

## 2023 CLSI MIC Breakpoint Comparison Chart (GN95 Card)

Highlighted antibiotics have had a change in recommended MIC breakpoints due to ongoing surveillance of clinical outcomes and emerging patterns of resistance.

You may call the pharmacist at 513-5152 for assistance with interpretation of results

| <i>Enterobacteriales</i> (includes <i>E.coli</i> , <i>Klebsiella</i> , <i>Morganella</i> , <i>Proteus</i> , <i>Enterobacter</i> , <i>Citrobacter</i> and <i>Serratia</i> spp) |                       |       |      |                    |                 |       |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|------|--------------------|-----------------|-------|-----|
|                                                                                                                                                                               | 2023 CLSI Breakpoints |       |      |                    | Conway Regional |       |     |
|                                                                                                                                                                               | ≤ S                   | I     | R ≥  |                    | ≤ S             | I     | R ≥ |
| Amikacin *NEW 2023                                                                                                                                                            | 4                     | 8     | 16   | Amikacin           | 16              | 32    | 64  |
| Amox/Clav                                                                                                                                                                     | 8                     | 16    | 32   | Amox/Clav          | 8               | 16    | 32  |
| Ampicillin                                                                                                                                                                    | 8                     | 16    | 32   | Ampicillin         | 8               | 16    | 32  |
| Ampicillin                                                                                                                                                                    | 8                     | 16    | 32   | Ampicillin         | 8               | 16    | 32  |
| Amp/sulbactam                                                                                                                                                                 | 8                     | 16    | 32   | Amp/sulbactam      | 8               | 16    | 32  |
| Aztreonam 2010                                                                                                                                                                | 4                     | 8     | 16   | Aztreonam          | 8               | 16    | 32  |
| Cefazolin* 2011                                                                                                                                                               | 2                     | 4     | 8    | Cefazolin          | 8               | 16    | 32  |
| Cefepime 2014                                                                                                                                                                 | 2                     | 4-8** | 16   | Cefepime           | 2               | 4-8   | 16  |
| Ceftazidime 2010                                                                                                                                                              | 4                     | 8     | 16   | Ceftazidime        | 8               | 16    | 32  |
| Ceftriaxone 2010                                                                                                                                                              | 1                     | 2     | 4    | Ceftriaxone        | 1               | 2     | 4   |
| Ciprofloxacin 2019                                                                                                                                                            | 0.25                  | 0.5   | 1    | Ciprofloxacin      | 1               | 2     | 4   |
| Ertapenem 2012                                                                                                                                                                | 0.5                   | 1     | 2    | Ertapenem          | 0.5             | 1     | 2   |
| Gentamicin *NEW 2023                                                                                                                                                          | 2                     | 4     | 8    | Gentamicin         | 4               | 8     | 16  |
| Imipenem 2010                                                                                                                                                                 | 1                     | 2     | 4    | Imipenem           | 4               | 8     | 16  |
| Levofloxacin 2019                                                                                                                                                             | 0.5                   | 1     | 2    | Levofloxacin       | 2               | 4     | 8   |
| Meropenem 2010                                                                                                                                                                | 1                     | 2     | 4    | Meropenem          | 4               | 8     | 16  |
| Nitrofurantoin (U)                                                                                                                                                            | 32                    | 64    | 128  | Nitrofurantoin (U) | 32              | 64    | 128 |
| Tetracycline                                                                                                                                                                  | 4                     | 8     | 16   | Tetracycline       | 4               | 8     | 16  |
| Pip/Tazo *NEW 2022                                                                                                                                                            | 8                     | 16**  | 32   | Pip/Tazo           | 16              | 32-64 | 128 |
| Tobramycin *NEW 2023                                                                                                                                                          | 2                     | 4     | 8    | Tobramycin         | 4               | 8     | 16  |
| Trimet/Sulfa                                                                                                                                                                  | 2/38                  | –     | 4/76 | Trimet/Sulfa       | 40              | –     | 80  |

\*Cefazolin urine MIC of 16 or less is sensitive. 32 or greater is resistant  
 \*\*Cefepime MIC of 4-8 is SDD, MIC of 4 needs dose of 1g q8h or 2g q12h. MIC of 8 needs 2g q8h.

\*\*Pip/tao MIC of 16 is SDD, dose needs to be 4.5g over 4 hr q8h.

| <i>Pseudomonas aeruginosa</i>     |                       |    |     |               |                                |    |     |
|-----------------------------------|-----------------------|----|-----|---------------|--------------------------------|----|-----|
|                                   | 2023 CLSI Breakpoints |    |     |               | Conway Regional                |    |     |
|                                   | ≤ S                   | I  | R ≥ |               | ≤ S                            | I  | R ≥ |
| Amikacin *URINE ONLY              | 16                    | 32 | 64  | Amikacin      | 16                             | 32 | 64  |
| Aztreonam                         | 8                     | 16 | 32  | Aztreonam     | Vitek not approved for testing |    |     |
| Cefepime                          | 8                     | 16 | 32  | Cefepime      | 4                              | *  | 32  |
| Ceftazidime                       | 8                     | 16 | 32  | Ceftazidime   | 8                              | 16 | 32  |
| Ceftaz/Avibac                     | 8                     | –  | 16  | Ceftaz/Avibac | 8                              | –  | 16  |
| Ceftol/tazo                       | 4                     | 8  | 16  | Ceftol/tazo   | 4                              | 8  | 16  |
| Ciprofloxacin 2019                | 0.5                   | 1  | 2   | Ciprofloxacin | 1                              | 2  | 4   |
| Gentamicin *NEW 2023              |                       |    |     | Gentamicin    | 4                              | 8  | 16  |
| Imipenem 2012                     | 2                     | 4  | 8   | Imipenem      | 4                              | 8  | 16  |
| Meropenem 2012                    | 2                     | 4  | 8   | Meropenem     | 4                              | 8  | 16  |
| Levofloxacin 2019                 | 1                     | 2  | 4   | Levofloxacin  | 2                              | 4  | 8   |
| Pip/Tazo 2012; revised again 2023 | 16                    | 32 | 64  | Pip/Tazo      | 64                             | –  | 128 |
| Tobramycin *NEW 2023              | 1                     | 2  | 4   | Tobramycin    | 4                              | 8  | 16  |

\*NEW 2023= URINE ONLY

\*VITEK: no 8 or 16's reported w/out secondary testing

\*\*Gentamicin no longer recommended for treatment of pseudomonas as of 2023

VITEK updated to match CLSI

Does not match and no rule in place

Vitek more strict than CLSI

Does not match CLSI but rule in place to suppress mismatch breakpoints

Newest updates