ABR-Scan Science Week 42

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 ABR-scan@folkhalsomyndigheten.se

Surveillance

Widespread distribution of mcr-1-bearing bacteria in the ecosystem, 2015 to 2016. Eurosurveillance

An outbreak of bloodstream infection due to extensively resistant *Acinetobacter baumannii* among neonates. American Journal of Infection Control

Antimicrobial Nonsusceptibility of Gram-Negative Bloodstream Isolates, Veterans Health Administration System, United States, 2003–2013. Emerging Infectious Diseases

Cessation of screening for intestinal carriage of extended-spectrum β-lactamase-producing Enterobacteriaceae in a low-endemicity intensive care unit with universal contact precautions. Clinical Microbiology and Infection

Antimicrobial resistance among children in sub-Saharan Africa. Lancet Infectious Diseases

Phylogenetic Analysis of Klebsiella pneumoniae from Hospitalized Children, Pakistan. <u>Emerging Infectious Diseases</u>

High-Level Fosfomycin Resistance in Vancomycin-Resistant Enterococcus faecium. <u>Emerging</u> Infectious Diseases

The Drivers of Acute and Long-term Care *Clostridium difficile* Infection Rates: A Retrospective Multilevel Cohort Study of 251 Facilities. <u>Clinical Infectious Diseases</u>

Trends in prescribing behavior of systemic agents used in the treatment of acne among dermatologists and nondermatologists: A retrospective analysis, 2004-2013. <u>Journal of the American Academy of Dermatology</u>

Antimicrobial Susceptibilities of *Enterobacteriaceae* in Community-Acquired Urinary Tract Infections during a 5-year Period: A Single Hospital Study in Korea. Infection & Chemotherapy

High levels of susceptibility to new and older antibiotics in *Neisseria gonorrhoeae* isolates from Saskatchewan (2003–15): time to consider point-of-care or molecular testing for precision treatment? <u>Journal of Antimicrobial Chemotherapy</u>

An Evaluation of the Prevalence of Vancomycin-Resistant Enterococci (VRE) and Methicillin-Resistant Staphylococcus aureus (MRSA) in Hospital Food. <u>Infection Control & Hospital</u> Epidemiology

Monitoring and managing antibiotic resistance in refugee children. Expert Review of Anti-Infective Therapy

A review of antimicrobial resistance surveillance programmes in livestock and meat thereof in Europe with a focus on antimicrobial resistance patterns in humans. Clinical Microbiology and Infection

Treatment and diagnosis

Effect of Post–Cesarean Delivery Oral Cephalexin and Metronidazole on Surgical Site Infection Among Obese Women. JAMA

Surgical Antibiotic Prophylaxis and Risk for Postoperative Antibiotic-Resistant Infections. <u>Journal of the American College of Surgeons</u>

Impact of an electronic sepsis initiative on antibiotic use and health care facility—onset *Clostridium difficile* infection rates. American Journal of Infection Control

Effect of antibiotics for infectious diarrhea on the duration of hospitalization: A retrospective cohort study at a single center in Japan from 2012 to 2015. Journal of Infection and Chemotherapy

Effects of Behavioral Interventions on Inappropriate Antibiotic Prescribing in Primary Care 12 Months After Stopping Interventions. JAMA

Vancomycin Taper and Pulse Regimen With Careful Follow-up for Patients With Recurrent *Clostridium difficile* Infection. <u>Clinical Infectious Diseases</u>

Pharmacokinetic considerations and dosing strategies of antibiotics in the critically ill patient. Journal of the Intensive Care Society

Comparing the Outcomes of Adults With Enterobacteriaceae Bacteremia Receiving Short-Course Versus Prolonged-Course Antibiotic Therapy in a Multicenter, Propensity Score–Matched Cohort. Clinical Infectious Diseases

High-Dose Daptomycin and Mortality: The Case Is Not Yet Closed. Clinical Infectious Diseases

Combination therapy for bloodstream infections with carbapenemase-producing Enterobacteriaceae. Lancet Infectious Diseases

Combination therapy for bloodstream infections with carbapenemase-producing Enterobacteriaceae – Authors' reply. <u>Lancet Infectious Diseases</u>

Rapid Test for Antibiotic Susceptibility. JAMA

Effect of procalcitonin-guided antibiotic treatment on mortality in acute respiratory infections: a patient level meta-analysis. <u>Lancet Infectious Diseases</u>

Procalcitonin and antibiotic use: imperfect, yet effective. Lancet Infectious Diseases

A rapid diagnostic workflow for cefotaxime-resistant Escherichia coli and Klebsiella pneumoniae detection from blood cultures by MALDI-TOF mass spectrometry. <u>PLoS One</u>

Trial Evaluating Ambulatory Therapy of Travelers' Diarrhea (TrEAT TD) Study: A Randomized Controlled Trial Comparing 3 Single-Dose Antibiotic Regimens With Loperamide. Clinical Infectious Diseases

The dilemma of monotherapy or combination therapy in community acquired pneumonia. European Journal of Clinical Investigation

Prevention and intervention

Importance of Carbapenemase Production Detection in Carbapenem-Resistant Enterobacteriaceae: Looking Beyond Epidemiological Purposes. <u>Clinical Infectious Diseases</u>

The expected and unexpected benefits of dispensing the exact number of pills. PLoS One

Reducing early career general practitioners' antibiotic prescribing for respiratory tract infections: a pragmatic prospective non-randomised controlled trial. <u>Family Practise</u>

Implementation of central line-associated bloodstream infection prevention bundles in a surgical intensive care unit using peer tutoring. Antimicrobial Resistance & Infection Control

Anti-microbial stewardship: antibiotic use in well-appearing term neonates born to mothers with chorioamnionitis. Journal of Perinatology

Reducing antimicrobial use in food animals. <u>Science</u>

Microbiology

Fecal Microbiota Transplantation Is a New Effective Weapon to Fight Multidrug-Resistant Bacteria, but Harmonization and More Data Are Needed. Clinical Infectious Diseases

Other

Challenges and Opportunities of Nontraditional Approaches to Treating Bacterial Infections.

<u>Clinical Infectious Diseases</u>

Addressing Antimicrobial Resistance and Stewardship - The Priority Antimicrobial Value and Entry (PAVE) Award. <u>JAMA</u>

Pull Incentives for Antibacterial Drug Development: An Analysis by the Transatlantic Task Force on Antimicrobial Resistance. Clinical Infectious Diseases

Can the Antimicrobial Resistance Benchmark blaze a new trail? Lancet

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.