

ABR-Scan Science Week 16-17

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

Antimicrobial consumption and resistance in adult hospital inpatients in 53 countries: results of an internet-based global point prevalence survey. [Lancet Global Health](#)

Longitudinal point prevalence survey of antibacterial use in Northern Ireland using the European Surveillance of Antimicrobial Consumption (ESAC) PPS and Global-PPS tool. [Epidemiology & Infection](#)

Quality assurance for antimicrobial susceptibility testing of *Neisseria gonorrhoeae* in Latin American and Caribbean countries, 2013–2015. [BMJ STI](#)

National Estimates of Emergency Department Visits for Antibiotic Adverse Events Among Adults—United States, 2011–2015. [Journal of General Internal Medicine](#)

A systematic review of the epidemiology of carbapenem-resistant Enterobacteriaceae in the United States. [Antimicrobial Resistance & Infection Control](#)

Continuous increase of vancomycin resistance in enterococci causing nosocomial infections in Germany – 10 years of surveillance. [Antimicrobial Resistance & Infection Control](#)

In vitro activity of imipenem/relebactam against Gram-negative ESKAPE pathogens isolated in 17 European countries: 2015 SMART surveillance programme. [Journal of Antimicrobial Chemotherapy](#)

Determinants of Antibiotic Consumption - Development of a Model using Partial Least Squares Regression based on Data from India. [Scientific Reports](#)

Identification of carbapenem-resistant *Pseudomonas aeruginosa* in selected hospitals of the Gulf Cooperation Council States: dominance of high-risk clones in the region. [Journal of Medical Microbiology](#)

Colonization with Levofloxacin-Resistant Extended-Spectrum β -Lactamase-Producing Enterobacteriaceae and Risk of Bacteremia in Hematopoietic Stem Cell Transplant Recipients. [Clinical Infectious Diseases](#)

Long-term Carriage of Extended-Spectrum β -Lactamase–Producing *Escherichia coli* and *Klebsiella pneumoniae* in the General Population in The Netherlands. [Clinical Infectious Diseases](#)

Prevalence of drug-resistant tuberculosis and imputed burden in South Africa: a national and sub-national cross-sectional survey. [Lancet Infectious Diseases](#)

The magnitude of antibiotic resistance to *Helicobacter pylori* in Africa and identified mutations which confer resistance to antibiotics: systematic review and meta-analysis. [BMC Infectious Diseases](#)

Self-Medication with Antibiotics, Attitude and Knowledge of Antibiotic Resistance among Community Residents and Undergraduate Students in Northwest Nigeria. [Diseases](#)

Drug-resistant tuberculosis: the rise of the monos. [Lancet Infectious Diseases](#)

Observational cross-sectional study of nasal staphylococcal species of medical students of diverse geographical origin, prior to healthcare exposure: prevalence of SCCmec, fusC, fusB and the arginine catabolite mobile element (ACME) in the absence of selective antibiotic pressure. [BMJ Open](#)

The microbiology of infected pancreatic necrosis in the era of minimally invasive therapy. [European Journal of Clinical Microbiology & Infectious Diseases](#)

Characterization of integrons, extended-spectrum β -lactamases, AmpC cephalosporinase, quinolone resistance, and molecular typing of Shigella spp. from Iran. [Infectious Diseases](#)

Clonal spread of vanA Enterococcus faecium sequence type 203 in Bulgarian hospitals. [Infectious Diseases](#)

New York City House Mice (Mus musculus) as Potential Reservoirs for Pathogenic Bacteria and Antimicrobial Resistance Determinants. [mBio](#)

Treatment and diagnosis

Shortened courses of antibiotics for bacterial infections: A systematic review of randomized controlled trials. [Pharmacotherapy](#)

Effect of 5-Day Nitrofurantoin vs Single-Dose Fosfomycin on Clinical Resolution of Uncomplicated Lower Urinary Tract Infection in Women: A Randomized Clinical Trial. [JAMA](#)

Nitrofurantoin vs Fosfomycin: Rendering a Verdict in a Trial of Acute Uncomplicated Cystitis. [JAMA](#)

Oral doxycycline versus intravenous ceftriaxone for treatment of multiple erythema migrans: an open-label alternate-treatment observational trial. [Journal of Antimicrobial Chemotherapy](#)

Plasma and CSF pharmacokinetics of meropenem in neonates and young infants: results from the NeoMero studies. [Journal of Antimicrobial Chemotherapy](#)

Development and first evaluation of a novel multiplex real-time PCR on whole blood samples for rapid pathogen identification in critically ill patients with sepsis. [European Journal of Clinical Microbiology & Infectious Diseases](#)

Despite antibiotic treatment of travellers' diarrhoea pathogens are found in stools from half of travellers at return. [Travel Medicine and Infectious Disease](#)

The effects of antibiotic cycling and mixing on antibiotic resistance in intensive care units: a cluster-randomised crossover trial. [Lancet Infectious Diseases](#)

Emergency department visits during outpatient parenteral antimicrobial therapy: a retrospective cohort study. [Journal of Antimicrobial Chemotherapy](#)

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](#)

Busting the Myth of "Static vs Cidal": A Systemic Literature Review. [Clinical Infectious Diseases](#)

Rifaximin Fails to Prevent Campylobacteriosis in the Human Challenge Model: A Randomized, Double-Blind, Placebo-Controlled Trial. [Clinical Infectious Diseases](#)

Impact of Isolating *Clostridium difficile* Carriers on the Burden of Isolation Precautions: A Time Series Analysis. [Clinical Infectious Diseases](#)

Daptomycin and combination daptomycin-ceftaroline as salvage therapy for persistent methicillin-resistant *Staphylococcus aureus* bacteremia. [Infectious Diseases](#)

Blood culture useful only in selected patients with urinary tract infections – a literature review. [Infectious Diseases](#)

Dose, duration, and cost: Opportunities to improve use of long-term oral antibiotics for people with rosacea. [Journal of Dermatological Treatment](#)

Characterisation of 40 mg/ml and 100 mg/ml tobramycin formulations for aerosol therapy with adult mechanical ventilation. [Pulmonary Pharmacology & Therapeutics](#)

Gram negative anaerobe susceptibility testing in clinical isolates using Sensititre and Etest methods. [Pathology](#)

Clinical impact of rapid bacterial identification by MALDI-TOF MS combined with the bêta-LACTA™ test on early antibiotic adaptation by an antimicrobial stewardship team in bloodstream infections. [Infectious Diseases](#)

The clinical significance of concomitant bacteriuria in patients with *Staphylococcus aureus* bacteremia. A review and meta-analysis. [Infectious Diseases](#)

Surgical Antimicrobial Prophylaxis Among Pediatric Patients in South Africa Comparing Two Healthcare Settings. [Pediatric Infectious Disease Journal](#)

Pediatric tuberculosis detection using trained African giant pouched rats. [Pediatric Research](#)

Prevention and intervention

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

Emergence and control of linezolid-resistant *Staphylococcus epidermidis* in an ICU of a German hospital. [Journal of Antimicrobial Chemotherapy](#)

Comment on: MIC-based dose adjustment: facts and fables. [Journal of Antimicrobial Chemotherapy](#)

Efficacy of infection control interventions, other than decolonization, in reducing the incidence of new MRSA acquisition in a neurosurgical intensive care unit. [Infectious Diseases](#)

The One Health stewardship of colistin as an antibiotic of last resort for human health in South Africa. [Lancet Infectious Diseases](#)

Implementing an Antibiotic Stewardship Information System to Improve Hospital Infection Control: A Co-Design Process. [Studies in Health Technology and Informatics](#)

Phenotypic antimicrobial susceptibility testing with deep learning video microscopy. [Analytical Chemistry](#)

Microbiology

Comparison of piperacillin exposure in the lungs of critically ill patients and healthy volunteers. [Journal of Antimicrobial Chemotherapy](#)

Other

Attributable Healthcare Resource Utilization and Costs for Patients With Primary and Recurrent Clostridium difficile Infection in the United States. [Clinical Infectious Diseases](#)

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.