##### 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 (not evaluated in the final report)

* Which standard(s)/guideline(s) do you use when performing AST?

[ ]  CLSI

 [ ]  EUCAST

[ ]  ISO 20776-1:2006

 [ ]  TREK

* Which incubation conditions do you use?      °C/     h
* Which solvent was used for the preparation of the 0.5 McFarland solution?

[ ]  Water

 [ ]  Saline

[ ]  Mueller Hinton broth

* Please describe how you prepared the inoculum:

The inoculum was prepared by adding       µl of 0.5 McFarland solution to       ml MH broth

* What is the expected inoculum concentration (e.g. 1\*105 CFU/ml)?       CFU/ml

Comments or additional information:

#### **TEST FORMS METHODS – Staphylococci**

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

 [ ]  MIC – Broth microdilution

 [ ]  MIC – Agar dilution (not evaluated in the final report)

* Which standard(s)/guideline(s) do you use when performing AST?

[ ]  CLSI

 [ ]  EUCAST

[ ]  ISO 20776-1:2006

 [ ]  TREK

* Which incubation conditions do you use?      °C/     h
* Which solvent was used for the preparation of the 0.5 McFarland solution?

[ ]  Water

 [ ]  Saline

[ ]  Mueller Hinton broth

* Please describe how you prepared the inoculum:

The inoculum was prepared by adding       µl of 0.5 McFarland solution to       ml MH broth

* What is the expected inoculum concentration (e.g. 1\*105 CFU/ml)?       CFU/ml

Comments or additional information:

**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 (not evaluated in the final report)

* Which standard(s)/guideline(s) do you use when performing AST?

[ ]  CLSI

 [ ]  EUCAST

[ ]  ISO 20776-1:2006

 [ ]  TREK

* Which incubation conditions do you use?      °C/     h
* Which solvent was used for the preparation of the 0.5 McFarland solution?

[ ]  Water

 [ ]  Saline

[ ]  Mueller Hinton broth

* Please describe how you prepared the inoculum:

The inoculum was prepared by adding       µl of 0.5 McFarland solution to       ml MH broth

* What is the expected inoculum concentration (e.g. 1\*105 CFU/ml)?       CFU/ml

Comments or additional information:

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

|  |  |  |
| --- | --- | --- |
| Strain | Antimicrobial  | Results and interpretation |
| > | MIC-value (μg/ml) | S / R |
| EnterococciEURL ENT. 14.1[ ]  *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 |
| EnterococciEURL ENT. 14.2[ ]  *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 |
| EnterococciEURL ENT. 14.3[ ]  *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 |
| EnterococciEURL ENT. 14.4[ ]  *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 |
| EnterococciEURL ENT. 14.5[ ]  *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 |
| EnterococciEURL ENT. 14.6[ ]  *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 |
| EnterococciEURL ENT. 14.7[ ]  *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 |
| EnterococciEURL ENT. 14.8[ ]  *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 14.1 | 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 14.2 | 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 14.3 | 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 14.4 | 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 14.5 | 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 14.6 | 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 14.7 | 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 14.8 | 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 14.1 | 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 14.1 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 14.2 | 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 14.2 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 14.3 | 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 14.3 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 14.4 | 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 14.4 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 14.5 | 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 14.5 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 14.6 | 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 14.6 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 14.7 | 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 14.7 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 14.8 | 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 14.8 | 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**:

|  |  |  |
| --- | --- | --- |
| [ ]  ESBL phenotype[ ]  ESBL+AmpC phenotype | [ ]  AmpC phenotype[ ]  Carbapenemase phenotype | [ ]  Other phenotypes[ ]  Susceptible (to panel 2 antimicrobials) |

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 |       |