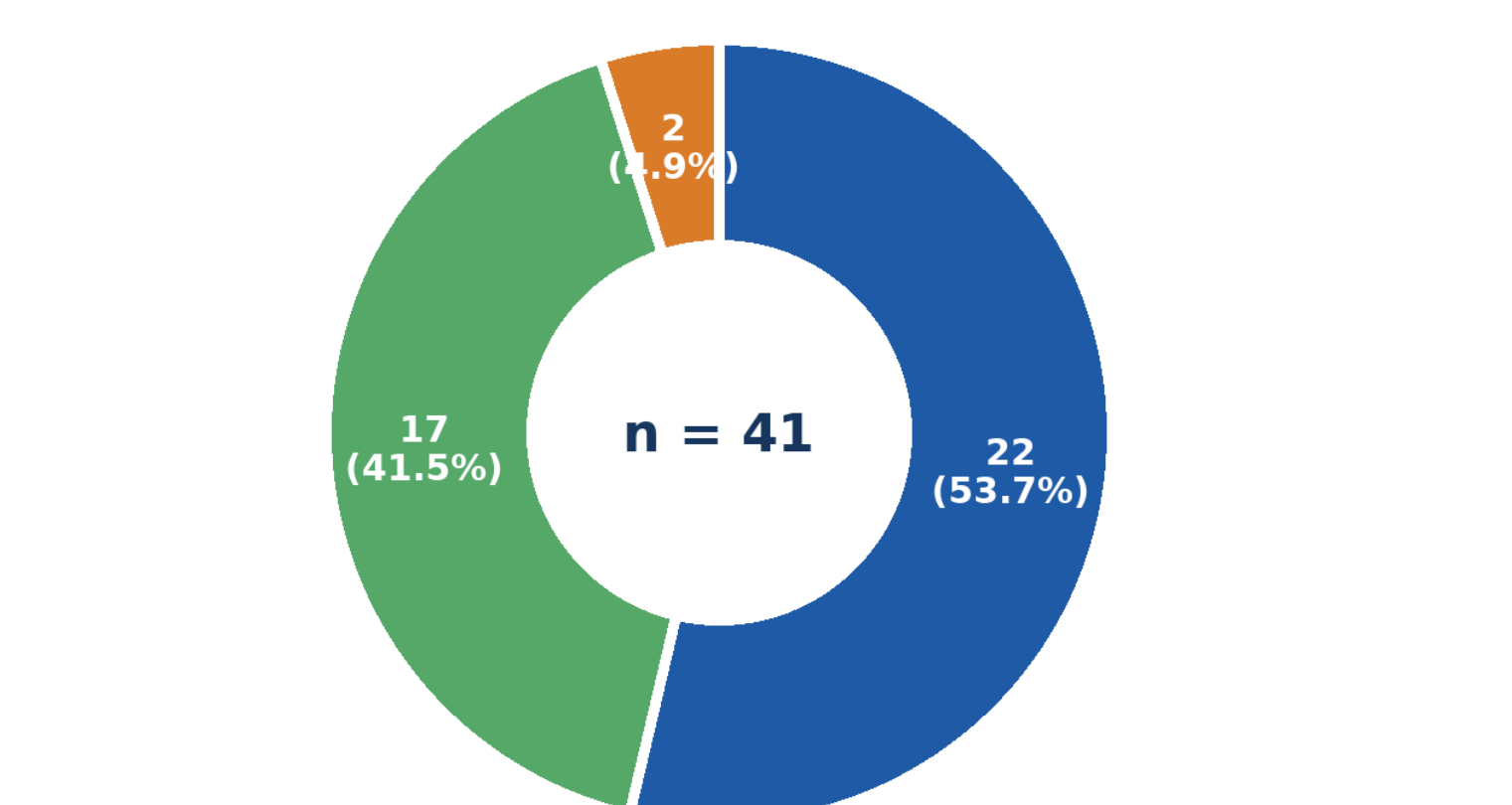
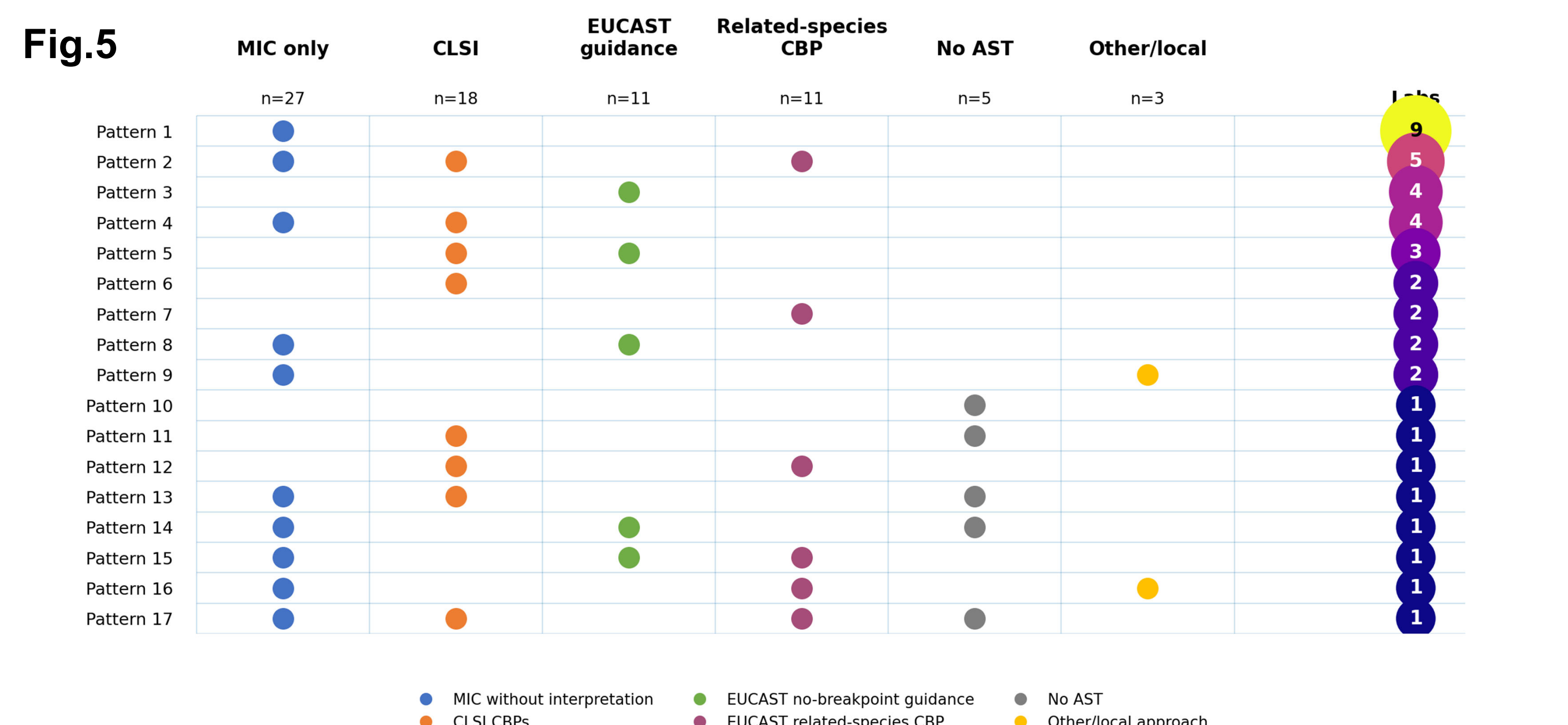


Fig.4. Guidelines used for the interpretation of AST results



AST interpretation is predominantly EUCAST-based: 17/41 (41.5%) use EUCAST exclusively, most others use CLSI when EUCAST guidance is unavailable, and 2 laboratories rely on CA-SFM as fallback (Fig.4).

The survey revealed high variability in handling AST results in the absence of EUCAST clinical breakpoints (Fig.5).

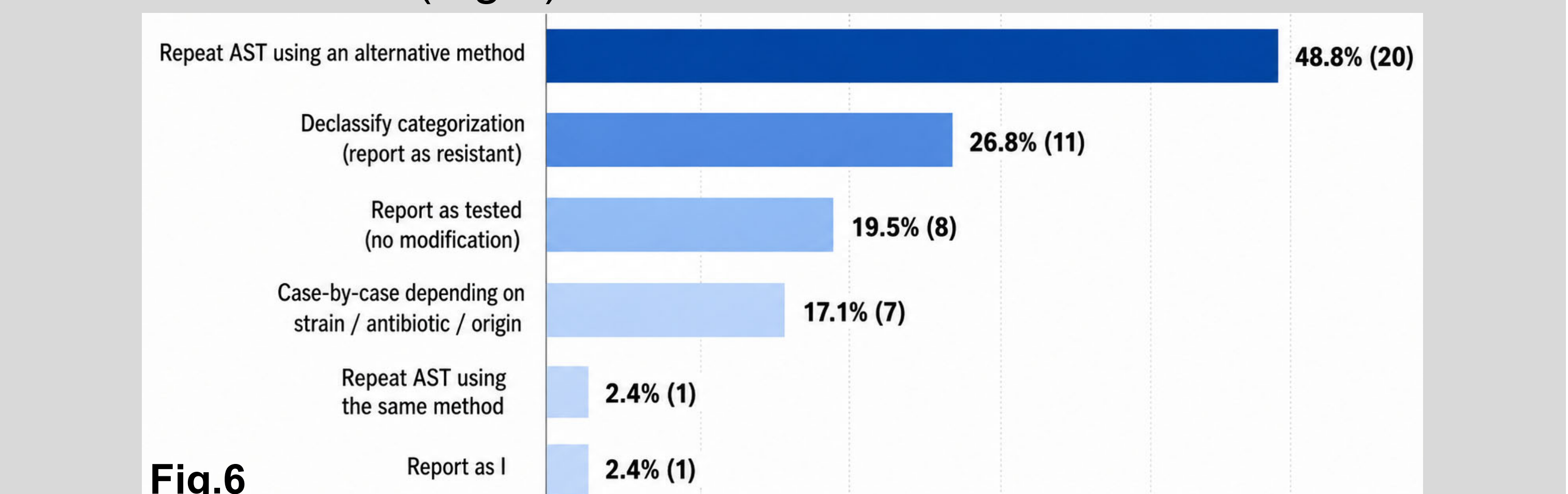


METHODS

An online questionnaire was distributed in early April 2026 to Swiss clinical microbiology laboratories performing bacterial AST.

RESULTS – II

Substantial variability is present in handling AST results in the ATU, while practices remain broadly consistent with EUCAST recommendations (Fig.6).



High variability persist in both ESBL screening/detection methods (Fig.7-8) and AST result reporting (Fig.9).

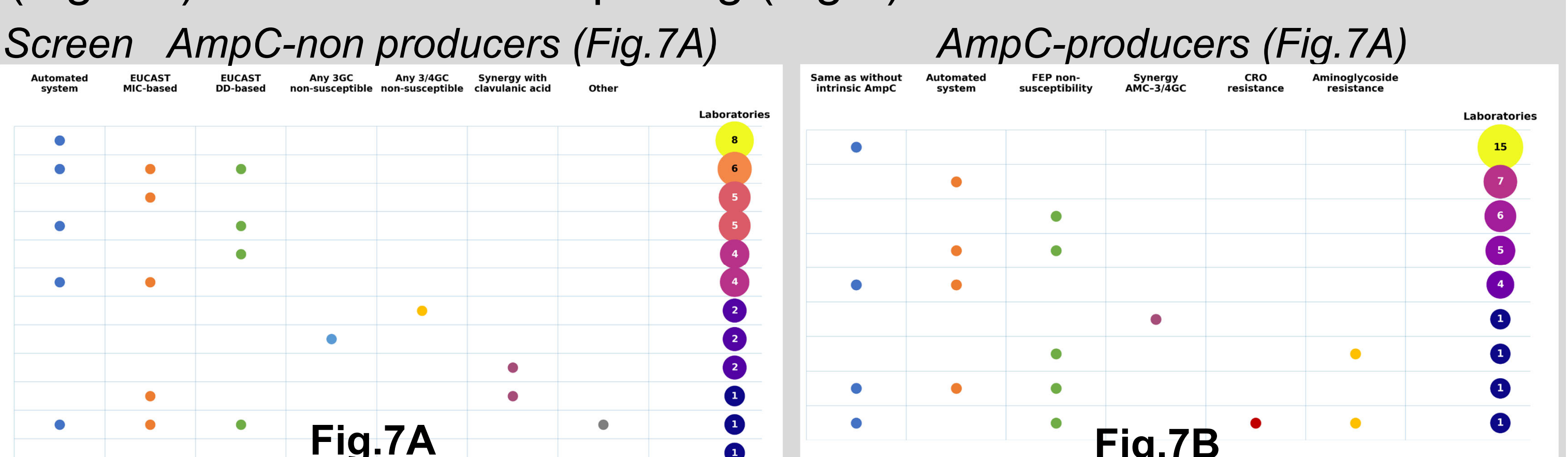


Fig.8 ESBL confirmatory testing

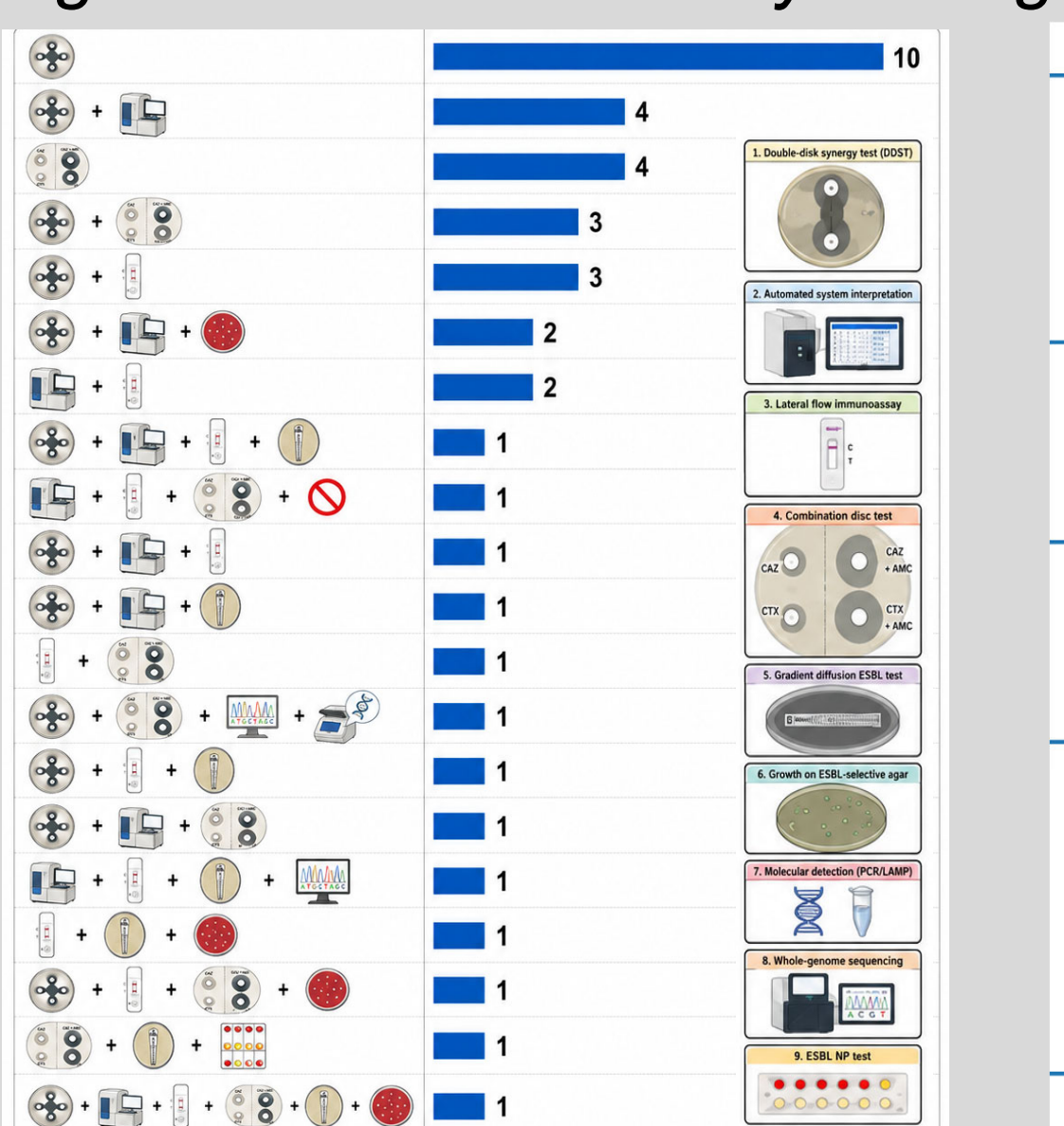


Fig.9 Reporting ESBL production

Reporting strategy	Antibiotics affected	Laboratories
Discouraging comment	3/4GC	8
	AMC	1
	3/4GC + AMC	1
Suppress AST result	3/4GC + AMC + TZP	13
	3/4GC	1
	3/4GC + AMC	2
Modify to resistant	3/4GC + AMC + TZP	3
	AMC + TZP	1
	3/4GC + AMC	1
Mixed strategies	3/4GC + AMC + TZP	2
	Comment 3/4GC + modify 3/4GC	1
	Suppress 3/4GC + modify AMC	1
	Modify 3/4GC + suppress AMC	1
	Suppress 3/4GC + AMC + comment TZP	1
No modification/comment	Comment 3/4GC + modify AMC	1
	3/4GC + AMC	1

CONCLUSION

Swiss laboratories show broad adherence to EUCAST recommendations, although relevant variability persists in selected AST practices, particularly in the detection and reporting of resistance mechanisms. These findings support future national harmonization efforts and guideline development.

CONTACT



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