

# ABR-Scan Science Week 3-4

## 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

Attributable deaths and disability-adjusted life-years caused by infections with antibiotic-resistant bacteria in the EU and the European Economic Area in 2015: a population-level modelling analysis. [Lancet Infectious Diseases](#)

Consumption of oral antibiotic formulations for young children according to the WHO Access, Watch, Reserve (AWaRe) antibiotic groups: an analysis of sales data from 70 middle-income and high-income countries. [Lancet Infectious Diseases](#)

Antibiotic Resistance in Bangladesh: a Systematic Review. [International Journal of Infectious Diseases](#)

Microbiology and Antibiotic Resistance in Peripartum Bacteremia. [Obstetrics & Gynecology](#)

Antibiotic Prescribing for Children in United States Emergency Departments: 2009–2014. [Pediatrics](#)

Antimicrobial resistance of *Vibrio cholerae* from sub-Saharan Africa: A systematic review. [African Journal of Laboratory Medicine](#)

Quality assurance for antimicrobial susceptibility testing of *Neisseria gonorrhoeae* in Latin American and Caribbean countries, 2013–2015. [BMJ Sexually Transmitted Diseases](#)

Is previous azithromycin treatment associated with azithromycin resistance in *Neisseria gonorrhoeae*? A cross-sectional study using national surveillance data in England. [BMJ Sexually Transmitted Diseases](#)

Susceptibility of *Neisseria gonorrhoeae* to azithromycin and ceftriaxone in China: A retrospective study of national surveillance data from 2013 to 2016. [PLoS Medicine](#)

Antimicrobial resistance following mass azithromycin distribution for trachoma: a systematic review. [Lancet Infectious Diseases](#)

Patient-related determinants of antibiotic use: a systematic review. [Clinical Microbiology and Infection](#)

Inappropriate Antibiotic Prescribing for Acute Bronchiolitis in US Emergency Departments, 2007–2015. [Journal of the Pediatric Infectious Diseases Society](#)

Appropriateness of outpatient antibiotic prescribing among privately insured US patients: ICD-10-CM based cross sectional study. [BMJ](#)

Temporal Trends and Center Variation in Early Antibiotic Use Among Premature Infants. [JAMA Network Open](#)

Quantitative and qualitative analysis of antimicrobial usage at farm and flock level on 181 broiler farms in nine European countries. [Journal of Antimicrobial Chemotherapy](#)

Trends in Oral Antibiotic Prescription in Dermatology, 2008 to 2016. [JAMA Dermatology](#)

A Systematic Review and Meta-analysis of Ventilator-associated Pneumonia in Adults in Asia: An Analysis of National Income Level on Incidence and Etiology. [Clinical Infectious Diseases](#)

Fecal pollution can explain antibiotic resistance gene abundances in anthropogenically impacted environments. [Nature Communications](#)

## Treatment and diagnosis

Adverse events in people taking macrolide antibiotics versus placebo for any indication. [Cochrane Systematic Reviews](#)

Seven versus fourteen Days of Antibiotic Therapy for uncomplicated Gram-negative Bacteremia: a Non-inferiority Randomized Controlled Trial. [Clinical Infectious Diseases](#)

The Role of Trimethoprim/Sulfamethoxazole in the Treatment of Infections Caused by Carbapenem-Resistant *Enterobacteriaceae*. [Open Forum Infectious Diseases](#)

Predictors of Time to Effective and Optimal Antimicrobial Therapy in Patients With Positive Blood Cultures Identified via Molecular Rapid Diagnostic Testing. [Open Forum Infectious Diseases](#)

The etiology and management of recurrent urinary tract infections in postmenopausal women. [Climacteric](#)

Efficacy and tolerability of a cocktail of bacteriophages to treat burn wounds infected by *Pseudomonas aeruginosa* (PhagoBurn): a randomised, controlled, double-blind phase 1/2 trial. [Lancet Infectious Diseases](#)

Evaluation and Management of Penicillin Allergy. [JAMA](#)

Am I Allergic to Penicillin? [JAMA](#)

Antibiotic and acid-suppression medications during early childhood are associated with obesity. [Obesity](#)

Vancomycin Monotherapy May Be Insufficient to Treat Methicillin-resistant *Staphylococcus aureus* Coinfection in Children With Influenza-related Critical Illness. [Clinical Infectious Diseases](#)

Efficacy of Ceftazidime-Avibactam Salvage Therapy in Patients With Infections Caused by *Klebsiella pneumoniae* Carbapenemase-producing *K. pneumoniae*. [Clinical Infectious Diseases](#)

Outcomes Associated With De-escalating Therapy for Methicillin-Resistant *Staphylococcus aureus* in Culture-Negative Nosocomial Pneumonia. [Chest](#)

The role of carbapenem-resistant pathogens in cSSTI and how to manage them. [Current Opinion in Infectious Diseases](#)

Time-dependent differences in management and microbiology of orthopaedic internal fixation-associated infections: an observational prospective study with 229 patients. [Clinical Microbiology and Infection](#)

Ceftazidime/Avibactam, Meropenem/Vaborbactam, or Both? Clinical and Formulary Considerations. [Clinical Infectious Diseases](#)

Trends in antimicrobial management of gonorrhoea by general practitioners in Amsterdam, the Netherlands, between 2010 and 2016: a cross-sectional study. [BMC Family Practice](#)

The Role of Routine Culture in the Treatment of Chronic Suppurative Otitis Media: Implications for the Standard of Care in Rural Areas of South Africa. [Tropical Medicine and Infectious Diseases](#)

Monoclonal antibodies as anti-infective products: a promising future? [Clinical Microbiology and Infection](#)

## Prevention and intervention

Antimicrobial stewardship: an evaluation of structure and process and their association with antimicrobial prescribing in NHS hospitals in England. [Journal of Antimicrobial Chemotherapy](#)

Risk of *Clostridium difficile* Infection with Systemic Antimicrobial Therapy Following Successful Fecal Microbiota Transplant: Should We Recommend Anti-*Clostridium difficile* Antibiotic Prophylaxis? [Digestive Diseases and Sciences](#)

Expected Practice as a Novel Antibiotic Stewardship Intervention. [Open Forum Infectious Diseases](#)

Electronic prescribing: introducing a stat optional dose to improve time to antibiotic on the acute medical unit. [BMJ Open Quality](#)

Procalcitonin-Guided Antibiotic Therapy Reduces Antibiotic Use for Lower Respiratory Tract Infections in a United States Medical Center: Results of a Clinical Trial. [Open Forum Infectious Diseases](#)

Predictors of *Clostridium difficile* infection and predictive impact of probiotic use in a diverse hospital-wide cohort. [American Journal of Infection Control](#)

Implementation of the Smart Use of Antibiotics Program to Reduce Unnecessary Antibiotic Use in a Neonatal ICU - A Prospective Interrupted Time-Series Study in a Developing Country. [Online Clinical Investigations](#)

The Cost-effectiveness of Antimicrobial Lock Solutions for the Prevention of Central Line-Associated Bloodstream Infections. [Clinical Infectious Diseases](#)

Outpatient ertapenem therapy in an ESBL-high-prevalence area: an efficacy, safety, and cost study. [Infection and Drug Resistance](#)

Rationalizing antimicrobial therapy in the ICU: a narrative review. [Intensive Care Medicine](#)

Antimicrobial Stewardship in the Neonatal Intensive Care Unit: an update. [Current Pediatric Reviews](#)

Infectious diseases physician attitudes to long-term antibiotic use. [International Journal of Clinical Pharmacy](#)

Development and Assessment of Risk Scores for Carbapenem and Extensive  $\beta$ -Lactam Resistance Among Adult Hospitalized Patients With *Pseudomonas aeruginosa* Infection. [JAMA Network Open](#)

Collaborative emergency preparedness and response to cross-institutional outbreaks of multidrug-resistant organisms: a scenario-based approach in two regions of the Netherlands [BMC Public Health](#)

## Microbiology

Sequential evolution of virulence and resistance during clonal spread of community-acquired methicillin-resistant *Staphylococcus aureus*. [PNAS](#)

## Other

**The Emergence of Antimicrobial Resistance as a Public Matter of Concern: A Swedish History of a “Transformative Event”.** [Science in Context](#)

**A ROADMAP Plan to Address Research Needs for Gonococcal Antimicrobial Resistance in China.** [Clinical Infectious Diseases](#)

*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.*