#### QUIZ 12/5/2025

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## The true statement about New Delhi metallo-beta-lactamase (NDM-1) is

- 1.It is a Class A Beta lactamase
- 2. Not Inhibited by Avibactam and Vaborbactam
- 3.Imipenem-cilistatin-relebactam is a preferred option
- 4. Most strains do not respond to Tetracyclines

# Answer: 2 Not Inhibited by Avibactam and Vaborbactam

The most clinically important Class B carbapenemase is the New Delhi metallo-beta-lactamase (NDM-1)

MBLs can be inhibited by EDTA; however, not inhibited by betalactamase inhibitors

MBLs **confer resistance** to almost all beta-lactams
Aztreonam avibactam or ceftazidime – avibactam with aztreonam is
effective AGAINST MBLs

MBLs do not confer resistance to aztreonam, but the organisms typically carry other resistance mechanisms that result in resistance to aztreonam. By adding avibactam, these resistance mechanisms are overcome, and aztreonam regains its activity

## WINNER

- Dr. Kumaresh
- Final Year DM Resident
- GMKMCH SALEM



Question No: 2

All these drugs can be used for treatment of infections with Strenotrophomonas Maltophilia except

- 1.Ceftazidime
- 2.Minocycline
- 3.Cefiderocol
- 4.Trimethoprim- Sulfomethoxazole

#### Ans: 1. Ceftazidime

- Stenotrophomonas maltophilia is an aerobic, glucose non-fermenting, gramnegative bacillus that is ubiquitous in water environments
- Produces biofilm and virulence factors that enable colonization or infection in vulnerable hosts
- has the potential to cause serious disease, particularly in patients with underlying pulmonary conditions such as cystic fibrosis or ventilator dependency
- Any of 2 approaches are preferred options for the treatment of S. maltophilia infections:
  - (1) the use of 2 of the following agents: cefiderocol, minocycline, TMP-SMX, or levofloxacin or
  - (2) the combination of ceftazidime-avibactam and aztreonam.
- Ceftazidime is not a suggested treatment option for *S. maltophilia* infections due to the presence of  $\beta$ -lactamase genes intrinsic to *S. maltophilia*

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# Thank You