

## MRSA/VRE infections driven by antibacterial use?

The incidence of nosocomial infections due to methicillin-resistant *Staphylococcus aureus* (MRSA) or vancomycin-resistant *Enterococcus* (VRE) does not appear to be related to the use of vancomycin or linezolid, report researchers from the US.

They conducted a retrospective analysis to assess relationships between vancomycin and linezolid use and nosocomial infection rates due to MRSA and VRE at a tertiary-care hospital in South Carolina, US, between 1995 and 2005.\* Using data from 2000 through 2005 for 187 patients with MRSA infection and 19 with VRE infection, the effect of patient characteristics and antibacterial use on length of stay and costs of care were also assessed.

There was no association between hospital-wide vancomycin or linezolid use and MRSA or VRE infection rates. The analysis also showed that patients with MRSA or VRE infection incurred substantial costs (mean total costs \$US110 493 and \$US115 260, respectively), but there was considerable variability in these costs for these patients.\*\* Multivariate analysis among patients with MRSA infection identified multiple infections, intensive-care unit (ICU) stay, presence of a central-line associated bloodstream infection and ventilator-associated pneumonia as cost drivers. Among patients with VRE infection, only the use of levofloxacin/gatifloxacin had a high correlation with total and ICU costs.

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\*\* Costs (2005 values) included those associated with hospitalisation including intensive care, drug treatment and laboratory tests.

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