Treatment Options for MRSA Infections

Robert Moellering
Harvard Medical School, USA

In this talk I will discuss two separate issues:

1) Optimal antimicrobial therapy of CA-MRSA infections (with clear bias to the present approach in the USA)
2) Potential effectiveness of newer antimicrobial agents for infections due to GISA and hGISA.

The majority of infections caused by CA-MRSA are skin and soft tissue infections which respond to oral antibiotics including trimethoprim/sulfamethoxazole, doxycycline, minocycline, clindamycin, linezolid and fusidic acid. Except for linezolid, there are no adequate clinical trials demonstrating the superiority of any of these agents for ABSSTI. The newly published IDSA Guidelines address these issues and will be discussed.

Heteroresistance to the glycopeptides has become an increasing problem. Agents which clearly have activity against these organisms include the anti-MRSA cephalosporins (ceftobiprole and ceftaroline), and a number of newer antibiotics such as tigecycline, quinupristin/dalfopristin, linezolid and iclaprim. Of the new glycopeptides, it appears that, based on limited data, telavancin does have in vitro and in vivo activity against heteroresistant strains and the same is likely to be true of oritavancin. Unfortunately, clinical data to support the in vitro and in vivo observations for these agents are limited to date.