# Keime und Resistenzen ARS 2011 oder Vorsicht, Antibiotika!

Quelle: Robert Koch-Institut: ARS, https://ars.rki.de , Datenstand: 04.01.2012

Zusammenstellung und mehr zum Thema:

**www.Krankenhaushasser.de**

Die Datenbank ARS vom Robert Koch Institut beinhaltet die Meldungen von 240 Krankenhäusern und 3500 Arztpraxen bezüglich gefundener Keime und der Ergebnisse der Resistenztestungen.

Hier ist eine Zusammenstellung der vom RKI ermittelten Daten der Keime, bei denen jeweils mindestes 50 Proben auf Resistenzen getestet wurden.

Bei der Behandlung von Infektionen ergeben sich große Schwierigkeiten, weil die Wahl der richtigen Antibiotika nicht so einfach zu sein scheint. Bei der Auswahl der Medikamente werden teilweise Kriterien zugrunde gelegt wie: das machen wir immer so oder: der Hersteller dieses Medikamentes läd zu den besten "Bildungsreisen" ein oder: dieser Konzern bezahlt am meisten für die "Anwendungsbeobachtungen".

Das größte Problem ist die Tatsache, dass die meisten Arztpraxen und inzwischen auch viele Krankenhäuser aus Kostengründen keine eigenes Labor für mikrobiologische Untersuchungen haben und deshalb der Zeitraum bis zur Bestimmung der Keime und ihrer Resistenzen viel zu lang ist. Aus diesem Grund beginnt die Behandlung entweder zu spät oder viel zu oft mit einem Antibiotikum, das mehr Schaden anrichtet, als dass es hilft, weil die Keime, die man behandeln will gegen dieses MIttel resistent sind und lediglich alle anderen Bakterien - also auch die "guten" - ausgerottet werden und das eigene Immunsystem des Patienten durch das falsche Antibiotikum erheblich geschwächt wird.

Ein Beispiel: Meiner Mutter wurde am 30.04.07 im Agnes Karll Krankenhaus in Laatzen eine Sputumprobe entnommen. Am 02.05.07 war die Probe im Labor im Nordstadtkrankenhaus. Am 05.05.07 wurde das Ergebnis an das AKK gefaxt. Da meine Mutter inzwischen nach Hause entlassen worden war , faxte das AKK den Befund am 07.05.07 um 17:00 an unseren Hausarzt - am 07.05.07 um 02:00 morgens war meine Mutter verstorben - wahrscheinliche Todesursache: reichlich Pseudomonas aeruginosa, mäßig Staphyloccocus aureus und mäßig Klebsiella oxytica - alle multiresistent - aber es gab noch etliche AB die geholfen hätten.

Die Bestimmung der Keime dauert i. d. R. einen Tag - maximal zwei Tage - die Bestimmung der Resistenzen dauert eventuell länger. Wenn man sofort nach der Keimbestimmung mit einem Antibiotikum behandeln würde, gegen das dieser Keim am seltensten resistent ist, könnten viele Leben gerettet werden.

| 0 - 49 % | | | | | Acinetobacter baumannii unbewegliche, aerobe, gramnegative Kurzstäbchen | | | | | | Citrobacter freundii gramnegative Stäbchen | | | | | | Enterobacter cloacae fakultativ anaeroben gramnegativen Stäbchen | | | | | | | | | Enterococcus faecalis unbewegliche grampositive Kokken | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 - 69 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70 - 89 % | STATIONÄR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 90 - 100 % | AMBULANT | | | | stationär | | | ambulant | | | stationär | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | |
| | oral | i.v. | i.m. | | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S |
| Oxacillin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Penicillin | V | G | G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amoxicillin | x | x | x | | | | | | | | | | | | | | | | | | | | | | | 1 | 0 | 99 | | | | 0 | 0 | 100 |
| Amoxicillin/Clavulansäure | x | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ampicillin | x | x | x | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 100 | 1 | 0 | 99 | 0 | 0 | 100 |
| Ampicillin/Sulbactam | x | x | x | | 43 | 1 | 57 | 56 | 0 | 44 | | | | | | | | | | | | | | | | | | | | | | | |
| Piperacillin | | x | x | | 32 | 43 | 25 | 17 | 65 | 18 | 28 | 1 | 75 | 14 | 1 | 85 | 36 | 1 | 63 | 38 | 1 | 61 | 17 | 0 | 83 | | | | | | | | |
| Piperacillin/Tazobactam | | x | | | 19 | 48 | 33 | 5 | 75 | 20 | 22 | 3 | 75 | 9 | 0 | 90 | 28 | 4 | 68 | 31 | 5 | 65 | 11 | 2 | 87 | | | | | | | | |
| Cefazolin | | x | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cefepim | | x | x | | 77 | 2 | 22 | | | | 7 | 0 | 93 | 3 | 0 | 97 | 7 | 0 | 93 | | | | 2 | 0 | 98 | | | | | | | | |
| Cefotaxim | | x | x | | | | | | | | 23 | 0 | 77 | 9 | 0 | 91 | 31 | 1 | 68 | 33 | 1 | 67 | 12 | 0 | 88 | | | | | | | | |
| Ceftazidim | | x | x | | 58 | 34 | 8 | 20 | 69 | 11 | 23 | 1 | 76 | 9 | 0 | 91 | 29 | 1 | 70 | 30 | 1 | 69 | 11 | 0 | 89 | | | | | | | | |
| Cefuroxim | | x | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ertapenem | | x | | | | | | | | | 1 | 0 | 100 | 0 | 0 | 100 | 6 | 2 | 92 | | | | 1 | 0 | 99 | | | | | | | | |
| Imipenem | | x | | | 11 | 0 | 89 | 2 | 0 | 98 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | | | | | | | | |
| Meropenem | | x | | | 12 | 0 | 88 | 2 | 0 | 98 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | | | | | | | | |
| Aztreonam | | x | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ciprofloxacin | x | x | | | 22 | 3 | 75 | 10 | 5 | 86 | 8 | 2 | 90 | 6 | 1 | 93 | 8 | 1 | 91 | 10 | 2 | 89 | 5 | 0 | 95 | | | | | | | | |
| Levofloxacin | x | x | | | 19 | 48 | 76 | 7 | 7 | 86 | 8 | 2 | 90 | 5 | 0 | 94 | 8 | 1 | 91 | 11 | 1 | 88 | 5 | 0 | 95 | 53 | 0 | 47 | 85 | 0 | 15 | 11 | 0 | 88 |
| Moxifloxacin | x | x | | | | | | | | | | | | | | | | | | | | | | | | 34 | 0 | 66 | 51 | 0 | 49 | 18 | 0 | 82 |
| Amikacin | | x | x | | 27 | 1 | 72 | | | | 1 | 1 | 98 | | | | 1 | 0 | 99 | | | | 1 | 1 | 98 | | | | | | | | |
| Gentamicin | | x | x | topisch | 11 | 1 | 88 | 3 | 0 | 97 | 6 | 0 | 94 | 3 | 0 | 97 | 10 | 1 | 89 | 10 | 2 | 89 | 4 | 0 | 96 | | | | | | | | |
| Gentamicin 500 (high level) | | x | | intrathekal | | | | | | | | | | | | | | | | | | | | | | 35 | 0 | 65 | 48 | 0 | 52 | 23 | 0 | 77 |
| Clindamycin | x | x | x | topisch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Erythromycin | x | x | | topisch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tobramycin | | x | x | topisch | 8 | 0 | 92 | 1 | 1 | 98 | 7 | 1 | 92 | 2 | 1 | 97 | 8 | 1 | 91 | 5 | 3 | 92 | 4 | 0 | 96 | | | | | | | | |
| Colistin | x | x | x | topisch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Doxycyclin | x | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetracyclin | x | | | topisch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Co-Trimoxazol | x | x | | | 18 | 1 | 81 | 7 | 0 | 92 | 12 | 0 | 89 | 8 | 0 | 92 | 15 | 0 | 85 | 12 | 0 | 88 | 7 | 0 | 93 | | | | | | | | |
| Tigecyclin | | x | | | 39 | 16 | 45 | | | | 5 | 5 | 91 | | | | 21 | 8 | 71 | | | | 8 | 17 | 75 | | | | | | | | |
| Teicoplanin | x | x | x | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Vancomycin | (x) | x | intraperitoneal | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 100 | 1 | 0 | 99 | 0 | 0 | 100 |
| Linezolid | x | x | | | | | | | | | | | | | | | | | | | | | | | | 0 | 2 | 97 | 1 | 3 | 96 | 0 | 1 | 99 |
| Streptomycin 1000 (high level) | | | x | | | | | | | | | | | | | | | | | | | | | | | 40 | 0 | 60 | 49 | 0 | 51 | 32 | 0 | 68 |
| Fosfomycin | | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fusidinsäure | x | x | | topisch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rifampicin | x | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 0 - 49 % |
|---|
| 50 - 69 % |
| 70 - 89 % |
| 90 - 100 % |

| | | Enterococcus faecium unbewegliche grampositive Kokken | | | | | | | | | Escherichia coli gramnegative gerade Stäbchen beweglich | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | stationär | | | aus Blutkultur | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | | aus Blutkultur | | |
| | oral | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S |
| Oxacillin | | | | | | | | | | | | | | | | | | | | | | |
| Penicillin | V | | | | | | | | | | | | | | | | | | | | | |
| Amoxicillin | x | 95 | 0 | 5 | | | | 68 | 0 | 32 | 49 | 0 | 50 | 49 | 0 | 51 | 43 | 0 | 56 | 48 | 0 | 52 |
| Amoxicillin/Clavulansäure | x | | | | | | | | | | 30 | 5 | 65 | 29 | 7 | 64 | 21 | 7 | 72 | 29 | 8 | 63 |
| Ampicillin | x | 93 | 0 | 7 | 98 | | 2 | 80 | 1 | 19 | 51 | 0 | 49 | 51 | 1 | 48 | 44 | 0 | 56 | 51 | 2 | 48 |
| Ampicillin/Sulbactam | x | | | | | | | | | | 30 | 5 | 65 | 27 | 6 | 67 | 20 | 8 | 72 | 28 | 6 | 66 |
| Piperacillin | | | | | | | | | | | 48 | 1 | 51 | 48 | 0 | 52 | 43 | 0 | 57 | 47 | 0 | 53 |
| Piperacillin/Tazobactam | | | | | | | | | | | 17 | 9 | 74 | 16 | 9 | 75 | 9 | 8 | 83 | 11 | 11 | 78 |
| Cefazolin | | | | | | | | | | | 43 | 0 | 56 | 33 | 0 | 67 | 12 | 1 | 87 | | | |
| Cefepim | | | | | | | | | | | 14 | 0 | 86 | | | | 6 | 0 | 94 | | | |
| Cefotaxim | | | | | | | | | | | 10 | 0 | 90 | 10 | 0 | 90 | 5 | 0 | 95 | 6 | 0 | 94 |
| Ceftazidim | | | | | | | | | | | 13 | 0 | 87 | 13 | 0 | 87 | 5 | 0 | 94 | 6 | 0 | 94 |
| Cefuroxim | | | | | | | | | | | 14 | 2 | 84 | 13 | 1 | 86 | 7 | 2 | 91 | 10 | 1 | 89 |
| Ertapenem | | | | | | | | | | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | | | |
| Imipenem | | | | | | | | | | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Meropenem | | | | | | | | | | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Aztreonam | | | | | | | | | | | | | | | | | | | | | | |
| Ciprofloxacin | x | | | | | | | | | | 22 | 1 | 77 | 23 | 0 | 76 | 16 | 0 | 83 | 27 | 1 | 72 |
| Levofloxacin | x | 93 | 1 | 3 | 99 | | 1 | 61 | 13 | 27 | 22 | 1 | 78 | 23 | 0 | 77 | 16 | 0 | 83 | 25 | 0 | 75 |
| Moxifloxacin | x | 90 | 2 | 8 | 98 | | 2 | 73 | 8 | 19 | | | | | | | | | | | | |
| Amikacin | | | | | | | | | | | 1 | 0 | 99 | 0 | 1 | 99 | 3 | 1 | 96 | | | |
| Gentamicin | | | | | | | | | | | 7 | 0 | 93 | 5 | 1 | 94 | 5 | 0 | 95 | 5 | 1 | 94 |
| Gentamicin 500 (high level) | | 41 | 0 | 59 | 46 | | 54 | 33 | 0 | 67 | | | | | | | | | | | | |
| Clindamycin | x | | | | | | | | | | | | | | | | | | | | | |
| Erythromycin | x | | | | | | | | | | | | | | | | | | | | | |
| Tobramycin | | | | | | | | | | | 9 | 0 | 90 | 9 | 0 | 90 | 5 | 0 | 94 | 6 | 1 | 93 |
| Colistin | x | | | | | | | | | | | | | | | | | | | | | |
| Doxycyclin | x | | | | | | | | | | 58 | 0 | 41 | 57 | 0 | 43 | 50 | 0 | 49 | 39 | 0 | 61 |
| Tetracyclin | x | | | | | | | | | | 36 | 1 | 64 | 33 | 1 | 66 | 31 | 0 | 69 | 39 | 0 | 61 |
| Co-Trimoxazol | x | | | | | | | | | | 31 | 0 | 69 | 31 | 0 | 69 | 28 | 0 | 72 | 29 | 0 | 71 |
| Tigecyclin | | | | | | | | | | | 0 | 1 | 99 | 0 | 1 | 99 | 0 | 1 | 99 | | | |
| Teicoplanin | x | 6 | 0 | 94 | 8 | | 92 | 4 | 0 | 96 | | | | | | | | | | | | |
| Vancomycin | (x) | 15 | 0 | 85 | 14 | | 86 | 13 | 0 | 87 | | | | | | | | | | | | |
| Linezolid | x | 1 | 0 | 99 | 1 | | 99 | 0 | 0 | 100 | | | | | | | | | | | | |
| Streptomycin 1000 (high level) | | 67 | 0 | 33 | 79 | | 21 | 62 | 0 | 38 | | | | | | | | | | | | |
| Fosfomycin | | | | | | | | | | | | | | | | | | | | | | |
| Fusidinsäure | x | | | | | | | | | | | | | | | | | | | | | |
| Rifampicin | x | | | | | | | | | | | | | | | | | | | | | |

| | Klebsiella oxytoca gramnegative Stäbchen | | | | | | | | | Klebsiella pneumoniae gramnegative Stäbchen | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | stationär | | | aus Blutkultur | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | |
| | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S |
| Oxacillin | | | | | | | | | | | | | | | | | | |
| Penicillin | | | | | | | | | | | | | | | | | | |
| Amoxicillin | 100 | 0 | 0 | | | | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 |
| Amoxicillin/Clavulansäure | 23 | 1 | 76 | 22 | 3 | 75 | 16 | 1 | 83 | 21 | 2 | 78 | 28 | 3 | 69 | 14 | 1 | 85 |
| Ampicillin | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 |
| Ampicillin/Sulbactam | 23 | 1 | 76 | 27 | 3 | 70 | 17 | 1 | 82 | 20 | 1 | 79 | 24 | 2 | 74 | 14 | 2 | 84 |
| Piperacillin | 94 | 5 | 1 | 97 | 2 | 1 | 96 | 3 | 1 | 97 | 3 | 1 | 96 | 3 | 0 | 98 | 2 | 1 |
| Piperacillin/Tazobactam | 19 | 3 | 78 | 24 | 4 | 73 | 12 | 3 | 85 | 16 | 3 | 81 | 16 | 3 | 81 | 10 | 2 | 88 |
| Cefazolin | 41 | 2 | 58 | | | | 20 | 0 | 80 | 41 | 1 | 58 | | | | 11 | 3 | 86 |
| Cefepim | 24 | 0 | 76 | | | | 3 | 0 | 97 | 13 | 0 | 87 | | | | 5 | 0 | 95 |
| Cefotaxim | 7 | 1 | 92 | 6 | 1 | 93 | 4 | 0 | 96 | 12 | 0 | 88 | 13 | 0 | 87 | 5 | 0 | 94 |
| Ceftazidim | 9 | 0 | 91 | 7 | 0 | 93 | 4 | 0 | 96 | 15 | 0 | 85 | 15 | 0 | 85 | 6 | 0 | 94 |
| Cefuroxim | 20 | 1 | 79 | 24 | 2 | 75 | 13 | 1 | 86 | 16 | 1 | 83 | 18 | 1 | 81 | 8 | 2 | 90 |
| Ertapenem | 0 | 0 | 100 | | | | 0 | 0 | 100 | 2 | 0 | 98 | 0 | 0 | 100 | 0 | 0 | 100 |
| Imipenem | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Meropenem | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Aztreonam | | | | | | | | | | | | | | | | | | |
| Ciprofloxacin | 10 | 1 | 89 | 8 | 0 | 92 | 6 | 1 | 94 | 13 | 2 | 85 | 17 | 1 | 82 | 8 | 1 | 91 |
| Levofloxacin | 10 | 0 | 89 | 8 | 0 | 92 | 6 | 0 | 94 | 13 | 1 | 86 | 16 | 0 | 83 | 8 | 1 | 92 |
| Moxifloxacin | | | | | | | | | | | | | | | | | | |
| Amikacin | 1 | 0 | 99 | | | | 0 | 1 | 99 | 2 | 1 | 97 | | | | 2 | 2 | 96 |
| Gentamicin | 2 | 0 | 98 | 2 | 0 | 98 | 1 | 0 | 99 | 6 | 0 | 94 | 6 | 1 | 94 | 4 | 0 | 96 |
| Gentamicin 500 (high level) | | | | | | | | | | | | | | | | | | |
| Clindamycin | | | | | | | | | | | | | | | | | | |
| Erythromycin | | | | | | | | | | | | | | | | | | |
| Tobramycin | 2 | 0 | 98 | 0 | 1 | 99 | 1 | 0 | 99 | 10 | 2 | 88 | 12 | 2 | 86 | 5 | 1 | 94 |
| Colistin | | | | | | | | | | | | | | | | | | |
| Doxycyclin | 47 | 1 | 52 | 30 | 0 | 70 | 29 | 1 | 70 | 47 | 4 | 49 | 51 | 3 | 46 | 33 | 4 | 63 |
| Tetracyclin | 8 | 2 | 90 | | | | 6 | 1 | 93 | 17 | 5 | 78 | 19 | 4 | 77 | 13 | 4 | 83 |
| Co-Trimoxazol | 9 | 0 | 91 | 13 | 0 | 87 | 6 | 0 | 94 | 15 | 0 | 85 | 19 | 0 | 81 | 13 | 0 | 87 |
| Tigecyclin | 2 | 3 | 94 | | | | 3 | 6 | 91 | 8 | 7 | 84 | | | | 5 | 11 | 84 |
| Teicoplanin | | | | | | | | | | | | | | | | | | |
| Vancomycin | | | | | | | | | | | | | | | | | | |
| Linezolid | | | | | | | | | | | | | | | | | | |
| Streptomycin 1000 (high level) | | | | | | | | | | | | | | | | | | |
| Fosfomycin | | | | | | | | | | | | | | | | | | |
| Fusidinsäure | | | | | | | | | | | | | | | | | | |
| Rifampicin | | | | | | | | | | | | | | | | | | |

| 0 - 49 % | | Morganella morganii Aerobe, gramnegative Stäbchen | | | | | | Proteus mirabilis Aerobe, gramnegative Stäbchen | | | | | | | | | Pseudomonas aeruginosa gramnegative Stäbchen mit polarer Begeißelung. | | | | | | | | | Serratia marcescens Aerobe, gramnegative, bewegliche Stäbchen | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 - 69 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70 - 89 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 90 - 100 % | | stationär | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | | stationär | | | ambulant | | |
| | oral | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S |
| Oxacillin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Penicillin | V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amoxicillin | x | | | | | | | 33 | 0 | 67 | 39 | 0 | 61 | 29 | 0 | 71 | | | | | | | | | | | | | | | |
| Amoxicillin/Clavulansäure | x | | | | | | | 6 | 2 | 92 | 6 | 3 | 92 | 4 | 1 | 95 | | | | | | | | | | | | | | | |
| Ampicillin | x | | | | | | | 31 | 0 | 69 | 33 | 0 | 67 | 30 | 0 | 70 | | | | | | | | | | | | | | | |
| Ampicillin/Sulbactam | x | | | | | | | 6 | 2 | 92 | 7 | 2 | 91 | 4 | 2 | 94 | | | | | | | | | | | | | | | |
| Piperacillin | | 22 | 1 | 77 | 14 | 1 | 85 | 28 | 2 | 71 | 30 | 4 | 66 | 28 | 1 | 71 | 16 | 16 | 68 | 16 | 13 | 71 | 8 | 18 | 74 | 15 | 1 | 84 | 13 | 0 | 87 |
| Piperacillin/Tazobactam | | 15 | 2 | 83 | 9 | 2 | 89 | 2 | 2 | 96 | 2 | 3 | 94 | 1 | 1 | 97 | 15 | 17 | 68 | 15 | 14 | 72 | 6 | 19 | 74 | 9 | 1 | 90 | 7 | 0 | 92 |
| Cefazolin | | | | | | | | 10 | 0 | 89 | | | | 3 | 0 | 96 | | | | | | | | | | | | | | | |
| Cefepim | | 7 | 0 | 93 | 3 | 1 | 96 | 1 | 0 | 98 | | | | 1 | 0 | 99 | 11 | 3 | 85 | 11 | 6 | 83 | 6 | 5 | 89 | 1 | 0 | 99 | 1 | 0 | 99 |
| Cefotaxim | | 16 | 2 | 83 | 9 | 1 | 91 | 1 | 0 | 99 | 0 | 1 | 99 | 1 | 0 | 99 | | | | | | | | | | 9 | 1 | 90 | 6 | 0 | 93 |
| Ceftazidim | | 14 | 2 | 84 | 9 | 1 | 90 | 1 | 0 | 98 | 0 | 0 | 100 | 1 | 0 | 99 | 10 | 4 | 86 | 10 | 3 | 87 | 5 | 3 | 92 | 9 | 1 | 90 | 6 | 0 | 94 |
| Cefuroxim | | | | | | | | 4 | 0 | 96 | 1 | 1 | 98 | 2 | 1 | 97 | | | | | | | | | | | | | | | |
| Ertapenem | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 1 | 99 | | | | 0 | 0 | 100 | | | | | | | | | | 2 | 0 | 98 | 0 | 0 | 100 |
| Imipenem | | 0 | 17 | 83 | 1 | 3 | 96 | 4 | 20 | 76 | 5 | 16 | 79 | 2 | 6 | 93 | 9 | 6 | 85 | 6 | 5 | 89 | 5 | 5 | 90 | 0 | 0 | 99 | 0 | 0 | 100 |
| Meropenem | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 7 | 6 | 88 | 5 | 5 | 90 | 3 | 3 | 94 | 0 | 0 | 100 | 0 | 0 | 100 |
| Aztreonam | | | | | | | | | | | | | | | | | 14 | 65 | 21 | 15 | 62 | 23 | 10 | 46 | 44 | | | | | | |
| Ciprofloxacin | x | 9 | 4 | 86 | 9 | 3 | 88 | 14 | 3 | 83 | 19 | 2 | 79 | 13 | 2 | 85 | 19 | 8 | 74 | 15 | 8 | 76 | 14 | 9 | 77 | 10 | 3 | 87 | 9 | 2 | 90 |
| Levofloxacin | x | 9 | 3 | 88 | 9 | 2 | 89 | 14 | 1 | 84 | 19 | 1 | 80 | 13 | 1 | 86 | 24 | 2 | 73 | 22 | 2 | 76 | 23 | 2 | 76 | 11 | 1 | 88 | 9 | 1 | 90 |
| Moxifloxacin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amikacin | | 1 | 0 | 99 | 2 | 0 | 98 | 1 | 0 | 99 | | | | 1 | 1 | 98 | 6 | 7 | 86 | 10 | 4 | 86 | 6 | 5 | 89 | 0 | 1 | 99 | 1 | 3 | 96 |
| Gentamicin | | 9 | 0 | 91 | 9 | 0 | 90 | 9 | 1 | 90 | 12 | 1 | 87 | 9 | 0 | 90 | 14 | 3 | 84 | 11 | 2 | 87 | 10 | 6 | 84 | 3 | 1 | 97 | 3 | 1 | 97 |
| Gentamicin 500 (high level) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clindamycin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Erythromycin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tobramycin | | 5 | 1 | 94 | 5 | 1 | 95 | 7 | 1 | 93 | 7 | 1 | 92 | 6 | 0 | 93 | 6 | 0 | 93 | 5 | 0 | 95 | 5 | 0 | 95 | 3 | 5 | 92 | 2 | 6 | 92 |
| Colistin | x | | | | | | | | | | | | | | | | 1 | 1 | 98 | 1 | 0 | 99 | 3 | 1 | 97 | | | | | | |
| Doxycyclin | x | | | | | | | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | | | | | | | | | | | | | | | |
| Tetracyclin | x | | | | | | | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | | | | | | | | | | | | | | | |
| Co-Trimoxazol | x | 20 | 0 | 80 | 21 | 0 | 79 | 35 | 0 | 65 | 41 | 0 | 59 | 35 | 0 | 65 | | | | | | | | | | 6 | 0 | 94 | 6 | 0 | 94 |
| Tigecyclin | | 65 | 4 | 30 | | | | 70 | 4 | 26 | | | | 82 | 4 | 14 | | | | | | | | | | 2 | 26 | 72 | | | |
| Teicoplanin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vancomycin | (x) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Linezolid | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Streptomycin 1000 (high level) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fosfomycin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fusidinsäure | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rifampicin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 0 - 49 % |
|---|
| 50 - 69 % |
| 70 - 89 % |
| 90 - 100 % |

| | | Staphyloccocus aureus grampositive Kokken koagulasepositiv | | | | | | | | | Staphylokkoken, koagulase negativ (z.B. Staph. epidermitis) | | | | | | | | | | | | Stenotrophomonas maltophilia aerobe gramnegative Stäbchenbakterien | | | | | | Streptococcus pneumoniae grampositive, rund-oval bis lanzettförmige Kokken | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | stationär | | | aus Blutkultur | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | | aus Blutkultur | | | stationär | | | ambulant | | | stationär | | | aus Blutkultur | | | ambulant | | |
| | oral | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S | R | I | S |
| Oxacillin | | 23 | 0 | 77 | 18 | 0 | 82 | 13 | 0 | 87 | 58 | 0 | 42 | 61 | 0 | 39 | 34 | 0 | 66 | 38 | 0 | 62 | | | | | | | | | | | | | | |
| Penicillin | V | 76 | 0 | 24 | 74 | 0 | 26 | 69 | 0 | 31 | 83 | 0 | 17 | 83 | 0 | 17 | 73 | 0 | 27 | 72 | 0 | 28 | | | | | | | 0 | 5 | 94 | 1 | 1 | 98 | 1 | 4 | 95 |
| Amoxicillin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amoxicillin/Clavulansäure | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ampicillin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Ampicillin/Sulbactam | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Piperacillin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Piperacillin/Tazobactam | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cefazolin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cefepim | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cefotaxim | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Ceftazidim | | | | | | | | | | | | | | | | | | | | | | | 66 | 5 | 29 | 53 | 7 | 40 | | | | | | | | | |
| Cefuroxim | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ertapenem | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Imipenem | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Meropenem | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aztreonam | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ciprofloxacin | x | 31 | 1 | 67 | 26 | 1 | 73 | 17 | 2 | 81 | 45 | 7 | 48 | 44 | 8 | 48 | 24 | 5 | 71 | 21 | 6 | 73 | | | | | | | | | | | | | | | |
| Levofloxacin | x | 32 | 1 | 67 | 25 | 0 | 74 | 19 | 1 | 80 | 43 | 6 | 51 | 41 | 7 | 52 | 24 | 4 | 72 | 23 | 7 | 69 | | | | | | | 1 | 27 | 72 | 1 | 22 | 77 | 0 | 16 | 84 |
| Moxifloxacin | x | 25 | 1 | 73 | 26 | 1 | 73 | 14 | 1 | 85 | 31 | 18 | 51 | 29 | 20 | 51 | 18 | 10 | 72 | 8 | 18 | 74 | 19 | 5 | 76 | 33 | 5 | 62 | 0 | 1 | 99 | | | | 1 | 0 | 99 |
| Amikacin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gentamicin | | 2 | 0 | 98 | 2 | 0 | 98 | 2 | 0 | 98 | 34 | 0 | 65 | 31 | 0 | 69 | 16 | 0 | 84 | 16 | 0 | 84 | | | | | | | | | | | | | | | |
| Gentamicin 500 (high level) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clindamycin | x | 28 | 0 | 72 | 25 | 0 | 75 | 21 | 0 | 79 | 50 | 0 | 50 | 50 | 0 | 50 | 36 | 0 | 64 | 31 | 0 | 69 | | | | | | | 8 | 0 | 92 | 6 | 0 | 94 | 5 | 0 | 95 |
| Erythromycin | x | 28 | 0 | 71 | 26 | 0 | 74 | 22 | 1 | 78 | 64 | 0 | 36 | 63 | 0 | 37 | 52 | 0 | 48 | 52 | 0 | 48 | | | | | | | 12 | 1 | 86 | 8 | 1 | 92 | 11 | 2 | 88 |
| Tobramycin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Colistin | x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Doxycyclin | x | 5 | 0 | 94 | 3 | 0 | 97 | 6 | 0 | 94 | 39 | 4 | 57 | 32 | 9 | 59 | 35 | 2 | 64 | 34 | 3 | 63 | | | | | | | 8 | 1 | 91 | 3 | 0 | 97 | 8 | 1 | 91 |
| Tetracyclin | x | 5 | 0 | 95 | 3 | 0 | 97 | 5 | 0 | 95 | 46 | 1 | 53 | 42 | 1 | 57 | 33 | 0 | 67 | 36 | 0 | 64 | | | | | | | 35 | 0 | 65 | | | | 11 | 0 | 89 |
| Co-Trimoxazol | x | 1 | 0 | 99 | 1 | 0 | 99 | 1 | 0 | 99 | 20 | 0 | 79 | 19 | 0 | 81 | 11 | 0 | 89 | 8 | 0 | 91 | 3 | 0 | 97 | 2 | 1 | 97 | 16 | 2 | 82 | 17 | 1 | 81 | 17 | 3 | 80 |
| Tigecyclin | | | | | | | | | | | | | | | | | | | | | | | 30 | 2 | 68 | 26 | 0 | 74 | | | | | | | | | |
| Teicoplanin | x | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 9 | 1 | 90 | 9 | 1 | 90 | 5 | 1 | 94 | 11 | 1 | 88 | | | | | | | | | | | | | | | |
| Vancomycin | (x) | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 99 | 0 | 0 | 100 | 0 | 0 | 100 | | | | | | | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 |
| Linezolid | x | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 1 | 0 | 99 | | | | | | | | | | | | | | | |
| Streptomycin 1000 (high level) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fosfomycin | | 2 | 0 | 98 | 2 | 0 | 98 | 2 | 0 | 98 | 48 | 0 | 52 | 47 | 0 | 53 | 48 | 0 | 52 | 44 | 0 | 56 | | | | | | | | | | | | | | | |
| Fusidinsäure | x | 2 | 1 | 97 | 3 | 0 | 97 | 2 | 1 | 97 | 29 | 3 | 68 | 28 | 3 | 69 | 21 | 9 | 70 | 23 | 4 | 72 | | | | | | | | | | | | | | | |
| Rifampicin | x | 1 | 0 | 99 | 1 | 0 | 99 | 0 | 0 | 100 | 6 | 1 | 94 | 6 | 1 | 93 | 2 | 1 | 97 | 2 | 0 | 98 | | | | | | | | | | | | | | | |