IDENTIFICATION OF TWO WIDELY DISSEMINATED STRAINS OF ENTEROCOCCUS FAECLIS HIGHLY-RESISTANT TO GENTAMICIN AND CIPROFLOXACIN CAUSING BACTEREMIAS IN THE UNITED KINGDOM

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ABSTRACT

Objective: To investigate the basis of a significant association observed between high-level resistance to ciprofloxacin (Cip) and gentamicin (Gm) in isolates of Enterococcus faecalis collected in the United Kingdom and Ireland as part of the BSAC Bacteremia Resistance Surveillance Programme, 2001-2002.

Methods: In 2001, 24 laboratories collected 152 consecutive isolates of E. faecalis from bacteremias all from separate patients. MICs of ampicillin, ciprofloxacin and gentamicin were determined by the Etest® and the E-Test® ribbon methods, respectively, and included into the chimeric, HLRG may be transferred between strains.

Hi-guidance levels of resistance to ciprofloxacin (Cip) (MICs = 64 mg/L) were resistant to Cip (MICs = 64 mg/L) and Cip (MICs ≥ 64 mg/L) and from 18 different hospitals, were compared by using the data of the 2 clusters. Two large clusters are apparent after analysis of patterns of patterns of isolates from 7 hospitals that were all at 

Results: 60 of 66 E. faecalis isolates with high-level Gm (MICs ≥ 12 mg/L) were resistant to Cip (MICs ≥ 32 mg/L), compared with only 7 of 66 E. faecalis isolates with normal Gm susceptibility (P = 0.0001). This association was not seen for other Enterococcus spp. collected during the survey to investigate this further. 138 E. faecalis isolates highly resistant to Gm (MICs ≥ 256 mg/L) and Cip (MICs ≥ 64 mg/L) and from 18 different hospitals, were compared by using the data of the 2 clusters. Two large clusters are apparent after analysis of patterns of patterns of isolates from 7 hospitals that were all at 

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