

ABR-Scan Science Week 36-37

Unit for Antibiotics and Infection Control

This biweekly ABR-Scan is compiled by the Unit for Antibiotics and Infection Control at the Public Health Agency of Sweden (PHAS). It includes a summary of links to recent peer-reviewed articles mainly from a selection of 17 scientific journals, which are listed at the bottom of the document. The articles are sorted according to the following categories: surveillance, treatment and diagnosis, prevention and intervention, microbiology and other. Please note that the information and views set out in the articles included are those of the author(s) and do not necessarily reflect the official opinion of PHAS. Please send an e-mail to ABR-scan@folkhalsomyndigheten.se if you would like to subscribe, unsubscribe or submit any comments or suggestions.

Surveillance

Fluoroquinolones for urinary tract infection and within-household spread of resistant Enterobacteriaceae: the smoking gun. [Clinical Microbiology and Infection](#)

Effect of outpatient antibiotics for urinary tract infections on antimicrobial resistance among commensal Enterobacteriaceae: a multinational prospective cohort study. [Clinical Microbiology and Infection](#)

Neonatal intestinal colonization with extended-spectrum β -lactamase-producing Enterobacteriaceae—a 5-year follow-up study. [Clinical Microbiology and Infection](#)

Culturing rate and the surveillance of bloodstream infections: a population-based assessment. [Clinical Microbiology and Infection](#)

The ClosER study: results from a three-year pan-European longitudinal surveillance of antibiotic resistance among prevalent *Clostridium difficile* ribotypes, 2011–2014. [Clinical Microbiology and Infection](#)

Candida auris in Healthcare Facilities, New York, USA, 2013–2017. [Emerging Infectious Diseases](#)

Treatment and diagnosis

Therapeutic drug monitoring of β -lactam antibiotics in the critically ill: direct measurement of unbound drug concentrations to achieve appropriate drug exposures. [Journal of Antimicrobial Chemotherapy](#)

Clinical and bacteriological efficacy of pivmecillinam treatment for uncomplicated urinary tract infections caused by ESBL-producing *Escherichia coli*: a prospective, multicentre, observational cohort study. [Journal of Antimicrobial Chemotherapy](#)

Clinical activity of ceftazidime/avibactam against MDR Enterobacteriaceae and *Pseudomonas aeruginosa*: pooled data from the ceftazidime/avibactam Phase III clinical trial programme. [Journal of Antimicrobial Chemotherapy](#)

Averting the post-antibiotic era: successful use of meropenem/vaborbactam for carbapenem-resistant *Serratia marcescens* and *Enterobacter aerogenes* bacteraemia in a haemodialysis patient. [Journal of Antimicrobial Chemotherapy](#)

Dosing vancomycin in the super obese: less is more. [Journal of Antimicrobial Chemotherapy](#)

Effect of Piperacillin-Tazobactam vs Meropenem on 30-Day Mortality for Patients With *E coli* or *Klebsiella pneumoniae* Bloodstream Infection and Ceftriaxone Resistance A Randomized Clinical Trial. [JAMA](#)

Carbapenem-Sparing Therapy for Extended-Spectrum β -Lactamase-Producing *E coli* and *Klebsiella pneumoniae* Bloodstream Infection The Search Continues. Editorial. [JAMA](#)

Effect of Levofloxacin Prophylaxis on Bacteremia in Children With Acute Leukemia or Undergoing Hematopoietic Stem Cell Transplantation A Randomized Clinical Trial. [JAMA](#)

Fluoroquinolone prophylaxis during neutropenia: what can we expect nowadays? [Clinical Microbiology and Infection](#)

Amoxicillin for acute lower respiratory tract infection in primary care: subgroup analysis by bacterial and viral aetiology. [Clinical Microbiology and Infection](#)

Pharmacokinetics/pharmacodynamics characterization of combined antimicrobial agents: a real challenge and an urgent need. [Clinical Microbiology and Infection](#)

[Assessment and modelling of antibacterial combination regimens.](#) [Clinical Microbiology and Infection](#)

[Semi-mechanistic pharmacokinetic-pharmacodynamic modelling of antibiotic drug combinations.](#) [Clinical Microbiology and Infection](#)

Experimental design and modelling approach to evaluate efficacy of β -lactam/ β -lactamase inhibitor combinations. [Clinical Microbiology and Infection](#)

Routine antibiotic therapy in dogs increases the detection of antimicrobial-resistant faecal *Escherichia coli*. [Journal of Antimicrobial Chemotherapy](#)

Partial Oral versus Intravenous Antibiotic Treatment of Endocarditis. [New England Journal of Medicine](#)

Diagnosis and Treatment of *Clostridium difficile* Infection. [JAMA](#)

[Prevention and intervention](#)

Probiotics to Prevent *Clostridium difficile* Infection in Patients Receiving Antibiotics. [JAMA](#)

The majority of MRSA colonized children not given eradication treatment are still colonized one year later. Systemic antibiotics improve the eradication rate. [Infectious Diseases](#)

Effect of an antimicrobial stewardship programme on antimicrobial utilisation and costs in patients with leukaemia: a retrospective controlled study. [Clinical Microbiology and Infection](#)

European Commission guidelines for the prudent use of antimicrobials in human health: a missed opportunity to embrace nursing participation in stewardship. [Clinical Microbiology and Infection](#)

Challenging biocide tolerance with antiseptic stewardship. [Journal of Hospital Infection](#)

The AMR-BESH Study: A mixed methods study of barriers and enablers to MRSA admission screening in hospitals. [Journal of Hospital Infection](#)

Guidance for the decontamination of intracavity medical devices: The report of a working group of the Healthcare Infection Society. [Journal of Hospital Infection](#)

When is it safe to stop contact precautions for vancomycin-resistant *Enterococcus faecium* carriage? [Journal of Hospital Infection](#)

Enterococcus faecium tolerance to isopropanol: from good science to misinformation. [Lancet Infectious Diseases](#)

Microbiology

Performance of the EUCAST disc diffusion method and two MIC methods in detection of Enterobacteriaceae with reduced susceptibility to meropenem: the NordicAST CPE study. [Journal of Antimicrobial Chemotherapy](#)

Rapid phenotypic methods to improve the diagnosis of bacterial bloodstream infections: meeting the challenge to reduce the time to result. [Clinical Microbiology and Infection](#)

Diagnosis of bloodstream infections from positive blood cultures and directly from blood samples: recent developments in molecular approaches. [Clinical Microbiology and Infection](#)

Rapid detection of antibiotic resistance by MALDI-TOF mass spectrometry using a novel direct-on-target microdroplet growth assay. [Clinical Microbiology and Infection](#)

Rapid MALDI-TOF-based identification of *Brucella melitensis* from positive blood culture vials may prevent laboratory-acquired infections. [Journal of Hospital Infection](#)

Other

Anthropological and socioeconomic factors contributing to global antimicrobial resistance: a univariate and multivariable analysis. [The Lancet Planetary Health](#)

Quantifying drivers of antibiotic resistance in humans: a systematic review. [Lancet Infectious Diseases](#)

Microbiota transplantation and/or CRISPR/Cas in the battle against antimicrobial resistance. [Clinical Microbiology and Infection](#)

Re: The impact of antibiotics on the Intestinal microbiota needs to be re-defined in order to optimize the antibiotic usage; by Ruppe et al. [Clinical Microbiology and Infection](#)

Patients, public perceptions and political pressures in the prioritization of surveillance of healthcare-associated infection. [Journal of Hospital Infection](#)

Proton pump inhibitor use as a risk factor for Enterobacteriaceal infection: a case-control study. [Journal of Hospital Infection](#)

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.