

University of Miami/Jackson Memorial Hospital (Main)

ANTIBIOTIC SUSCEPTIBILITY REPORT July- December 2015

Data include 1st isolate from patient

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| GRAM-NEGATIVE ISOLATES | No. | Percent susceptible ^(*) | | | | | | | | | | | | | |
|--|------|------------------------------------|-----|-----|-----|---------------------|-----|-----|-----|----|----|-----|-----|-----|-----|
| | | AMS | TZP | CAZ | CRO | FEP ^(**) | ATM | ERT | MER | AN | GM | TOB | LVX | TET | SXT |
| <i>Escherichia coli</i> ^(***) | 1253 | 43 | 93 | 89 | 84 | 93(95) | 88 | 99 | 99 | 99 | 84 | 84 | 62 | 58 | 57 |
| <i>Citrobacter freundii</i> | 40 | / | 80 | 75 | 75 | 86(95) | 75 | 88 | 88 | 99 | 90 | 83 | 78 | 75 | 75 |
| <i>Citrobacter koseri</i> | 36 | / | 97 | 97 | 97 | 97 | 97 | 100 | 100 | 99 | 97 | 97 | 97 | 97 | 97 |
| <i>Klebsiella pneumoniae</i> | 424 | 63 | 79 | 77 | 77 | 89(92) | 76 | 97 | 97 | 98 | 85 | 79 | 80 | 73 | 72 |
| <i>Enterobacter aerogenes</i> | 52 | / | 87 | 85 | 73 | 91(96) | 87 | 94 | 94 | 99 | 99 | 99 | 94 | 87 | 98 |
| <i>Enterobacter cloacae</i> | 153 | / | 81 | 78 | 77 | 91(94) | 78 | 95 | 95 | 99 | 90 | 90 | 86 | 82 | 80 |
| <i>Serratia marcescens</i> | 73 | / | nd | 92 | 84 | 97 | 88 | 95 | 95 | 99 | 92 | 86 | 80 | 51 | 96 |
| <i>Proteus mirabilis</i> | 210 | 86 | 99 | 98 | 97 | 98(99) | 99 | 99 | 99 | 99 | 93 | 94 | 85 | / | 82 |
| <i>Morganella morganii</i> | 41 | / | 93 | 85 | 85 | 95 | 90 | 99 | 99 | 98 | 85 | 85 | 59 | / | 49 |
| <i>Providencia stuartii</i> | 16 | / | 94 | 88 | 88 | 94 | 94 | 94 | 94 | 99 | / | / | 50 | / | 75 |
| <i>Pseudomonas aeruginosa</i> | 310 | nd | 80 | 81 | / | 83 | 41 | / | 71 | 97 | 85 | 93 | 68 | / | / |
| <i>Acinetobacter baumannii</i> | 88 | / | 60 | 40 | / | / | / | / | 60 | nd | 73 | 80 | 61 | 60 | / |
| <i>Stenotrophomonas maltophilia</i> | 99 | / | / | nd | / | / | / | / | / | / | / | / | 84 | / | 85 |

AMP AMPICILLIN
AMS AMPICILLIN/SULBACTAM
AN AMIKACIN
ATM AZTREONAM
CAZ CEFTAZIDIME
CLN CLINDAMYCIN
CRO CEFTRIAXONE
CTX CEFOTAXIME
CZ CEFAZOLIN
ERT ERTAPENEM
FEP CEFEPIME
FOX CEFOXITIN
GM GENTAMICIN
LVX LEVOFLOXACIN
LZD LINEZOLID
MER MEROPENEM
PEN PENICILLIN
RIF RIFAMPIN
OX OXACILLIN
SXT TRIMETH/SULFA
TET TETRACYCLINE
TOB TOBRAMYCIN
TZP PIPERACILLIN/TAZO
VA VANCOMYCIN

(*) Clinical Laboratory Standards Institute (CLSI) M100-S25, 2015 breakpoints for antibiotic susceptibility

(**) *Enterobacteriaceae*, two cefepime has two dose-dependent susceptibility breakpoints: susceptible at 1g q12 and at (2g q8)

(***) 94% of urinary *Escherichia coli* isolates sensitive to Nitrofurantoin

(/) slash indicates that the drug is clinically ineffective or <20% susceptible (Sanford Guide to Antimicrobial Therapy, 2015)

(nd) no antibiotic susceptibility data available

| GRAM-POSITIVE ISOLATES | No. | Percent susceptible ^(*) | | | | | | | | | | | |
|---|-----|------------------------------------|-------|-----|-------|-----|----|-----|-----|-----|-----|-----|-----|
| | | AMP | PEN | OX | CTX | CLN | GM | LVX | RIF | TET | LZD | VA | SXT |
| <i>Enterococcus faecalis</i> | 278 | 98 | / | / | / | / | / | / | / | 18 | 100 | 95 | / |
| <i>Enterococcus faecium</i> | 59 | 29 | / | / | / | / | / | / | / | 32 | 100 | 39 | / |
| <i>Staph aureus</i> MRSA ^a | 351 | / | 0 | 0 | 0 | 69 | 91 | / | 99 | 91 | 100 | 99 | 88 |
| <i>Staph aureus</i> MSSA ^a | 310 | / | 0 | 100 | 100 | 77 | 98 | / | 99 | 89 | 100 | 99 | 95 |
| <i>Staphylococcus epidermidis</i> ^a | 237 | / | 0 | 26 | / | 44 | 65 | / | 94 | 89 | 100 | 98 | 44 |
| <i>Staphylococcus haemolyticus</i> ^a | 43 | / | 0 | 32 | / | 62 | 79 | / | 98 | 65 | 100 | 100 | 56 |
| <i>Staphylococcus hominis</i> ^a | 37 | / | 0 | 45 | / | 49 | 99 | / | 99 | 70 | 100 | 100 | 57 |
| <i>Streptococcus agalactiae</i> | 106 | 100 | 100 | / | 100 | 70 | / | 97 | / | / | / | 99 | / |
| <i>Streptococcus pneumoniae</i> | 21 | / | (b,c) | / | (b,c) | 68 | / | 98 | / | / | / | 98 | 70 |

(a) *S. aureus* and coagulase-negative staph (CNS) resistant to oxacillin are resistant to penicillins, cephalosporins, carbapenems
overall MRSA = 53% of all *Staphylococcus aureus* isolates

(b) for non-meningeal infections: 95% are susceptible to penicillin (MIC \leq 2.0 ug/ml); similarly, 91% are susceptible to cefotaxime/ceftriaxone (MIC <1 ug/ml) using CLSI parenteral breakpoints for antibiotic susceptibility

(c) for meningeal infection: 52% are susceptible to penicillin (MIC \leq 0.064 ug/ml); similarly, 81% are susceptible to cefotaxime/ceftriaxone (MIC \leq 0.5 ug/ml) using CLSI parenteral breakpoints for antibiotic susceptibility