



EVALUATION REPORT *CAMPYLOBACTER*

SPECIES DESIGNATION AND DISK DIFFUSION



EXTERNAL QUALITY ASSESSMENT SCHEME ON ANTIMICROBIAL SUSCEPTIBILITY TESTING 2014-2015

INSTITUTE FOR HEALTH IN NIS

RL FOR *CAMPYLOBACTER* AND *HELICOBACTER*

SERBIA

Dear Participant

In this evaluation report your individual results are presented for the first external quality assessment on antimicrobial susceptibility testing (EQA1-AST) 2014-2015 for national public health laboratories for *Salmonella* and *Campylobacter* in the Food-and Waterborne Diseases and Zoonoses Network (FWD-Net) organised by Statens Serum Institut (SSI).

Enclosed with this document are nine pages including the Eucast ECOFFs and clinical breakpoints for *Campylobacter*, your own submitted results, expected results and a comparison of these. Please study the results carefully and do not hesitate to contact us if you have any question or suggestions.

Thank you very much for your participation.

Yours sincerely,

EQA team Denmark

EUCAST ECOFFs and clinical breakpoints used for *Campylobacter*

| Antimicrobial agent | MIC determination (µg/mL) | | | | Disk Diffusion (mm) | | | |
|--------------------------------|---------------------------|-------|----------------------------|-----|---------------------|-------|----------------------------|-----|
| | EUCAST ECOFF | | EUCAST clinical breakpoint | | EUCAST ECOFF | | EUCAST Clinical breakpoint | |
| | WT ≤ | NWT > | S ≤ | R > | WT ≥ | NWT < | S ≥ | R < |
| Mandatory | | | | | | | | |
| Ciprofloxacin | 0.5 | 0.5 | 0.5 | 0.5 | 26 | 26 | 26 | 26 |
| Erythromycin (<i>jejuni</i>) | 4 | 4 | 4 | 4 | 22 | 22 | 20 | 20 |
| Erythromycin (<i>coli</i>) | 8 | 8 | 8 | 8 | 24 | 24 | 24 | 24 |
| Tetracycline | 1 | 1 | 2 | 2 | 30 | 30 | 30 | 30 |
| Optional | | | | | | | | |
| Gentamicin | 2 | 2 | NA | NA | NA | NA | NA | NA |
| Amoxicillin+clavulanic acid | NA | NA | NA | NA | NA | NA | NA | NA |

EQA_AST.C15.0001

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 30 | WT | S | 34 | S/WT | < 26 | Correct | WT | Correct |
| Erythromycin | 6 | NWT | R | 6 | R/NWT | < 34 | Correct | NWT | Correct |
| Tetracycline | 38 | WT | S | 30 | S/WT | < 30 | Correct | WT | Correct |
| Gentamicin | 33 | NA | NA | 22 | S/WT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 38 | NA | NA | 43 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter coli</i> | | | <i>C. coli</i> | | | Correct | | |

¹Participant reported measured values interpreted by SSI according to own reported breakpoints/cutoffs for resistance and compared to the reported interpretation.

²Participant reported measured values interpreted by SSI based on EUCAST ECOFFs when available.

³Participant reported values interpreted by SSI based on EUCAST ECOFFs compared to the expected interpretations as measured by SSI.

EQA_AST.C15.0002

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 6 | NWT | R | 6 | R/NWT | < 26 | Correct | NWT | Correct |
| Erythromycin | Mix ⁴ | WT/NWT | S/R | 6 | R/NWT | < 34 | Correct | NWT | Correct |
| Tetracycline | 6 | NWT | R | 6 | R/NWT | < 30 | Correct | NWT | Correct |
| Gentamicin | 30 | NA | NA | 24 | S/WT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 30 | NA | NA | 41 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter coli</i> | | | <i>C. coli</i> | | | Correct | | |

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³Participant reported values interpreted by SSI based on EUCAST ECOFFs compared to the expected interpretations as measured by SSI.

⁴Both Erythromycin S/WT and R/NWT are accepted as the original culture contained two strains.

EQA_AST.C15.0003

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 6 | NWT | R | 6 | R/NWT | < 26 | Correct | NWT | Correct |
| Erythromycin | 33 | WT | S | 40 | S/WT | < 20 | Correct | WT | Correct |
| Tetracycline | 44 | WT | S | 50 | S/WT | < 30 | Correct | WT | Correct |
| Gentamicin | 33 | NA | NA | 34 | S/WT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 33 | NA | NA | 50 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter jejuni</i> | | | <i>C. jejuni</i> | | | Correct | | |

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EQA_AST.C15.0004

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 6 | NWT | R | 6 | R/NWT | < 26 | Correct | NWT | Correct |
| Erythromycin | 32 | WT | S | 34 | S/WT | < 20 | Correct | WT | Correct |
| Tetracycline | 6 | NWT | R | 12 | R/NWT | < 30 | Correct | NWT | Correct |
| Gentamicin | 30 | NA | NA | 32 | S/WT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 49 | NA | NA | 55 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter jejuni</i> | | | <i>C. jejuni</i> | | | Correct | | |

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EQA_AST.C15.0005

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 6 | NWT | R | 6 | R/NWT | < 26 | Correct | NWT | Correct |
| Erythromycin | 24 | WT | S | 26 | S/WT | < 34 | Correct | WT | Correct |
| Tetracycline | 39 | WT | S | 45 | S/WT | < 30 | Correct | WT | Correct |
| Gentamicin | 31 | NA | NA | 25 | S/WT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 25 | NA | NA | 27 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter coli</i> | | | <i>C. coli</i> | | | Correct | | |

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³Participant reported values interpreted by SSI based on EUCAST ECOFFs compared to the expected interpretations as measured by SSI

EQA_AST.C15.0006

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 6 | NWT | R | 6 | R/NWT | < 26 | Correct | NWT | Correct |
| Erythromycin | 26 | WT | S | 24 | S/WT | < 34 | Correct | WT | Correct |
| Tetracycline | 6 | NWT | R | 6 | R/NWT | < 30 | Correct | NWT | Correct |
| Gentamicin | 28 | NA | NA | 24 | S/WT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 37 | NA | NA | 45 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter coli</i> | | | <i>C. coli</i> | | | Correct | | |

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³Participant reported values interpreted by SSI based on EUCAST ECOFFs compared to the expected interpretations as measured by SSI

EQA_AST.C15.0007

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 6 | NWT | R | 6 | R/NWT | < 26 | Correct | NWT | Correct |
| Erythromycin | 6 | NWT | R | 6 | R/NWT | < 34 | Correct | NWT | Correct |
| Tetracycline | 6 | NWT | R | 6 | R/NWT | < 30 | Correct | NWT | Correct |
| Gentamicin | 6 | NA | NA | 6 | R/NWT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 23 | NA | NA | 25 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter coli</i> | | | <i>C. coli</i> | | | Correct | | |

¹Participant reported measured values interpreted by SSI according to own reported breakpoints/cutoffs for resistance and compared to the reported interpretation.

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³Participant reported values interpreted by SSI based on EUCAST ECOFFs compared to the expected interpretations as measured by SSI

EQA_AST.C15.0008

CS_RLCAM / L027

| Antimicrobial agents | Expected results as measured by SSI | | | Your reported results and criteria | | | In accordance with own criteria ¹ | Interpretation based on EUCAST ECOFFs ² | In accordance with expected ³ |
|-----------------------------|-------------------------------------|---------------------------------------|--|------------------------------------|----------------|-----------------------------|--|--|--|
| | Value | Interpretation based on EUCAST ECOFFs | Interpretation based on clinical breakpoints | Value | Interpretation | Cutoff/breakpoint for R/NWT | | | |
| Ciprofloxacin | 35 | WT | S | 36 | S/WT | < 26 | Correct | WT | Correct |
| Erythromycin | 33 | WT | S | 27 | S/WT | < 20 | Correct | WT | Correct |
| Tetracycline | 44 | WT | S | 36 | S/WT | < 30 | Correct | WT | Correct |
| Gentamicin | 23 | NA | NA | 18 | S/WT | < 14 | Correct | NA | NA |
| Amoxicillin+clavulanic acid | 37 | NA | NA | 44 | S/WT | < 19 | Correct | NA | NA |
| Species designation | Expected result | | | Your reported result | | | In accordance with expected | | |
| | <i>Campylobacter jejuni</i> | | | <i>C. jejuni</i> | | | Correct | | |

¹Participant reported measured values interpreted by SSI according to own reported breakpoints/cutoffs for resistance and compared to the reported interpretation.

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³Participant reported values interpreted by SSI based on EUCAST ECOFFs compared to the expected interpretations as measured by SSI