All isolates were tested against antimicrobial agents active against Gram-positive organisms including linezolid, chloramphenicol, erythromycin, clindamycin, trimethoprim/sulfamethoxazole, rifampicin, tetracyclines, and vancomycin. Categorical resistance was determined using breakpoints for linezolid (high-level resistance), erythromycin (high-level resistance), clindamycin (resistant, >2 μg/mL), trimethoprim/sulfamethoxazole (≥1:1), rifampicin (≥4 μg/mL), tetracycline (≥1 μg/mL), and vancomycin (≥16 μg/mL).

All linezolid-resistant isolates (MIC, ≥8 μg/mL), if detected, were confirmed with linezolid disk dilution. Strain discordance and discordant effects methods. The determination of the ZAAPS target minimal inhibitory concentration (MIC) was performed as described in US CLSI M100-S20 and AMENDED ABSTRACT

RESULTS

A total of 13,965 Gram-positive cocci were sampled for susceptibility by the ZAAPS surveillance system (2002-2009). All tests were performed in a reference laboratory by standardized CLSI methods (Table 1 and Figure 1).

Conclusions: ZAAPS surveillance for linezolid susceptibility remains useful, but is not designed to detect increasing linezolid-resistant strains and the potential for widespread dissemination of linezolid-resistant isolates.

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REFERENCES


