# Chughtai Lab antibiogram data

## (% age Susceptibility) July to December 2019

An antibiogram is an overall profile of antimicrobial susceptibility testing results of a specific microorganism to a battery of antimicrobial drugs. Antibiograms help guide the clinician and pharmacist in selecting the best empiric antimicrobial treatment in the event of pending microbiology culture and susceptibility results. They are also useful tools for detecting and monitoring trends in antimicrobial resistance.

The %value represent the **percentage susceptible** isolates against particular antibiotic.

### Gram Negative:

| Organism | # of isolates | AMC | CRO | IPM | MEM | TZP | AK | CN | DO | CIP | LEV | SXT | NA† | F† | FOS† |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ecoli | 5622 | 50.13% | 29.25% | 92.96% | 92.96% | 83.99% | 93.28% | 66.01% | 36.66% | 26.41% | 29.14% | 29.09% | 14.96% | 88.96% | 92.52% |
| Enterobacter spp | 126 | IR | 35.25% | 74.19% | 74.19% | 60.66% | 83.87% | 59.48% | 53.85% | 44.64% | Δ | 49.14% | Δ | Δ | NT |
| Klebsiella spp | 2723 | 41.52% | 31.89% | 80.75% | 80.75% | 70.78% | 81.71% | 64.96% | 42.86% | 36.04% | 50.96% | 36.14% | 31.68% | 72.36% | NT |
| Proteus spp | 466 | 60.06% | 60.22% | NT | 98.49% | 96.11% | 90.39% | 67.49% | 9.06% | 52.14% | 49.23% | 29.70% | 22.22% | IR | NT |
| Serratia spp | 103 | IR | 23.53% | 62.92% | 62.92% | 52.69% | 53.40% | 30.61% | 52.24% | 30.00% | NT | 57.14% | NT | IR | NT |

| Organism | # of isolates | AMP | CRO | CIP | SXT | C | AZM | MEM |
|---|---|---|---|---|---|---|---|---|
| Salmonella Typhi (XDR cases included) | 1370 | 23.13% | 43.39% | 2.41% | 23.58% | 23.20% | 100.00% | 100.00% |
| Salmonella Paratyphi A | 173 | 99.42% | 100.00% | 6.40% | 99.42% | 99.42% | NT | NT |

| Organism | # of isolates | CAZ | IPM | MEM | TZP | AK | CN | TOB | DO | CIP | LEV | SXT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acinetobacter spp | 525 | 20.76% | 28.88% | 28.41% | 26.18% | 42.94% | 34.44% | 65.67% | 50.62% | 23.26% | 30.00% | 31.15% |

| Organism | # of isolates | CAZ | FEP | IPM | MEM | TZP | AK | CN | TOB | CIP | LEV |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pseudo aeruginosa | 1480 | 71.13% | 71.75% | 78.40% | 78.27% | 79.53% | 80.10% | 69.28% | 74.90% | 62.89% | 74.36% |
| Pseudo spp | 392 | 63.92% | 62.02% | 77.63% | 77.58% | 79.79% | 71.47% | 57.22% | Δ | 50.46% | 58.33% |

| Organism | # of isolates | CAZ | MEM | MINO | LEV | SXT |
|---|---|---|---|---|---|---|
| Burkholderia spp | 117 | 54.78% | 60.34% | 75.00% | 62.50% | 82.76% |
| Stenotrophomonas maltophilia | 41 | 48.72% | IR | 80.00% | 75.68% | 82.05% |

### Gram Positive:

| Organism | # of isolates | OX | CN | DO | CIP | LEV | SXT | E | DA | LZD | VA | FD | F† |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CoNS | 2266 | 39.45% | 80.18% | 82.31% | 46.83% | 51.60% | 48.00% | 27.37% | 79.02% | 99.87% | 100.00% | 58.70% | Δ |
| St. aureus | 2937 | 42.34% | 74.73% | 83.22% | 28.71% | 48.19% | 46.81% | 42.77% | 86.13% | 100.00% | 100.00% | 91.98% | 100.00% |

| Organism | # of isolates | AMP | CRO | DO | LEV | E | DA | LZD | VA | FOS† | F† |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Enterococcus spp | 1175 | 75.80% | NT | 60.45% | 25.74% | NT | IR | 100.00% | 98.19% | 87.15% | 93.49% |
| Streptococcus pyogenes | 125 | 100.00% | 100.00% | Δ | 90.11% | 76.79% | 76.72% | 100.00% | 100.00% | NT | NT |

| Code | Antibiotic Name |
|---|---|
| AK | Amikacin |
| AMC | Amoxicillin-Clavulanic Acid |
| AMP | Ampicillin |
| AZM | Azithromycin |
| C | Chloramphenicol |
| CAZ | Ceftazidime |
| CIP | Ciprofloxacin |
| CN | Gentamicin |
| CRO | Ceftriaxone |
| DA | Clindamycin |
| DO | Doxycycline |
| E | Erythromycin |
| F | Nitrofurantoin |
| FD | Fusidic Acid |
| FEP | Cefepime |
| FOS | Fosfomycin |
| IPM | Imipenem |
| LEV | Levofloxacin |
| LZD | Linezolid |
| MEM | Meropenem |
| MINO | Minocycline |
| NA | Nalidixic Acid |
| OX | Oxacillin |
| SXT | Sulfamethoxazole-Trimethoprim |
| TOB | Tobramycin |
| TZP | Piperacillin-Tazobactam |
| VA | Vancomycin |
| NT | Not Tested |
| IR | Intrinsic Resistance |
| Δ | Less than 30 isolates tested |
| † | Urinary tract isolates only |

*Intrinsic resistance (IR) is the innate ability of a type of bacteria species to resist the action of an antibiotic as a consequence of the bacteria's structural or functional characteristics.