### **ORAL PRESENTATION**



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# Antimicrobial resistance of germs isolated from invasive infections – Romania 2012

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#### Background

Antimicrobial resistance has become a serious threat to public health undermining the efficacy of existing antimicrobials (including the last-resort ones) while very few novel antimicrobial agents are in the development pipeline. The interventions aimed to contain antimicrobial resistance need a continuous surveillance of new mechanisms of resistance emergence and the spread of existing ones. Romania participated since 2002 as member of European Antimicrobial Resistance Surveillance Network (EARS) for invasive infection; it is a network which collects data for the most important bacteria and clinically relevant antibiotics. We analyzed the antimicrobial resistance results obtained in 2012 in Romania, in order to support national guidelines for antimicrobial treatment and chemoprophylaxis.

#### Methods

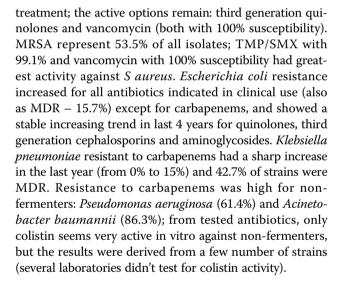
Antimicrobial resistance data collected for EARS-Net in 10 public hospitals in Romania in 2012 (756 strains) were analyzed; the resulting levels of resistance were compared with the results from the previous year as presented in EARS-Net 2011 report.

#### Results

The number of isolates was 2.55 folds greater than in 2011. Resistance of enterococci to vancomycin is negligible, together with *Enterococcus faecalis* resistance to ampicillin. *S pneumoniae* non-susceptibility to penicillin (38.6%), resistance to macrolides (39.5%) and dual (32.5%) compromise these alternatives for invasive infection

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#### Conclusion

The antimicrobial resistance in 2012 reached great levels for many antibiotics. There is an urgent need for a national program and local interventions to stimulate the rational use of antibiotics.

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