

# ABR-Scan Science Week 46-47

## 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

Antimicrobial use in European acute care hospitals: results from the second point prevalence survey (PPS) of healthcare-associated infections and antimicrobial use, 2016 to 2017.

[Eurosurveillance](#)

Antibiotic prescribing upon discharge from the hospital to long-term care facilities: Implications for antimicrobial stewardship requirements in post-acute settings. [Infection Control & Hospital Epidemiology](#)

[Epidemiology](#)

Prevalence of healthcare-associated infections, estimated incidence and composite antimicrobial resistance index in acute care hospitals and long-term care facilities: results from two European point prevalence surveys, 2016 to 2017. [Eurosurveillance](#)

Antimicrobial use in European long-term care facilities: results from the third point prevalence survey of healthcare-associated infections and antimicrobial use, 2016 to 2017. [Eurosurveillance](#)

Antimicrobial prescribing and infections in long-term care facilities (LTCF): a multilevel analysis of the HALT 2016 study, Ireland, 2017. [Eurosurveillance](#)

Antimicrobial prescribing in long-term care facilities: a nationwide point-prevalence study, Slovenia, 2016. [Eurosurveillance](#)

Benchmarking Inpatient Antimicrobial Use: A Comparison of Risk-Adjusted Observed-to-Expected Ratios. [Clinical Infectious Diseases](#)

Appropriateness of antibiotic prescribing in the Emergency Department. [Journal of Antimicrobial Chemotherapy](#)

Cost-utility analysis of outpatient parenteral antimicrobial therapy (OPAT) in the Brazilian national health system. [Expert Review on Pharmacoeconomics & Outcomes Research](#)

Antimicrobial prescription patterns and ventilator associated pneumonia: findings from a 10-site prospective audit. [BMC Research Notes](#)

Carbapenem-resistant *Acinetobacter baumannii*: Current status of the problem in four Bulgarian university hospitals (2014–2016). [Journal of Global Antimicrobial Resistance](#)

Incidence of single-drug-, multidrug-, and extensively drug-antimicrobial resistance of *Escherichia coli* urinary tract infections: an Australian laboratory-based retrospective study. [Journal of Global Antimicrobial Resistance](#)

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

Attributable deaths and disability-adjusted life-years caused by infections with antibiotic-resistant bacteria in Switzerland. [Lancet Infectious Diseases](#)

The first year of the global Enhanced Gonococcal Antimicrobial Surveillance Programme (EGASP) in Bangkok, Thailand, 2015-2016. [PLoS One](#)

The mortality burden of multidrug-resistant pathogens in India: a retrospective observational study. [Clinical Infectious Diseases](#)

High rates of meticillin-resistant *Staphylococcus aureus* among asylum seekers and refugees admitted to Helsinki University Hospital, 2010 to 2017. [Eurosurveillance](#)

CTX-M-65 Extended-Spectrum  $\beta$ -Lactamase–Producing *Salmonella enterica* Serotype Infantis, United States. [Emerging Infectious Diseases](#)

A Comparison of the Mortality Risk Associated With Ventilator-Acquired Bacterial Pneumonia and Nonventilator ICU-Acquired Bacterial Pneumonia. [Critical Care Medicine](#)

Antimicrobial resistance and molecular characteristics of *Neisseria gonorrhoeae* isolates from MSM. [International Journal of Infectious Diseases](#)

CTX-M-65 Extended-Spectrum  $\beta$ -Lactamase–Producing *Salmonella enterica* Serotype Infantis, United States. [Emerging Infectious Diseases](#)

Natural prognosis of carbapenem-resistant *Acinetobacter baumannii* bacteremia in patients who did not receive appropriate antibiotic treatment. [Medicine](#)

Nationwide study of outpatient oral antimicrobial utilization patterns for children in Japan (2013–2016). [Journal of Infection and Chemotherapy](#)

## Treatment and diagnosis

Cefiderocol versus imipenem-cilastatin for the treatment of complicated urinary tract infections caused by Gram-negative uropathogens: a phase 2, randomised, double-blind, non-inferiority trial. [Lancet Infectious Diseases](#)

Adjunctive rifampicin to reduce early mortality from *Staphylococcus aureus* bacteraemia: the ARREST RCT. [Health Technology Assessment](#)

Laboratory Diagnosis of Respiratory Tract Infections in Children – the State of the Art. [Frontiers in Microbiology](#)

Overdiagnosis of Penicillin Allergy Leads to Costly, Inappropriate Treatment. [JAMA](#)

Shorter duration of antibiotic treatment for acute bacteraemic cholangitis with successful biliary drainage: a retrospective cohort study. [Clinical Microbiology and Infection](#)

Clinical Impact of a Multiplex Gastrointestinal Polymerase Chain Reaction Panel in Patients With Acute Gastroenteritis. [Clinical Infectious Diseases](#)

Impact of a Multiplex PCR Assay for Bloodstream Infections With and Without Antimicrobial Stewardship Intervention at a Cancer Hospital. [Open Forum Infectious Diseases](#)

Readmission after antibiotic management of uncomplicated acute appendicitis in adults: prospective study. [European Journal of Trauma and Emergency Surgery](#)

Comment on: Treatment of infections caused by multidrug-resistant Gram-negative bacteria: report of the British Society for Antimicrobial Chemotherapy/Healthcare Infection Society/British Infection Association Joint Working Party. [Journal of Antimicrobial Chemotherapy](#)

Use of broad-spectrum antibiotics impacts outcome in patients treated with immune checkpoint inhibitors. [OncoImmunology](#)

ALternatives To prophylactic Antibiotics for the treatment of Recurrent urinary tract infection in women (ALTAR): study protocol for a multicentre, pragmatic, patient-randomised, non-inferiority trial. [Trials](#)

Rapid detection of resistance to carbapenems and cephalosporins in Enterobacteriaceae using liquid chromatography tandem mass spectrometry. [PLoS One](#)

## Prevention and intervention

Application of a ventilator associated pneumonia prevention guideline and outcomes: A quasi-experimental study. [Intensive and Critical Care Nursing](#)

Antimicrobial stewardship intervention for the clinical pathways improves antimicrobial prophylaxis in surgical or non-surgical invasive therapies. [International Journal of Clinical Practice](#)

Long-Term Effects of Phased Implementation of Antimicrobial Stewardship in Academic ICUs: 2007–2015. [Critical Care Medicine](#)

*Mycobacterium chimaera* infection following cardiac surgery in the United Kingdom: clinical features and outcome of the first 30 cases. [Clinical Microbiology and Infection](#)

Detection and Isolation of *Clostridium difficile* Asymptomatic Carriers During *Clostridium difficile* Infection Outbreaks: An Exploratory Study. [Clinical Infectious Diseases](#)

*Mycobacterium chimaera* infections after cardiac surgery—lessons learned. [Clinical Microbiology and Infection](#)

Decontamination Strategies and Bloodstream Infections With Antibiotic-Resistant Microorganisms in Ventilated Patients. [JAMA](#)

Risk factors for unnecessary antibiotic therapy: a major role for clinical management. [Clinical Infectious Diseases](#)

GRam stain-guided Antibiotics ChoicE for Ventilator-Associated Pneumonia (GRACE-VAP) trial: rationale and study protocol for a randomised controlled trial. [Trials](#)

## Microbiology

The Effect of Antibiotic Selection Pressure on the Nasopharyngeal Macrolide Resistome: A Cluster-randomized Trial. [Clinical Infectious Diseases](#)

Long-term impact of oral vancomycin, ciprofloxacin and metronidazole on the gut microbiota in healthy humans. [Journal of Antimicrobial Chemotherapy](#)

Multidrug-resistant *Neisseria gonorrhoeae* isolate, belonging to the internationally spreading Japanese FC428 clone, with ceftriaxone resistance and intermediate resistance to azithromycin, Ireland, August 2018. [Eurosurveillance](#)

## Other

**Analysis of results from the Joint External Evaluation: examining its strength and assessing for trends among participating countries.** [Journal of Global Health](#)

**The Global Antibiotic Research and Development Partnership (GARDP): a not-for-profit antibiotic development organization.** [Lancet Infectious Diseases](#)

**Antibiotic and pesticide susceptibility and the Anthropocene operating space.** [Nature Sustainability](#)

**News From the Centers for Disease Control and Prevention: Antibiotic Resistance Challenge.** [JAMA](#)

*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.*