

ABR-Scan Science Week 8-9

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

Surgical site infection after gastrointestinal surgery in high-income, middle-income, and low-income countries: a prospective, international, multicentre cohort study. [Lancet Infectious Diseases](#)

Evolution of Antibiotic Use and Cost in Patients with Community-Acquired Pneumonia. [Clinical Drug Investigation](#)

Global Health Estimate of Invasive Mycobacterium chimaera Infections Associated with Heater-Cooler Devices in Cardiac Surgery. [Emerging Infectious Diseases](#)

Association between prior antibiotic therapy and subsequent risk of community-acquired infections: a systematic review. [Journal of Antimicrobial Chemotherapy](#)

Comparison of risk factors for, and prevalence of, antibiotic resistance in contaminating and pathogenic urinary *Escherichia coli* in children in primary care: prospective cohort study. [Journal of Antimicrobial Chemotherapy](#)

Trends in Methicillin-Resistant *Staphylococcus aureus* Hospitalizations in the United States, 2010-2014. [Clinical Infectious Diseases](#)

Surgical site infection with extended-spectrum β -lactamase-producing Enterobacteriaceae after cardiac surgery: incidence and risk factors. [Clinical Microbiology and Infection](#)

The relationship between Gram-negative colonization and bloodstream infections in neonates: a systematic review and meta-analysis. [Clinical Microbiology and Infection](#)

Global emergence of the widespread *Pseudomonas aeruginosa* ST235 clone. [Clinical Microbiology and Infection](#)

Identification of a PVL-negative SCCmec-IVa sublineage of the methicillin-resistant *Staphylococcus aureus* CC80 lineage: understanding the clonal origin of CA-MRSA. [Clinical Microbiology and Infection](#)

An outbreak of *Clostridium difficile* infections due to new PCR ribotype 826: epidemiologic and microbiologic analyses. [Clinical Microbiology and Infection](#)

How to: Surveillance of *Clostridium difficile* infections. [Clinical Microbiology and Infection](#)

Imipenem Resistance in *Clostridium difficile* Ribotype 017, Portugal. [Emerging Infectious Diseases](#)

Genomic Analysis of Hospital Plumbing Reveals Diverse Reservoir of Bacterial Plasmids Conferring Carbapenem Resistance. [MBio](#)

Patient Factors Associated With Methicillin-Resistant *Staphylococcus aureus* Septic Arthritis in Children. [Orthopedics](#)

Antibiotic use, knowledge and health literacy among the general population in Berlin, Germany and its surrounding rural areas. [PLOS One](#)

Understanding the gender gap in antibiotic prescribing: a cross-sectional analysis of English primary care. [BMJ](#)

Switching Between Antibiotics Among Danish Children 0-4 Years of Age: A Nationwide Drug Utilization Study. [Pediatric Infectious Disease Journal](#)

Evaluation of institutional guideline adherence for carbapenem use at a large academic medical center. [Infectious Diseases](#)

Physician Perceptions Regarding Antimicrobial Use in End-of-Life Care. [Infection Control and Hospital Epidemiology](#)

Emergence of Vancomycin Intermediate and Resistant Staphylococcus aureus among Methicillin Resistant S. aureus isolated from clinical specimens in the northwest of Iran. [Journal of Global Antimicrobial Resistance](#)

Treatment and diagnosis

7-day compared with 10-day antibiotic treatment for febrile urinary tract infections in children: protocol of a randomised controlled trial. [BMJ Open](#)

Rectal *E. coli* above ciprofloxacin ECOFF associate with infectious complications following prostate biopsy. [European Journal of Clinical Microbiology & Infectious Diseases](#)

Effect of Meropenem-Vaborbactam vs Piperacillin-Tazobactam on Clinical Cure or Improvement and Microbial Eradication in Complicated Urinary Tract Infection, The TANGO I Randomized Clinical Trial. [JAMA](#)

Comment on: Influence of empirical double-active combination antimicrobial therapy compared with active monotherapy on mortality in patients with septic shock: a propensity score-adjusted and matched analysis. [Journal of Antimicrobial Chemotherapy](#)

Antibiotic Prophylaxis for Children With Sickle Cell Anemia. [Pediatrics](#)

Evidence to improve the treatment of infections caused by carbapenem-resistant Gram-negative bacteria. [Lancet Infectious Diseases](#)

Colistin alone versus colistin plus meropenem for treatment of severe infections caused by carbapenem-resistant Gram-negative bacteria: an open-label, randomised controlled trial. [Lancet Infectious Diseases](#)

Early discontinuation of empirical antibacterial therapy in febrile neutropenia: the ANTIBIOSTOP study. [Infectious Diseases](#)

Comparison of Different Strategies for Providing Fecal Microbiota Transplantation to Treat Patients with Recurrent *Clostridium difficile* Infection in Two English Hospitals: A Review. [Infectious Diseases and Therapy](#)

Evidence to improve the treatment of infections caused by carbapenem-resistant Gram-negative bacteria. [Lancet Infectious Diseases](#)

Application of the DRIP Score at a Veterans Affairs Hospital. [Antimicrobial Agents and Chemotherapy](#)

A Head-to-Head Comparative Phase II Study of Standard Urine Culture and Sensitivity Versus DNA Next-generation Sequencing Testing for Urinary Tract Infections. [Reviews in urology](#)

Prevention and intervention

Recommendations for the successful control of a large outbreak of vancomycin-resistant *Enterococcus faecium* (VRE) in a non-endemic hospital setting. [Journal of Hospital Infection](#)

Efficiency of different control measures for preventing carbapenemase-producing enterobacteria and glycopeptide-resistant *Enterococcus faecium* outbreaks: a 6-year prospective study in a French multihospital institution, January 2010 to December 2015. [Eurosurveillance](#)

A multicentre stewardship initiative to decrease excessive duration of antibiotic therapy for the treatment of community-acquired pneumonia. [Journal of Antimicrobial Chemotherapy](#)

The Importance of Contact Precautions for Endemic Methicillin-Resistant *Staphylococcus aureus* and Vancomycin-Resistant Enterococci. [JAMA](#)

Impact of antimicrobial stewardship interventions on *Clostridium difficile* infection and clinical outcomes: segmented regression analyses. [Journal of Antimicrobial Chemotherapy](#)

Development and implementation of an antimicrobial lock therapy guideline in a pediatric hospital. [American Journal of Health-System Pharmacy](#)

Microbiology

Culture-free Antibiotic-susceptibility Determination From Single-bacterium Raman Spectra. [Scientific Reports](#)

Expansion of a urethritis-associated *Neisseria meningitidis* clade in the United States with concurrent acquisition of *N. gonorrhoeae* alleles. [BMC Genomics](#)

Activity of ceftazidime/avibactam against problem Enterobacteriaceae and *Pseudomonas aeruginosa* in the UK, 2015–16. [Journal of Antimicrobial Chemotherapy](#)

In vitro activity of ceftolozane/tazobactam versus antimicrobial non-susceptible *Pseudomonas aeruginosa* clinical isolates including MDR and XDR isolates obtained from across Canada as part of the CANWARD study, 2008–16. [Journal of Antimicrobial Chemotherapy](#)

Draft genome sequence of a KPC-2-producing *Klebsiella pneumoniae* ST340 carrying *bla*CTX-M-15 and *bla*CTX-M-59 concomitantly. [Journal of Global Antimicrobial Resistance](#)

Comparative transcriptomics of multidrug-resistant *Acinetobacter baumannii* in response to antibiotic treatments. [Scientific Reports](#)

Other

Antibiotic therapy in neonates and impact on gut microbiota and antibiotic resistance development: a systematic review. [Journal of Antimicrobial Chemotherapy](#)

Discovery and development of new antibacterial drugs: learning from experience? [Journal of Antimicrobial Chemotherapy](#)

Toward prediction and control of antibiotic-resistance evolution. [Current Opinion in Biotechnology](#)

Establishing statistical equivalence of data from different sampling approaches for 2 assessment of bacterial phenotypic antimicrobial resistance. [Applied Environmental Microbiology](#)

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.