

# ABR-Scan Science Week 9-10

## 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](mailto:ABR-scan@folkhalsomyndigheten.se) if you would like to subscribe, unsubscribe or submit any comments or suggestions.*

### Surveillance

Duration of antibiotic treatment for common infections in English primary care: cross sectional analysis and comparison with guidelines. [BMJ](#)

Methicillin-Susceptible and Methicillin-Resistant *Staphylococcus aureus* bacteremia – Nationwide Estimates of 30-day Readmission, In-hospital Mortality, Length of Stay, and Cost in the US. [Clinical Infectious Diseases](#)

Financial Burden of Recurrent Urinary Tract Infections In Women: A Time-Driven Activity-Based Cost Analysis. [Urology](#)

A compilation of antimicrobial susceptibility data from a network of 13 Lebanese hospitals reflecting the national situation during 2015–2016. [Antimicrobial Resistance & Infection Control](#)

Association between Antibiotic Use and Hospital-Onset *Clostridioides difficile* Infection in U.S. Acute Care Hospitals, 2006-2012: an Ecologic Analysis. [Clinical Infectious Diseases](#)

Use of Antibiotics for Dermatologic Procedures From 2008 to 2016. [JAMA Dermatology](#)

Exploring community healthcare provider perceptions on antimicrobial resistance. [Journal of Global Antimicrobial Resistance](#)

Association between urinary community-acquired fluoroquinolone-resistant *Escherichia coli* and neighbourhood antibiotic consumption: a population-based case-control study. [Lancet Infectious Diseases](#)

Antibiotic use practice and predictors of hospital outcome among patients with systemic bacterial infection: Identifying targets for antibiotic and health care resource stewardship. [PLoS One](#)

Identification of a KPC-9-producing *Klebsiella pneumoniae* ST258 cluster among KPC-2-producing isolates of an ongoing outbreak in Northwestern Greece: a retrospective study. [Clinical Microbiology and Infection](#)

Infections Caused by Carbapenemase-Producing *Klebsiella pneumoniae*: Microbiological Characteristics and Risk Factors. [Microbial Drug Resistance](#)

Antibiotic prescription for febrile children in European emergency departments: a cross-sectional, observational study. [Lancet Infectious Diseases](#)

Epidemiology and Recent Trends in Methicillin-Resistant and in Methicillin-Susceptible *Staphylococcus aureus* Bloodstream Infections — United States. [Emerging Infectious Diseases](#)

**Klebsiella pneumoniae ST307 with blaOXA-181, South Africa, 2014–2016.** [Emerging Infectious Diseases](#)

**Trends and patterns of outpatient and inpatient antibiotic use in China’s hospitals: data from the Center for Antibacterial Surveillance, 2012–16.** [Journal of Antimicrobial Chemotherapy](#)

**Factors influencing mortality in hospital-acquired pneumonia caused by Gram-negative bacteria in China.** [Journal of Infection and Public Health](#)

**Data on antibiotic use for detecting clusters of healthcare-associated infection caused by multidrug-resistant organisms in a hospital in China, 2014 to 2017.** [Journal of Hospital Infection](#)

**Incidence, root causes, and outcomes of surgical site infections in a tertiary care hospital in Rwanda: a prospective observational cohort study.** [Patient Safety in Surgery](#)

**Effect of a surveillance system for decreasing neonatal nosocomial infections.** [Early Human Development](#)

## Treatment and diagnosis

**Once-Daily Plazomicin for Complicated Urinary Tract Infections.** [NEJM](#)

**Defining optimal dosing of ciprofloxacin in patients with septic shock.** [Journal of Antimicrobial Chemotherapy](#)

**Update of treatment algorithms for Clostridium difficile infection.** [Clinical Microbiology and Infection](#)

**How to: diagnose infection caused by Clostridium difficile.** [Clinical Microbiology and Infection](#)

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

**New insights into transmission of Clostridium difficile infection—narrative review.** [Clinical Microbiology and Infection](#)

**Antibiotic management of urinary tract infection in elderly patients in primary care and its association with bloodstream infections and all cause mortality: population based cohort study.** [BMJ](#)

**Impact of antibiotic administration on blood culture positivity at the beginning of sepsis: a prospective clinical cohort study.** [Clinical Microbiology and Infection](#)

**Implications of culture collection after the first antimicrobial dose in septic emergency department patients.** [American Journal of Emergency Medicine](#)

**Microbiologic epidemiology depending on time to occurrence of prosthetic joint infection: a prospective cohort study.** [Clinical Microbiology and Infection](#)

**Oral fosfomycin for the treatment of chronic bacterial prostatitis.** [Journal of Antimicrobial Chemotherapy](#)

**Oral Fluconazole in Pregnancy and Risk of Stillbirth and Neonatal Death.** [JAMA](#)

**Comparison of linezolid and daptomycin for the treatment of vancomycin-resistant enterococcal bacteremia.** [Therapeutic Advances in Infectious Disease](#)

**Outpatient Parenteral Antimicrobial Therapy in Vulnerable Populations—People Who Inject Drugs and the Homeless.** [Journal of Hospital Medicine](#)

**Genome-based epidemiology and antimicrobial resistance determinants of *Neisseria gonorrhoeae* isolates with decreased susceptibility and resistance to extended-spectrum cephalosporins in Argentina in 2011–16.** [Journal of Antimicrobial Chemotherapy](#)

**Duration of Initial Empirical Antibiotic Therapy and Outcomes in Very Low Birth Weight Infants.** [Pediatrics](#)

**Determinants of Initial Antibiotic Duration in Very Low Birth Weight Neonates.** [Infectious Diseases and Therapy](#)

**Prediction of bloodstream infection caused by ESBL-producing Enterobacterales in patients with suspected community-onset sepsis.** [International Journal of Antimicrobial Agents](#)

**Urinary tract infection: Pathogenicity, antibiotic resistance and development of effective vaccines against Uropathogenic *Escherichia coli*.** [Molecular Immunology](#)

**Incidence of Acute Kidney Injury in Critically Ill Patients Receiving Vancomycin with Concomitant Piperacillin/Tazobactam, Cefepime, or Meropenem.** [Antimicrobial Agents and Chemotherapy](#)

**Evaluation of accordance of antibiotics package size with recommended treatment duration of guidelines for sore throat and urinary tract infections.** [Antimicrobial Resistance & Infection Control](#)

**Clinical Guidelines on Chronic Rhinosinusitis in Children.** [Current Allergy and Asthma Reports](#)

**Home self-administration of intravenous antibiotics as part of an outpatient parenteral antibiotic therapy service: a qualitative study of the perspectives of patients who do not self-administer.** [BMJ Open](#)

**Antimicrobial therapy for asymptomatic bacteriuria or candiduria in advanced cancer patients transitioning to comfort measures.** [Infection Control & Hospital Epidemiology](#)

**Clinical benefits of systemic amoxicillin/metronidazole may depend on periodontitis severity and patients' age. An exploratory sub-analysis of the ABPARO-trial.** [Journal of Clinical Periodontology](#)

## Prevention and intervention

**Decolonization to Reduce Postdischarge Infection Risk among MRSA Carriers.** [NEJM](#)

**Chlorhexidine versus routine bathing to prevent multidrug-resistant organisms and all-cause bloodstream infections in general medical and surgical units (ABATE Infection trial): a cluster-randomised trial.** [Lancet](#)

**Diagnostic stewardship: are we using the right term?** [Clinical Microbiology and Infection](#)

**Human resources estimates for antibiotic stewardship teams: evidence-based approaches for recommendations are needed.** [Clinical Microbiology and Infection](#)

**Practical considerations for infection prevention of near-patient surfaces: validation of an alternative polyvinyl chloride carrier in the four-field test EN 16615:2015.** [Journal of Hospital Infection](#)

**'Clean care for all – it's in your hands': the 5th May 2019 World Health Organization *SAVE LIVES: Clean Your Hands* campaign.** [Journal of Hospital Infection](#)

**Health Care Workers' Attitudes towards Hand Hygiene Monitoring Technology.** [Journal of Hospital Infection](#)

**Antimicrobial prophylaxis and the prevention of surgical site infection in cardiac surgery: an analysis of 21 007 patients in Switzerland.** [European Journal of Cardio-thoracic Surgery](#)

**The Association of Antibiotic Stewardship With Fluoroquinolone Prescribing in Michigan Hospitals: A Multi-hospital Cohort Study.** [Clinical Infectious Diseases](#)

**Antibiotic Stewardship in the Neonatal Intensive Care Unit: Lessons From Oxygen.** [Pediatrics](#)

**Global Infection Prevention Gaps, Needs, and Utilization of Educational Resources: A Cross-Sectional Assessment by the International Society for Infectious Diseases.** [International Journal of Infectious Diseases](#)

**Urinary Tract Infections in Solid Organ Transplant Recipients: Guidelines from the American Society of Transplantation Infectious Diseases Community of Practice.** [Clinical Transplantation](#)

**Effectiveness and safety of electronically delivered prescribing feedback and decision support on antibiotic use for respiratory illness in primary care: REDUCE cluster randomised trial.** [BMJ](#)

**Chlorhexidine exposure of clinical strains of *Klebsiella pneumoniae* leads to acquired resistance to this disinfectant and colistin.** [International Journal of Antimicrobial Agents](#)

**The Top-100 Highly Cited Original Articles on Drug Therapy for Ventilator-Associated Pneumonia.** [Frontiers in Pharmacology](#)

**Biomarker-guided antifungal stewardship policies for patients with invasive candidiasis.** [Current Medical Mycology](#)

## Microbiology

**The quality of antimicrobial discs from nine manufacturers—EUCAST evaluations in 2014 and 2017.** [Clinical Microbiology and Infection](#)

**Microbiologic factors affecting *Clostridium difficile* recurrence.** [Clinical Microbiology and Infection](#)

**Transcriptomic studies and assessment of *Yersinia pestis* reference genes in various conditions.** [Scientific Report](#)

**Multidrug-Resistant Bacteria and Alternative Methods to Control Them: An Overview.** [Microbial Drug Resistance](#)

## Other

**Experiences of carriers of multidrug-resistant organisms: a systematic review.** [Clinical Microbiology and Infection](#)

**Together towards a common goal: REVIVE, a community of antimicrobial researchers brought together by the Global Antibiotic Research & Development Partnership (GARDP).** [Journal of Antimicrobial Chemotherapy](#)

*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.*