##### Antimicrobial susceptibility testing of *Escherichia coli*, enterococci and staphylococci

TEST FORMS

|  |
| --- |
| Name:  Name of laboratory:  Name of institute:  City:  Country:  E-mail:  Fax: |

#### Comments:

#### **TEST FORMS METHODS - Enterococci**

Which method did you use for antimicrobial susceptibility testing of enterococci in this EQAS:

MIC – Broth microdilution

MIC – Agar dilution (note: not evaluated in the final report)

Brand**:**

How many *Enterococcus* spp. isolates does your laboratory annually isolate:

How many *Enterococcus* spp. isolates does your laboratory annually test for antimicrobial susceptibility by a MIC method:

Which method was followed for the preparation of the inoculum? Please describe:

* Which standard was followed (TREK, CLSI…)
* Which solvent was used for the preparation of the 0.5 McFarland solution (water, saline)
* Please describe in detail how you prepared the dilution of the inoculum (including the volume in final MH-dilution and intended dilution level; e.g. diluted 1:1000 by adding 10µl of 0.5 McFarland solution in 10ml MH broth, for an expected inoculum of 1\*105 CFU/ml)

Comments or additional information:

#### **TEST FORMS METHODS - Staphylococci**

Which method did you use for antimicrobial susceptibility testing of staphylococci in this EQAS:

MIC – Broth microdilution

MIC – Agar dilution (note: not evaluated in the final report)

Brand**:**

How many *Staphylococcus* spp. isolates does your laboratory annually isolate:

How many *Staphylococcus* spp. isolates does your laboratory annually test for antimicrobial susceptibility by a MIC method:

Which method was followed for the preparation of the inoculum? Please describe:

* Which standard was followed (TREK, CLSI…)
* Which solvent was used for the preparation of the 0.5 McFarland solution (water, saline)
* Please describe in detail how you prepared the dilution of the inoculum (including the volume in final MH-dilution and intended dilution level; e.g. diluted 1:1000 by adding 10µl of 0.5 McFarland solution in 10ml MH broth, for an expected inoculum of 1\*105 CFU/ml)

Comments or additional information:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Antimicrobial | General information  The relevant information in the four columns below should be reported | | | |
| Test-range for MIC (μg/ml) | Resistant  (μg/ml) | Intermediate  (μg/ml) | Susceptible  (μg/ml) |
| Cefoxitin, FOX |  | ≤ |  | ≥ |
| Chloramphenicol, CHL |  | ≤ |  | ≥ |
| Ciprofloxacin, CIP |  | ≤ |  | ≥ |
| Clindamycin, CLN |  | ≤ |  | ≥ |
| Erythromycin, ERY |  | ≤ |  | ≥ |
| Fusidic acid, FUS |  | ≤ |  | ≥ |
| Gentamicin, GEN |  | ≤ |  | ≥ |
| Kanamycin, KAN |  | ≤ |  | ≥ |
| Linezolid, LZD |  | ≤ |  | ≥ |
| Mupirocin, MUP |  | ≤ |  | ≥ |
| Penicillin, PEN |  | ≤ |  | ≥ |
| Quin.-Dalf. (Synercid), SYN |  | ≤ |  | ≥ |
| Rifampicin, RIF |  | ≤ |  | ≥ |
| Streptomycin, STR |  | ≤ |  | ≥ |
| Sulfamethoxazole, SMX |  | ≤ |  | ≥ |
| Tetracycline, TET |  | ≤ |  | ≥ |
| Tiamulin (TIA) |  | ≤ |  | ≥ |
| Trimethoprim, TMP |  | ≤ |  | ≥ |
| Vancomycin, VAN |  | ≤ |  | ≥ |

**TEST FORMS METHODS – *Escherichia coli***

Which method did you use for antimicrobial susceptibility testing of *E. coli* in this EQAS:

MIC – Broth microdilution

MIC – Agar dilution (note: not evaluated in the final report)

Brand**:**

Incubation conditions:      °C/     h

How many *E. coli* isolates does your laboratory annually isolate:

How many *E. coli* isolates does your laboratory annually test for antimicrobial susceptibility by a MIC method:

Which method was followed for the preparation of the inoculum? Please describe:

* Which standard was followed (TREK, CLSI…)
* Which solvent was used for the preparation of the 0.5 McFarland solution (water, saline)
* Please describe in detail how you prepared the dilution of the inoculum (including the volume in final MH-dilution and intended dilution level; e.g. diluted 1:1000 by adding 10µl of 0.5 McFarland solution in 10ml MH broth, for an expected inoculum of 1\*105 CFU/ml)

Comments or additional information:

#### **TEST FORM - Enterococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.1  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.2  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

#### **TEST FORM - Enterococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.3  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.4  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

#### **TEST FORM - Enterococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.5  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.6  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

#### **TEST FORM - Enterococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.7  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| Enterococci  EURL ENT. 12.8  *E. faecium*  *E. faecalis* | Ampicillin AMP |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Daptomycin, DAP |  |  |  |
| Erythromycin, ERY |  |  |  |
| Gentamicin, GEN |  |  |  |
| Linezolid, LZD |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Teicoplanin, TEI |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Vancomycin, VAN |  |  |  |

#### **TEST FORM - Enterococci**

Antimicrobial susceptibility testing of reference strain *Enterococcus faecalis* ATCC 29212

|  |  |
| --- | --- |
| Antimicrobial | MIC-value (μg/ml) |
| Ampicillin, AMP |  |
| Chloramphenicol, CHL |  |
| Ciprofloxacin, CIP |  |
| Daptomycin, DAP |  |
| Erythromycin, ERY |  |
| Gentamicin, GEN |  |
| Linezolid, LZD |  |
| Quinupristin-Dalfopristin (Synercid), SYN |  |
| Teicoplanin, TEI |  |
| Tetracycline, TET |  |
| Tigecycline, TIG |  |
| Vancomycin, VAN |  |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.1 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.2 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.3 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.4 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.5 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.6 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.7 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORMS - Staphylococci**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *S. aureus*  EURL ST 12.8 | Cefoxitin, FOX |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin, CIP |  |  |  |
| Clindamycin, CLN |  |  |  |
| Erythromycin, ERY |  |  |  |
| Fusidic acid, FUS |  |  |  |
| Gentamicin, GEN |  |  |  |
| Kanamycin, KAN |  |  |  |
| Linezolid, LZD |  |  |  |
| Mupirocin, MUP |  |  |  |
| Penicillin, PEN |  |  |  |
| Quin.-Dalf. (Synercid), SYN |  |  |  |
| Rifampicin, RIF |  |  |  |
| Streptomycin, STR |  |  |  |
|  | Sulfamethoxazole, SMX |  |  |  |
|  | Tetracycline, TET |  |  |  |
|  | Tiamulin (TIA) |  |  |  |
|  | Trimethoprim, TMP |  |  |  |
|  | Vancomycin, VAN |  |  |  |

|  |  |
| --- | --- |
| Methicillin resistance (MRSA) | Positive  Negative |

#### **TEST FORM - Staphylococci**

Antimicrobial susceptibility testing of reference strain *S. aureus* ATCC 29213 (MIC)

|  |  |
| --- | --- |
| Antimicrobial | MIC-value (μg/ml) |
| Cefoxitin, FOX |  |
| Chloramphenicol, CHL |  |
| Ciprofloxacin, CIP |  |
| Clindamycin, CLN |  |
| Erythromycin, ERY |  |
| Fusidic acid, FUS |  |
| Gentamicin, GEN |  |
| Kanamycin, KAN |  |
| Linezolid, LZD |  |
| Mupirocin, MUP |  |
| Penicillin, PEN |  |
| Quin.-Dalf. (Synercid), SYN |  |
| Rifampicin, RIF |  |
| Streptomycin, STR |  |
| Sulfamethoxazole, SMX |  |
| Tetracycline, TET |  |
| Tiamulin (TIA) |  |
| Trimethoprim, TMP |  |
| Vancomycin, VAN |  |

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.1 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.1 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.2 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.2 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.3 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.3 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.4 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.4 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.5 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.5 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.6 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.6 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.7 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.7 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.8 | Ampicillin, AMP |  |  |  |
| Azithromycin, AZT |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Chloramphenicol, CHL |  |  |  |
| Ciprofloxacin CIP |  |  |  |
| Colistin, COL |  |  |  |
| Gentamicin, GEN |  |  |  |
| Meropenem, MERO |  |  |  |
| Nalidixic acid, NAL |  |  |  |
| Sulfamethoxazole, SMX |  |  |  |
| Tetracycline, TET |  |  |  |
| Tigecycline, TGC |  |  |  |
| Trimethoprim, TMP |  |  |  |

All strains resistant to cefotaxime (FOT), ceftazidime (TAZ) and/or meropenem (MERO) should be tested in the second panel for confirmatory tests for ESBL/AmpC/carbapenemase production. See further description of confirmatory tests in the protocol section ‘*3.3.1 E. coli*’*.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | Antimicrobial | Results and interpretation | | |
| > | MIC-value (μg/ml) | S / R |
| *E. coli*  EURL EC 12.8 | Cefepime, FEP |  |  |  |
| Cefotaxime, FOT |  |  |  |
| Cefotaxime + clavulanic acid (F/C) |  |  |  |
| Cefoxitin, FOX |  |  |  |
| Ceftazidime, TAZ |  |  |  |
| Ceftazidime+ clavulanic acid (T/C) |  |  |  |
| Ertapenem, ETP |  |  |  |
| Imipenem, IMI |  |  |  |
| Meropenem, MERO |  |  |  |
| Temocillin, TRM |  |  |  |

**Interpretation of PANEL 2 results**:

|  |  |  |
| --- | --- | --- |
| Presumptive ESBL  Presumptive ESBL+ AmpC | Presumptive AmpC  Presumptive carbapenemase | Other phenotype  Susceptible |

Comments (include optional genotype or other results):

#### **TEST FORM – *E. coli***

Antimicrobial susceptibility testing of reference strain *E. coli* ATCC 25922

|  |  |  |
| --- | --- | --- |
|  | Antimicrobial | MIC-value (μg/ml) |
| 1st panel | Ampicillin, AMP |  |
| Azithromycin, AZT |  |
| Cefotaxime, FOT |  |
| Ceftazidime, TAZ |  |
| Chloramphenicol, CHL |  |
| Ciprofloxacin, CIP |  |
| Colistin, COL |  |
| Gentamicin, GEN |  |
| Meropenem, MERO |  |
| Nalidixic acid, NAL |  |
| Sulfamethoxazole, SMX |  |
| Tetracycline, TET |  |
| Tigecycline, TGC |  |
| Trimethoprim, TMP |  |
| 2nd panel | Cefepime, FEP |  |
| Cefotaxime, FOT |  |
| Cefotaxime + clavulanic acid (F/C) |  |
| Cefoxitin, FOX |  |
| Ceftazidime, TAZ |  |
| Ceftazidime+ clavulanic acid (T/C) |  |
| Ertapenem, ETP |  |
| Imipenem, IMI |  |
| Meropenem, MERO |  |
| Temocillin, TRM |  |