

## **Erythromycin Resistant, Clindamycin Susceptible *Staphylococcus Aureus***

**Question:**

***What does your laboratory do when testing a *Staphylococcus aureus* isolate that is erythromycin resistant and clindamycin susceptible?***

***No additional testing – report clindamycin as susceptible***

***No additional testing – overwrite clindamycin to resistant***

***Perform penicillin-binding protein 2a (PBP2a) test***

***Perform D zone test***

***Perform ESBL confirmation***

**Discussion:**

**The following specific information for staphylococcus spp. is provided in the Clinical and Laboratory Standards Institute (CLSI) guidelines:**

***Inducible clindamycin resistance can be detected by disk diffusion using the D-zone test.***<sup>1</sup>

***Macrolide-resistant isolates of *S. aureus*...may express constitutive or inducible resistance to clindamycin or may be resistant only to macrolides. Inducible clindamycin resistance can be detected using a disk diffusion test with clindamycin and erythromycin disks placed in close proximity. ...Flattening of the clindamycin zone adjacent to the erythromycin disk (referred to as the D-Zone) indicates inducible clindamycin resistance. Following incubation, organisms that do not show flattening of the clindamycin zone adjacent to the erythromycin disk should be reported as tested (ie, susceptible or intermediate to clindamycin).***<sup>2</sup>

**Answer:**

***Perform D zone test***

<sup>1</sup> CLSI M100-S19 Table 2C: *Staphylococcus* spp., Comment 27, pg 58

<sup>2</sup>CLSI M07-A8, 13: Inducible Clindamycin Resistance, pg 30

<sup>2</sup>CLSI M02-A10, 12: Inducible Clindamycin Resistance, pg 25