

# CUSTOMER INFORMATION SHEET

## *Etest MIC end points for Glycopeptides*

CIS 002

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Glycopeptides like vancomycin and teicoplanin are large molecules (molecular weights 1450 and 1900 respectively) which bind to different matrices and diffuse very slowly in agar. Disc diffusion testing is not useful because MIC differences are not reflected in zone size changes due to the poorly resolved gradient around the disc.

The preformed and predefined gradient in Etest enables glycopeptide MICs to be determined over a 15 dilution range. Despite the efficient release of the gradient from the strip into the agar, molecules remain in the vicinity of the strip. This generally results in the characteristically slim inhibition ellipses seen with vancomycin and teicoplanin.

To select the correct end point, it is important to differentiate narrow ellipses from the so-called "dip effect" seen with macrolides and clindamycin. Do not read the end point for vancomycin and teicoplanin as a dip effect. Read the MIC where the ellipse actually cuts the strip (Figures 1 and 2). Scrutinise the end points for hazes or microcolonies and read at complete inhibition (Figure 3).

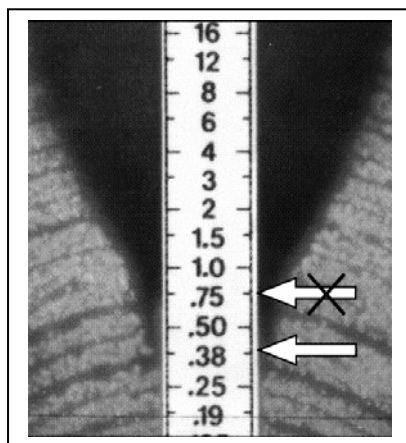


Figure 1. Slim ellipse. MIC 0.38 µg/ml

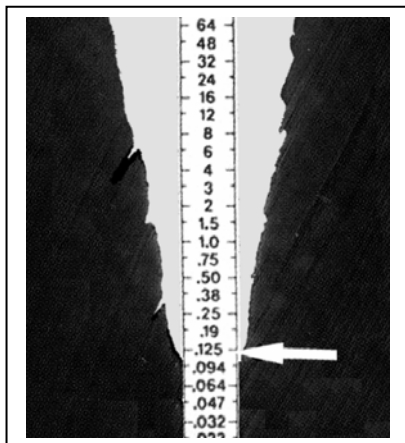


Figure 2. Slim ellipse. MIC 0.125 µg/ml

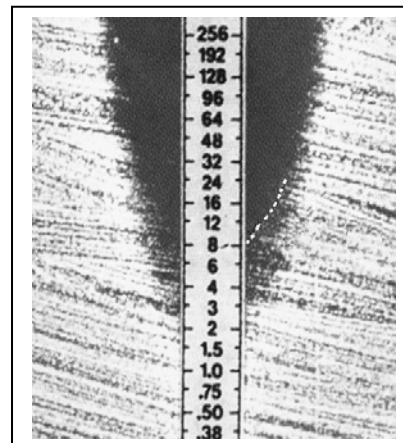


Figure 3. Colonies at end point. MIC 8 µg/ml