

Performance of the VITEK 2 Advanced Expert System (AES) as a Rapid Tool for Reporting Antimicrobial Susceptibility Testing (AST) in *Enterobacterales*

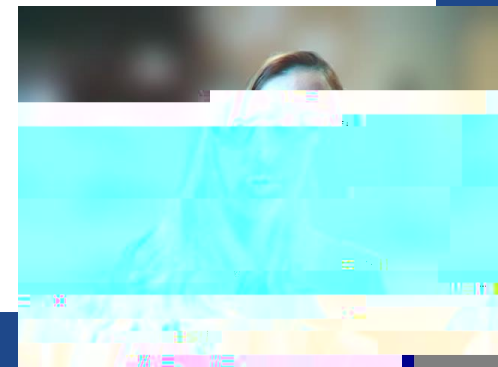
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Objective

To evaluate the performance of the VITEK 2 AES in comparison to the reference broth microdilution on a challenging set of whole genome sequenced *Enterobacterales* isolates of North and Latin American origin.

Methods

- 488 unique, molecularly characterized *Enterobacterales* isolates were selected from 2015-2019 SENTRY Antimicrobial Surveillance program (384 isolates) and CDC AR Bank (104 isolates).
- Isolates from North America (61 medical centers in the US) and Latin America (11 medical centers in 6 countries) were included.
- Isolates were tested by reference broth microdilution (BMD; CLSI) and VITEK 2 using N802 and XN15 AST cards and AES (v.9.02) in the CLSI-based + Natural Resistance (NATR) mode.
- BMD and VITEK 2 results for 29 antimicrobial agents were compared and discordant results were repeated by both methods using the same inoculum.
- The AES phenotypes were compared to resistant genotypes, while AES levels of confidence (green, yellow, and red) were compared to BMD results for accuracy.



Results

Results

Conclusions

Acknowledgements

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