

ABR-Scan Science Week 12-13

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-Resistant Bacteria in Infected Wounds, Ghana, 2014. [Emerging Infectious Diseases](#)

Genetic sequencing for surveillance of drug resistance in tuberculosis in highly endemic countries: a multi-country population-based surveillance study. [Lancet Infectious Diseases](#)

Population monitoring for drug-resistant tuberculosis: is genomics the answer? [Lancet Infectious Diseases](#)

Proteus mirabilis harboring carbapenemase NDM-5 and ESBL VEB-6 detected in Austria. [Diagnostic Microbiology & Infectious Diseases](#)

Factors associated to prevalence and treatment of carbapenem-resistant Enterobacteriaceae infections: a seven years retrospective study in three tertiary care hospitals. [Annals of Clinical Microbiology and Antimicrobials](#)

High admission prevalence of fluoroquinolone resistance in third-generation cephalosporin-resistant Enterobacteriaceae in German university hospitals [Journal of Antimicrobial Chemotherapy](#)

Antibiotic resistance in severe odontogenic infections of the South Australian population – a 9-year retrospective audit. [Australian Dental Journal](#)

First report of OXA-48–producing *Escherichia coli* in Croatia and confirmed intergenetic transfer of a plasmid-carrying *bla*OXA-48 from *Klebsiella pneumoniae*. [Infectious Diseases](#)

Prevalence and risk factors for Extended-Spectrum Beta-Lactamase-producing- *Enterobacteriaceae* in French military and civilian travelers: A cross-sectional analysis. [Travel Medicine and Infectious Disease](#)

Prevalence of antibiotic resistant coliform bacteria, Enterococcus spp. and Staphylococcus spp. in wastewater sewerage biofilm. [Journal of Global Antimicrobial Resistance](#)

Molecular epidemiology and antimicrobial resistance of *Clostridium difficile* in a National Geriatrics Hospital from Costa Rica. [Journal of Hospital Infection](#)

News From the Centers for Disease Control and Prevention March 27, 2018 - Drug-Resistant Infections from Raw Milk. [JAMA](#)

Candida auris: epidemiological situation, laboratory capacity and preparedness in European Union and European Economic Area countries, 2013 to 2017. [Eurosurveillance](#)

Microbiological and epidemiological information relating to multi-drug resistant gonorrhoea (MDRGC) in England, the first case being reported in March 2018. [Public Health England Health Protection Report](#)

Treatment and diagnosis

Population pharmacokinetics and probability of target attainment of ertapenem administered by subcutaneous or intravenous route in patients with bone and joint infection. [Journal of Antimicrobial Chemotherapy](#)

Duration of exposure to multiple antibiotics is associated with increased risk of VRE bacteraemia: a nested case-control study. [Journal of Antimicrobial Chemotherapy](#)

Procalcitonin monitoring as a guide for antimicrobial therapy: a review of current literature. [Pharmacotherapy](#)

Antibacterial activity of ceftolozane/tazobactam alone and in combination with other antimicrobial agents against MDR *Pseudomonas aeruginosa*. [Journal of Antimicrobial Chemotherapy](#)

Temocillin dosing in haemodialysis patients based on population pharmacokinetics of total and unbound concentrations and Monte Carlo simulations. [Journal of Antimicrobial Chemotherapy](#)

Opportunities for better value wound care: a multiservice, cross-sectional survey of complex wounds and their care in a UK community population. [BMJ Open](#)

Detection of *Neisseria meningitidis* in a paediatric patient with septic arthritis using multiplexed diagnostic PCR targeting meningitis/encephalitis (ME). [Annals of Clinical Microbiology and Antimicrobials](#)

Clinical efficacy and safety of cefepime–tazobactam in hospitalized patients in South India. [Infectious Diseases](#)

Impact of fluoroquinolone prophylaxis on documented infections in patients with febrile neutropenia. [Infectious Diseases](#)

Combination antibiotic therapy for *Pseudomonas aeruginosa* bacteremia in febrile neutropenic patients? The question still remains. [Infectious Diseases](#)

A shorter period of therapy is associated with higher mortality in bloodstream infections caused by carbapenemase-producing *Klebsiella pneumoniae* in a Brazilian centre. [Infectious Diseases](#)

A potential benefit from infectious disease specialist and stationary ward in rational antibiotic therapy of complicated skin and skin structure infections. [Infectious Diseases](#)

The use of cefepime as a carbapenem-sparing antibiotic for treating uncomplicated acute pyelonephritis caused by extended-spectrum β -lactamase producing *Escherichia coli*. [Infectious Diseases](#)

Efficacy of prophylactic probiotics in combination with antibiotics versus antibiotics alone for colorectal surgery: A meta-analysis of randomized controlled trials. [Journal of Surgical Oncology](#)

Tuberculosis: progress and advances in development of new drugs, treatment regimens, and host-directed therapies. [Lancet Infectious Diseases](#)

Tuberculosis: advances and challenges in development of new diagnostics and biomarkers. [Lancet Infectious Diseases](#)

Prevention and intervention

Hand hygiene and compliance behaviours are the under-appreciated human factors pivotal to reducing hospital-acquired infections. [Journal of Hospital Infection](#)

Efficacy of ethanol against viruses in hand disinfection. [Journal of Hospital Infection](#)

Changing the paradigm: messages for hand hygiene education and audit from cluster analysis. [Journal of Hospital Infection](#)

Demonstrating success in reducing adult cardiac surgical site infections and the economic impact of using multidisciplinary collaboration. [Journal of Hospital Infection](#)

Multidrug-resistant infections in long-term care facilities: extended-spectrum β -lactamase-producing Enterobacteriaceae and hypervirulent antibiotic resistant *Clostridium difficile*. [Diagnostic Microbiology & Infectious Diseases](#)

Antimicrobial stewardship in the neonatal unit reduces antibiotic exposure. [Acta Paediatrica](#)

Can Infection Prevention Programs in Hospitals and Nursing Facilities Be Integrated? From Silos to Partners. [JAMA](#)

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

Effectiveness of interventions to improve the public's antimicrobial resistance awareness and behaviours associated with prudent use of antimicrobials: a systematic review. [Journal of Antimicrobial Chemotherapy](#)

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

Fluoroquinolone Restriction as an Effective Antimicrobial Stewardship Intervention. [Current Infectious Disease Reports](#)

The impact of paediatric antimicrobial stewardship programmes on patient outcomes. [Current Opinion in Infectious Diseases](#)

Barriers to and enablers of implementing antimicrobial stewardship programs in veterinary practices. [Journal of Veterinary Internal Medicine](#)

Expert consensus regarding drivers of antimicrobial stewardship in companion animal veterinary practice: a Delphi study. [BMJ VetRecord](#)

Microbiology

Lactobacillus paracasei CNCM I-3689 reduces vancomycin-resistant Enterococcus persistence and promotes Bacteroidetes resilience in the gut following antibiotic challenge. [Scientific Reports](#)

Vancomycin and Daptomycin Minimum Inhibitory Concentration as a predictor of methicillin-resistant *Staphylococcus aureus* bacteremia outcome. [Journal of Global Antimicrobial Resistance](#)

Genomic epidemiology of multidrug-resistant Gram-negative organisms. [Annals of the New York Academy of Sciences](#)

Other

Concrete action now: UN High-Level Meeting on Tuberculosis. [Lancet Infectious Diseases](#)

Opportunities and challenges to improving antibiotic prescribing practices through a One Health approach: results of a comparative survey of doctors, dentists and veterinarians in Australia. [BMJ Open](#)

Note from the editors: World Tuberculosis Day 2018 and Special issue—Screening and prevention of infectious diseases in newly arrived migrants in Europe. [Eurosurveillance](#)

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.