ABR-Scan Science Week 1-2

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

Mycobacterium chimaera in Heater–Cooler Units in Denmark Related to Isolates from the United States and United Kingdom. <u>Emerging Infectious Diseases</u>

Azithromycin-Nonsusceptible Shigella flexneri 3a in Men Who Have Sex with Men, Taiwan, 2015–2016. Emerging Infectious Disease

Increasing Antibiotic Resistance in Shigella spp. from Infected New York City Residents, New York, USA. Emerging Infectious Diseases

Emergence of blaNDM-7-Producing Enterobacteriaceae in Gabon, 2016. Emerging Infectious Diseases

Neisseria meningitidis ST11 Complex Isolates Associated with Nongonococcal Urethritis, Indiana, USA, 2015–2016. Emerging Infectious Diseases

mcr-1-Harboring Salmonella enterica Serovar Typhimurium Sequence Type 34 in Pigs, China. Emerging Infectious Diseases

mcr-1 is borne by highly diverse *Escherichia coli* isolates since 2004 in food-producing animals in Europe. <u>Clinical Microbiology and Infection</u>

Nosocomial Infections with IMP-19-Producing Pseudomonas aeruginosa Linked to Contaminated Sinks, France. <u>Emerging Infectious Diseases</u>

Australian Gonococcal Surveillance Programme, 1 April to 30 June 2016. Communicable Diseases Surveillance

Australian Gonococcal Surveillance Programme, 1 July to 30 September 2015. Communicable Diseases Surveillance

Antimicrobial resistance in Staphylococcus pseudintermedius and the molecular epidemiology of methicillin-resistant S. pseudintermedius in small animals in Finland. Journal of Antimicrobial Chemotherapy

Sale of antibiotics without a prescription at community pharmacies in urban China: a multicentre cross-sectional survey. <u>Journal of Antimicrobial Chemotherapy</u>

Impact of long-term care facility residence on the antibiotic resistance of urinary tract Escherichia coli and Klebsiella. <u>Journal of Antimicrobial Chemotherapy</u>

Quantifying within-household transmission of extended-spectrum β-lactamase-producing bacteria. Clinical Microbiology and Infection

Editor's Choice: The Outpatient Burden of Respiratory Syncytial Virus Infections in Older Children. <u>Journal of Infectious Diseases</u>

Treatment and diagnosis

Duration of Antibiotic Therapy for Community-Acquired Pneumonia in the Era of Personalized Medicine. JAMA

Shortened Antimicrobial Treatment for Acute Otitis Media in Young Children. New England Journal of Medicine

Editor's choice: Redeploying β-Lactams Against Staphylococcus aureus: Repurposing With a Purpose. <u>Journal of Infectious Diseases</u>

Editor's choice: Redeploying β-Lactam Antibiotics as a Novel Antivirulence Strategy for the Treatment of Methicillin-Resistant Staphylococcus aureus Infections. <u>Journal of Infectious</u> Dieases

Efficacy of High-Dose Meropenem (Six Grams per Day) in Treatment of Experimental Murine Pneumonia Induced by Meropenem-Resistant Pseudomonas aeruginosa. Antimicrobial Agents and Chemotherapy

Carbapenem-Resistant Pseudomonas aeruginosa Bacteremia: Risk Factors for Mortality and Microbiologic Treatment Failure. <u>Antimicrobial Agents and Chemotherapy</u>

Dosing and Pharmacokinetics of Polymyxin B in Patients with Renal Insufficiency.

<u>Antimicrobial Agents and Chemotherapy</u>

Ambulatory treatment of fast breathing in young infants aged under 60 days: a double-blind, randomized, placebo-controlled equivalence trial in low-income settlements of Karachi. Clinical Infectious Diseases

Treating Sick Young Infants With Only Fast Breathing With Oral Amoxicillin in Resource-Limited Settings: Taking the High Road? <u>Clinical Infectious Diseases</u>

Early Clinical Response as a Predictor of Late Treatment Success in Patients With Acute Bacterial Skin and Skin Structure Infections: Retrospective Analysis of 2 Randomized Controlled Trials. Clinical Infectious Diseases

The Early Clinical Response Endpoint: Great Timing by the Food and Drug Administration? Clinical Infectious Diseases

Prevention and intervention

Development and validation of the INCREMENT-ESBL predictive score for mortality in patients with bloodstream infections due to extended-spectrum- β -lactamase-producing Enterobacteriaceae. <u>Journal of Antimicrobial Chemotherapy</u>

Microbiology

Are breakpoints for phenotypic susceptibility testing no longer needed? <u>Clinical Microbiology and Infection</u>

The role of whole genome sequencing in antimicrobial susceptibility testing of bacteria: report from the EUCAST Subcommittee. <u>Clinical Microbiology of Infection</u>

Clinical and Microbiological Characteristics of Clostridium difficile Infection Among Hospitalized Children in the Netherlands. <u>Clinical Infectious Diseases</u>

Biofilm-Forming Capability of Highly Virulent, Multidrug-Resistant Candida auris. <u>Emerging Infectious Diseases</u>

Prediction of antibiotic resistance from antibiotic resistance genes detected in antibiotic-resistant commensal Escherichia coli using PCR or WGS. <u>Journal of Antimicrobial</u>
<u>Chemotherapy</u>

Other

Potential economic burden of carbapenem-resistant Enterobacteriaceae (CRE) in the United States. Clinical Microbiology and Infection

Effect of faecal microbiota transplantation on mouse gut colonization with carbapenemase-producing Escherichia coli. <u>Journal of Antimicrobial Chemotherapy</u> Potentiation of ceftazidime by avibactam against β-lactam-resistant Pseudomonas aeruginosa in an in vitro infection model. <u>Journal of Antimicrobial Chemotherapy</u>

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.