ABR-Scan Science Week 23-24

Unit for Antibiotics and Infection Control

This ABR-Scan Science is compiled by the Unit for Antibiotics and Infection Control at the Public Health Agency of Sweden. It includes a summary of links to recent articles from a selection of 17 scientific journals that we find interesting. All journals included in the scan are listed at the bottom of the document. The articles are sorted according to our categorization: surveillance, treatment and diagnosis, prevention and intervention, microbiology and other. If you have any comments or suggestions, please send an e-mail to Jonas Fuks at ABR-scan@folkhalsomyndigheten.se

Surveillance

Epidemiology of Methicillin-Resistant Staphylococcus aureus Bacteremia in Children. Pediatrics

Drifting towards ceftriaxone treatment failure in gonorrhoea: risk factor analysis of data from the Gonococcal Resistance to Antimicrobials Surveillance Programme in England and Wales. <u>Sexually Transmitted Infections</u>

Clonal Expansion of New Penicillin-Resistant Clade of Neisseria meningitidis Serogroup W Clonal Complex 11, Australia. Emerging Infectious Diseases

Clinical Predictors and Outcomes of Klebsiella pneumoniae Bacteraemia in a Regional Hospital in Hong Kong. <u>Journal of Hospital Infection</u>

A 10-year surveillance of antimicrobial susceptibility patterns in Shigella sonnei isolates circulating in Jiangsu Province, China. Journal of Global Antimicrobal Resistance

Molecular epidemiology of carbapenem-resistant Acinetobacter baumannii in Greece: an extended review (2000–2015). Future Medicine

High Burden of Antimicrobial Resistance and Mortality Among Adults and Children With Community-Onset Bacterial Infections in India. Journal of Infectious Disease

Highly Tigecycline-Resistant Klebsiella pneumoniae Sequence Type 11 (ST11) and ST147 Isolates from Companion Animals. Antimicrobial Agents and Chemotherapy

Determinants of success and sustainability of the WHO multimodal hand hygiene promotion campaign, Italy, 2007–2008 and 2014. Eurosurveillance

Treatment and diagnosis

Early, Goal-Directed Therapy for Septic Shock — A Patient-Level Meta-Analysis. New England Journal of Medicine

Time to Treatment and Mortality during Mandated Emergency Care for Sepsis. New England Journal of Medicine

Short-Course Adjunctive Gentamicin as Empirical Therapy in Patients With Severe Sepsis and Septic Shock: A Prospective Observational Cohort Study. <u>Clinical Infectious Diseases</u>

Prediction of Bloodstream Infection Due to Vancomycin-Resistant Enterococcus in Patients
Undergoing Leukemia Induction or Hematopoietic Stem-Cell Transplantation. Clinical Infectious
Diseases

The Impact of Pediatric-Specific Vancomycin Dosing Guidelines: A Quality Improvement Initiative. Pediatrics

Successful treatment of post-surgical osteomyelitis caused by XDR *Pseudomonas aeruginosa* with ceftolozane/tazobactam monotherapy. <u>Journal of Antimicrobial Chemotherapy</u>

Predictors of mortality in nursing-home residents with pneumonia: a multicenter study. Clinical Microbiology and Infection

Prevention and intervention

Optimizing preoperative prophylaxis in patients with reported β -lactam allergy: a novel extension of antimicrobial stewardship. <u>Journal of Antimicrobial Chemotherapy</u>

Probiotics and prevention of Clostridium difficile infection. Anaerobe

Discordant Effects of Licensed Meningococcal Serogroup B Vaccination on Invasive Disease and Nasal Colonization in a Humanized Mouse Model. Journal of Infectious Diseases

Effect of a Health Care System Respiratory Fluoroquinolone Restriction Program To Alter Utilization and Impact Rates of Clostridium difficile Infection. <u>Antimicrobial Agents and Chemotherapy</u>

Reduced rate of intensive care unit acquired gram-negative bacilli after removal of sinks and introduction of 'water-free' patient care. <u>Antimicrobial Resistance and Infection Control</u>

Good epidemiological practice: A narrative review of appropriate scientific methods to evaluate the impact of antimicrobial stewardship interventions. Clinical Microbiology and Infection

ESCMID – an international Europe-based society committed to fostering cross-border collaboration and education to improve patient care. Clinical Microbiology and Infectiond

Microbiology

Resistance to the cyclotide cycloviolacin O2 in Salmonella enterica caused by different mutations that often confer cross-resistance or collateral sensitivity to other antimicrobial peptides.

Antimicrobial Agents and Chemotherapy

Deciphering Heteroresistance to Colistin in a Klebsiella pneumoniae Isolate from Marseille, France. Antimicrobial Agents and Chemotherapy

Comparison of methods for detection of plasmid-mediated and chromosomally-encoded colistin resistance in Enterobacteriaceae. Clinical Microbiology and Infection

Other

Pharmacokinetics of nebulized colistin methanesulfonate in critically ill patients. <u>Journal of</u> Antimicrobial Chemotherapy

Evaluation of two automated systems for colistin susceptibility testing of carbapenem-resistant Acinetobacter baumannii clinical isolates. Journal of Antimicrobial Chemotherapy

WHO targets antimicrobial resistance in new essential medicines list. British Medical Journal

The publications included in the scan are: Antimicrobial Agents and Chemotherapy, British Medical Journal, Clinical Infectious Diseases, Clinical Microbiology and Infection, Emerging Infectious Diseases, Eurosurveillance, Infection Control & Hospital Epidemiology, Infectious Diseases, JAMA - The Journal of the American Medical Association, Journal of Antimicrobial Chemotherapy, Journal of Hospital Infection, Journal of Infectious Diseases, Lancet, Lancet Infectious Diseases, New England Journal of Medicine, Pediatrics and Scandinavian Journal of Primary Health Care. In addition, other articles from other publications can be included.