

A stylized, light-colored illustration of a plant with several leaves and small, round buds or flowers, positioned on the left side of the slide against a dark brown background.

# MICROBIOLOGY LABORATORY

Antibiotic Susceptibility Reporting  
CLSI 2013

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PRETEST



# Microbiology Procedure Manual Volume 2

- SOP TITLE: Antimicrobial Susceptibility Testing Guidelines
- PROCEDURE NO.: MI-070



# DECISION ALGORITHM

- Does the Vitek2 Report has at least one “\*” next to antibiotic name/MIC ?
  
- Vitek2 Report **does NOT have** “\*” next to antibiotic name/MIC ?



# If you see an “\*”...

**ASK YOURSELF: WHY is an \* on the Vitek 2 report?**

1. Is the **D-TEST** positive?

- Do I need to change the CC to “IR” in VISTA?
- Do I need to change the E to “R” in VISTA?



# ASK YOURSELF: WHY is an \* on the Vitek 2 report?

## 2. Is something **INTRINSICALLY** resistant?

- Do I need to check the CLSI for the intrinsic table?
- Will I need to change the antibiotics to “R” in VISTA? (Vista does not know about *Klebsiella pneumoniae* and Amp-R, about *Enterococcus gallinarum* and Va-R, or about *Providencia spp.* and Gm/NN/Amp/etc.- Resistance. YOU are responsible to tell VISTA.)



# ASK YOURSELF: WHY is an \* on the Vitek 2 report?

3. Are the cephalosporins changing to “R”\* based on the ESBL result?

- BE SURE YOU double-check with CLSI. The Vitek uses 2008-2009 CLSI; we are using 2012-2013.
- NO MORE ESBL results because breakpoints have changed. This is why Cefazolin is  $\leq 4$  intermediate, and NOT susceptible.



# ASK YOURSELF: WHY is an \* on the Vitek 2 report?

4. Do you see a comment about **KPCs**? (Carbapenem producers are going to be noted in the comments section of the VIT2 report. You can also look up the phenotype on the Vitek2 to be sure. Usually, the metallo- or KPC comment is present.)

- When you have a KPC, check CLSI. Imipenem and Cephalosporins may need to be changed to demonstrate resistance.
- Consult with the supervisor regarding multiple-resistant KPCs.
- An email to infection control/infectious disease may be warranted.
- In addition, resistant strains may need to be saved for EIP.



# If you do NOT see an “\*”...

- Report “as is”; what is listed in VISTA; VISTA uses mostly 2012-2013 CLSI rules (some exceptions: *Imipenem* - report based on organism; *Acinetobacter*; *B. cepacia* – look up in CLSI)
- Look for name changes (MRSA, HLGR, VRE) to be made in VISTA (organism field)
- Look for **MDRO** (report to g.micro)
- Look for **Vitek product limitations** (PIP/TAZO Etest must be added to *Serratia marcescens* and all TZP-resistant *PSA*)



# EXAMPLES

- Review the Vitek printouts provided for discussion
- How / what would you change when resulting the report in VISTA?
- Where would you look for additional information? (Current CLSI? VITEK AES INTRINSIC list?)



NEW:

Do not report susceptibility results for  
*Staphylococcus saprophyticus* isolated from  
urine.



# POST-TEST

Answers....



QUESTIONS?





# Thank you

PLEASE remember to go directly to the SOP and to CLSI for clarification.