

ABR-Scan Science Week 21-22

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

Australian Gonococcal Surveillance Programme, 1 July to 30 September 2018. [Communicable Diseases Intelligence](#)

Prevalence of and factors associated with MDR Neisseria gonorrhoeae in England and Wales between 2004 and 2015: analysis of annual cross-sectional surveillance surveys. [Journal of Antimicrobial Chemotherapy](#)

Incidence of healthcare-associated Clostridioides difficile infections and association with ward-level antibiotic consumption in a German university hospital: an ecological study. [Journal of Antimicrobial Chemotherapy](#)

Multiple antibiotic resistance as a risk factor for mortality and prolonged hospital stay: A cohort study among neonatal intensive care patients with hospital-acquired infections caused by gram-negative bacteria in Vietnam. [PLoS One](#)

Resistance proportions for eight priority antibiotic-bacterium combinations in OECD, EU/EEA and G20 countries 2000 to 2030: a modelling study. [Eurosurveillance](#)

Ceftriaxone-resistant Salmonella enterica serotype Typhi in a pregnant traveller returning from Karachi, Pakistan to Denmark, 2019. [Eurosurveillance](#)

Emergence of ceftazidime-avibactam-resistant Klebsiella pneumoniae during treatment, Finland, December 2018. [Eurosurveillance](#)

Epidemiology and antibiotic resistance trends in clinical isolates of Pseudomonas aeruginosa from Rio de Janeiro - Brazil: Importance of mutational mechanisms over the years (1995-2015). [Infection, Genetics and Evolution](#)

Microorganisms Profile and Antibiotics Sensitivity Patterns in the Only Medical Intensive Care Unit in Bosnia and Herzegovina. [Microbial Drug Resistance](#)

Global Geographic Trends in Antimicrobial Resistance: The Role of International Travel. [Journal of Travel Medicine](#)

Community- and Hospital-Acquired Klebsiella pneumoniae Urinary Tract Infections in Portugal: Virulence and Antibiotic Resistance. [Microorganisms](#)

Differences in microbial etiology between hospital-acquired pneumonia and ventilator-associated pneumonia: a single-center retrospective study in Guang Zhou. [Infection and Drug Resistance](#)

A 2-Year Single-Centre Audit on Antibiotic Resistance of *Pseudomonas aeruginosa*, *Acinetobacter baumannii* and *Klebsiella pneumoniae* Strains from an Intensive Care Unit and Other Wards in a General Public Hospital in Greece. [Antibiotics](#)

Integrating Culture-based Antibiotic Resistance Profiles with Whole-genome Sequencing Data for 11,087 Clinical Isolates. [Genomics, Proteomics & Bioinformatics](#)

Outpatient antibacterial use and costs in children and adolescents: a nationwide register-based study in Finland, 2008-16. [Journal of Antimicrobial Chemotherapy](#)

Trends and correlates of antimicrobial use in broiler and turkey farms: a poultry company registry-based study in Italy. [Journal of Antimicrobial Chemotherapy](#)

Presence of NDM in non-*E. coli* Enterobacteriaceae in the poultry production environment. [Journal of Antimicrobial Chemotherapy](#)

Treatment and diagnosis

Ceftazidime-Avibactam in Combination With Fosfomycin: A Novel Therapeutic Strategy Against Multidrug-Resistant *Pseudomonas aeruginosa*. [Journal of Infectious Diseases](#)

Efficacy and Safety of Meropenem-Vaborbactam Versus Best Available Therapy for the Treatment of Carbapenem-Resistant Enterobacteriaceae Infections in Patients Without Prior Antimicrobial Failure: A Post Hoc Analysis. [Advances in Therapy](#)

Combined administration of antibiotics increases the incidence of antibiotic-associated diarrhea in critically ill patients. [Infection and Drug Resistance](#)

Short vs. long duration antimicrobial treatment for community-onset bacteremia: A propensity-score matching study. [International Journal of Antimicrobial Agents](#)

Comparison of Short-Course and Prolonged Antimicrobial Therapy in the Management of Intra-Abdominal Infections. [Surgical Infections](#)

Four versus six weeks of antibiotic therapy for osteoarticular infections after implant removal: a randomized trial. [Journal of Antimicrobial Chemotherapy](#)

Initial oral antibiotic therapy was noninferior to IV therapy for treatment failure in orthopedic infection at 1 y. [Annals of Internal Medicine](#)

Treatment of bone and joint infections caused by *Enterobacter cloacae* with a fluoroquinolone-cotrimoxazole combination. [International Journal of Antimicrobial Agents](#)

Clinical impact of rapid species identification from positive blood cultures with same-day phenotypic antimicrobial susceptibility testing on the management and outcome of bloodstream infections. [Clinical Infectious Diseases](#)

European Society of Emergency Medicine position paper on the 1-hour sepsis bundle of the Surviving Sepsis Campaign: expression of concern. [European Journal of Emergency Medicine](#)

Cefazolin/gentamicin versus taurolidine/citrate for prevention of infection in tunnelled central catheter in haemodialysis patients: a quasi-experimental trial. [International Journal of Infectious Diseases](#)

Adequacy of empiric gram-negative coverage for septic patients at an academic medical center. [American Journal of Infection Control](#)

Association of Adverse Drug Events with Broad-spectrum Antibiotic Use in Hospitalized Patients: A Single-center Study. [Internal Medicine](#)

Acute kidney injury during daptomycin versus vancomycin treatment in cardiovascular critically ill patients: a propensity score matched analysis. [BMC Infectious Diseases](#)

Severe Acute Respiratory Failure in Healthy Adolescents Exposed to Trimethoprim-Sulfamethoxazole. [Pediatrics](#)

Evaluation of treatment options for methicillin-resistant *Staphylococcus aureus* infections in the obese patient. [Infection and Drug Resistance](#)

A guide to understanding antimicrobial drug dosing in critically ill patients on renal replacement therapy. [Antimicrobial Agents and Chemotherapy](#)

Cefazolin versus fluoroquinolones for the treatment of community-acquired urinary tract infections in hospitalized patients. [European Journal of Clinical Microbiology and Infectious Diseases](#)

Gentamicin as an alternative to ceftriaxone in the treatment of gonorrhoea: the G-TOG non-inferiority RCT. [Health Technology Assessment](#)

Intra-abdominal infections in solid organ transplant recipients: Guidelines from the American Society of Transplantation Infectious Diseases Community of Practice. [Clinical Transplantation](#)

Novel Strategies for the Management of Vancomycin-Resistant Enterococcal Infections. [Current Infectious Disease Reports](#)

Antimicrobial Resistance in *Neisseria gonorrhoeae* and Treatment of Gonorrhea. [Methods in Molecular Biology](#)

Surgical antimicrobial prophylaxis and its dose appropriateness among paediatric patients in a Nigerian teaching hospital. [Journal of Chemotherapy](#)

Prevention and intervention

Efficacy of Probiotic Prophylaxis After The First Febrile Urinary Tract Infection in Children With Normal Urinary Tracts. [Journal of the Pediatric Infectious Diseases Society](#)

A simple and feasible antimicrobial stewardship program in a neonatal intensive care unit of a Japanese community hospital. [Journal of Infection and Chemotherapy](#)

Clostridioides difficile in transplant patients: early diagnosis, treatment, and prevention. [Current Opinion in Infectious Diseases](#)

The use of a poster to reduce expectations to receive antibiotics for a common cold. [European Journal of Clinical Microbiology and Infectious Diseases](#)

Is systematic fecal carriage screening of extended-spectrum beta-lactamase-producing Enterobacteriaceae still useful in intensive care unit: a systematic review. [Critical Care](#)

Microbiology

Prediction of Minimum Inhibitory Concentrations of Antimicrobials for *Neisseria gonorrhoeae* Using Whole-Genome Sequencing. [Methods in Molecular Biology](#)

Other

A microsimulation model projecting the health care costs for resistance to antibacterial drugs in Sweden. [European Journal of Public Health](#)

Economic burden of inpatients infected with *Klebsiella pneumoniae carbapenemase*. [Einstein](#)

Zero or more: methodological challenges of counting and estimating deaths related to antibiotic-resistant infections. [Clinical Infectious Diseases](#)

Risk modeling the mortality impact of antimicrobial resistance in secondary pneumococcal pneumonia infections during the 2009 influenza pandemic. [International Journal of Infectious Diseases](#)

Clinical research designs to study treatment effects for multidrug-resistant bacteria. [Clinical Microbiology and 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.