

Newsletter 28 (April 2012)

A number of changes were made to the CDS in April 2012, these modifications have been included in the on-line CDS Manual and will be added to the downloadable version within a week. The changes are:

1. Calibration of Fosfomycin This antibiotic has been calibrated for the CDS for use in uncomplicated urinary tract infections using a Fosfomycin/Trometanol 200µg disc (Oxoid, FOT 200, CT0758). It is emphasised that this antibiotic has not been calibrated for systemic use and it is best regarded as a urinary antiseptic.

Enterobacteriaceae and *Pseudomonas* sp. are tested on Sensitest agar and enterococci are tested on blood Sensitest agar.

Enterobacteriaceae, Pseudomonas species

MIC of susceptible strains ≤ 32 mg/L

Annular radius of susceptible strains ≥ 6 mm

Enterococcus species (tested on Blood Sensitest agar, 35°C, 5 % CO₂)

MIC of susceptible strains ≤ 64 mg/L

Annular radius of susceptible strains ≥ 6 mm

Note: With this antibiotic *in vitro* mutation to resistance is high with the majority of strains tested and this is demonstrated by the presence of resistant colonies within the inhibitory zones on disc testing. However, it is claimed that the reason for the clinical efficacy is that a fosfomycin urine level of > 128 mg/L is maintained for over 24h after a single 3g oral dose (Raz, R, Fosfomycin: an old—new antibiotic, *Clinical Microbiology and Infection*, vol. 18, 4–7, 2012). *Acinetobacter* species are considered inherently resistant to fosfomycin. With Enterobacteriaceae and *Pseudomonas* sp., when there is a double zone of confluent growth, the measurement of the annular radius is performed on the inner zone.

Acceptable range for quality control (annular radius in mm)

Escherichia coli ACM 5185: 5.7 – 9.7

Pseudomonas aeruginosa ACM 5189: 8.0 –

10.8

Enterococcus faecalis ACM 5184: 7.1 – 10.7

2. Modified susceptible breakpoint MIC for Augmentin[®] (2 parts of amoxicillin to one part of clavulanate).

The susceptible breakpoint MIC of Augmentin[®] has been changed to 8/4 mg/L (8 mg/L amoxicillin and 4 mg/L clavulanate) for *Acinetobacter* and *Enterobacteriaceae* and *Vibrionaceae*. The cut off annular radius of susceptible strains remains the same at 6 mm with an Augmentin 60 µg disc. In the quality control of AMC 60 discs, the acceptable range for the reference strain *Escherichia coli* ACM 5186 is unchanged i.e. 6.4 – 9.6 mm. Note: the susceptible breakpoint MIC of Augmentin[®] is unchanged at 8/4 mg/L for *Burkholderia* species.

3. Modified susceptible breakpoint MIC for Timentin[®] (ticarcillin in the presence of a fixed level of 2mg/L clavulanate)

The new susceptible breakpoint MIC of Timentin[®] is 16/2 mg/L. The cut off annular radius of susceptible strains with a Timentin[®] 85 µg disc is unaltered at 6 mm. The reference strain *E. coli* ACM 5186 is also used in the quality control of Timentin[®] 85 discs and its acceptable range with a Timentin[®] 85 disc is unchanged i.e. 6.0 – 8.4 mm.

4. Timentin[®] (ticarcillin in the presence of a fixed level of 2mg/L clavulanate) is no longer recommended testing for anaerobic organisms and is removed from Table 10.1.c.

5. Ticarcillin testing for *Pseudomonas* species is removed from Table 10.1.b.

6. Testing Staphylococcus species that do not grow on Sensitest agar

Rare isolates of *Staphylococcus* species will failing to grow on Sensitest agar are tested on blood Sensitest agar (in air or 5 % CO₂). Interpretation of results is the same as those of staphylococci tested on Sensitest agar.