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Abstract (poster session)

Antibiotic treatment patterns across Europe for complicated skin and soft tissue infections (cSSTI) due to methicillin-resistant *Staphylococcus aureus* (MRSA)

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Objectives: To describe pan-European antibiotic treatment patterns with MRSA-targeted antibiotics for cSSTI. **Methods:** This retrospective, observational medical chart review collected patient (pt) data via 342 physician investigators in France, Germany, Italy, Spain, United Kingdom, Austria, Greece, Portugal, Ireland, Slovakia, Czech Republic, and Poland. Pts were ≥ 18 years with documented MRSA cSSTI admitted to the hospital between 01/07/2010-30/06/2011, and discharged alive by 31/07/2011. Antibiotic treatment patterns during the entire hospitalization and at discharge were captured, together with the prescriber-reported decision-making/reason(s) for selection. MRSA-targeted antibiotics were defined as those with MRSA indication, or those with a confirmatory susceptibility. **Results:** Of the 1,542 identified pts, 1,468 were randomly selected and received inpatient MRSA-targeted therapy. Of these, 1,189 (81.0%) pts were treated with a single MRSA-targeted antibiotic regimen, 261 (17.8%) had one regimen change, and 18 (1.2%) had three regimens while inpatient. Vancomycin, linezolid, clindamycin, and teicoplanin were the most commonly-prescribed agents as both initial and final inpatient regimen (Table). The proportion of pts receiving linezolid increased with therapy switch, while the proportion of vancomycin decreased. Most common reasons for selecting vancomycin as initial therapy included efficacy (65.5%), personal clinical experience (30.3%) and spectrum of activity (30.3%), while the most common reasons for selecting linezolid were efficacy (69.4%), availability in an oral dosage form (44.6%), and personal clinical experience (25.2%). Among the 161 (11.0%) pts switched to oral therapy prior to discharge, the most common reasons for switching included improvement of symptoms (50.9%), convenience (5.9%), and lack of drug resistance (5.9%). 32.7% of pts were discharged on MRSA-targeted antibiotics, with linezolid being prescribed most commonly (42.1%) and the majority (92.7%) receiving oral therapy. **Conclusion:** Vancomycin and linezolid represent the most frequent antibiotic choices for management of MRSA cSSTI in Europe. Almost 20% of inpatients required at least one MRSA-targeted treatment change. Linezolid was the most common discharge antibiotic, followed by clindamycin. Contemporary evidence of efficacy in MRSA cSSTI, as with linezolid, may influence antibiotic selection for switches during the inpatient stay and discharge antibiotic.

	Initial inpatient MRSA-targeted antibiotic (N=1468)	Final inpatient MRSA-targeted antibiotic (N=1468)	MRSA-targeted discharge antibiotic (N=480)
Vancomycin	737 (50.2%)	609 (41.5%)	11 (2.3%)
Linezolid	222 (15.1%)	310 (21.1%)	202 (42.1%)
Clindamycin	159 (10.8%)	141 (9.6%)	95 (19.8%)
Teicoplanin	153 (10.4%)	158 (10.8%)	14 (2.9%)
Ciprofloxacin	101 (6.9%)	105 (7.2%)	58 (12.1%)
Daptomycin	87 (5.9%)	98 (6.7%)	1 (0.2%)
Rifampicin	62 (4.2%)	60 (4.1%)	34 (7.1%)
Tigecycline	48 (3.3%)	54 (3.7%)	2 (0.4%)
Trimethoprim-sulfamethoxazole	45 (3.1%)	56 (3.8%)	57 (11.9%)
Fusidic acid	21 (1.4%)	26 (1.8%)	16 (3.3%)
Doxycycline	14 (1.0%)	25 (1.7%)	21 (4.4%)