

ABR-Scan Science Week 27-33

Unit for Antibiotics and Infection Control

This ABR-Scan Science is compiled by the Unit for Antibiotics and Infection Control at the Public Health Agency of Sweden. It includes a summary of links to recent articles from a selection of 17 scientific journals that we find interesting. All journals included in the scan are listed at the bottom of the document. The articles are sorted according to our categorization: surveillance, treatment and diagnosis, prevention and intervention, microbiology and other. If you have any comments or suggestions, please send an e-mail to Jonas Fuks at ABR-scan@folkhalsomyndigheten.se

Surveillance

Trends in Methicillin-Resistant *Staphylococcus aureus* Hospitalizations in the United States, 2010–2014. [Clinical Infectious Diseases](#)

Antimicrobial resistance in *Neisseria gonorrhoeae*: Global surveillance and a call for international collaborative action. [PLOS Medicine](#)

ECDC/EFSA/EMA second joint report on the integrated analysis of the consumption of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from humans and food-producing animals. [EFSA Journal](#)

Antibiotic Use in the United States, 2017: Progress and Opportunities. [CDC](#)

Increasing Incidence of Multiply Recurrent *Clostridium difficile* Infection in the United States: A Cohort Study. [Annals of Internal Medicine](#)

Susceptibilities of clinical *Clostridium difficile* isolates to antimicrobials: a systematic review and meta-analysis of studies since 1970. [Clinical Microbiology and Infection](#)

Plasmid-borne colistin resistance gene *mcr-3* in *Salmonella* isolates from human infections, Denmark, 2009–17. [Eurosurveillance](#)

Novel *mcr-3* variant, encoding mobile colistin resistance, in an ST131 *Escherichia coli* isolate from bloodstream infection, Denmark, 2014. [Eurosurveillance](#)

Evolving beta-lactamase epidemiology in *Enterobacteriaceae* from Italian nationwide surveillance, October 2013: KPC-carbapenemase spreading among outpatients. [Eurosurveillance](#)

Editorial: Plasmid-encoded colistin resistance: *mcr*-one, two, three and counting. [Eurosurveillance](#)

Emergence of colistin-resistant *Escherichia coli* clinical isolates harboring *mcr-1* in Vietnam. [International Journal of Infectious Diseases](#)

Virulence and Antibiotic Resistance of *Staphylococcus aureus* Isolated from Bloodstream Infections and Pneumonia in Southern Poland. [Journal of Global Antimicrobial Resistance](#)

Prevalence and drug resistance characteristics of carbapenem-resistant *Enterobacteriaceae* in Hangzhou, China. [Frontiers of Medicine](#)

Regional differences in antibiotic-resistant pathogens in patients with pneumonia: Implications for clinicians. [Respirology](#)

Nosocomial bacterial infections and their antimicrobial susceptibility patterns among patients in Ugandan intensive care units: a cross sectional study. [BMC Research Notes](#)

Global outbreak of severe *Mycobacterium chimaera* disease after cardiac surgery: a molecular epidemiological study. [Lancet infectious diseases](#)

Emergence of Plasmid-Mediated Fosfomycin-Resistance Genes among *Escherichia coli* Isolates, France. [Emerging Infectious Diseases](#)

Macrolide-Resistant *Mycoplasma pneumoniae* Infection, Japan, 2008–2015. [Emerging Infectious Diseases](#)

Impact on Morbidity, Mortality, and Length of Stay of Hospital-Acquired Infections by Resistant Microorganisms [Clinical Infectious Diseases](#)

The Methodology of Surveillance for Antimicrobial Resistance and Healthcare-Associated Infections in Europe (SUSPIRE): A Systematic Review of Publicly Available Information [Clinical Microbiology and Infection](#)

National disparities in the relationship between antimicrobial resistance and antimicrobial consumption in Europe: an observational study in 29 countries [Journal of Antimicrobial Chemotherapy](#)

ESGAP inventory of target indicators assessing antibiotic prescriptions: a cross-sectional survey [Journal of Antimicrobial Chemotherapy](#)

Validation of adapted daily dose definitions for hospital antibacterial drug use evaluation: a multicentre study [Journal of Antimicrobial Chemotherapy](#)

Treatment and diagnosis

Benefits and Harms of Treatment of Asymptomatic Bacteriuria: A Systematic Review and Meta-analysis by the European Association of Urology Urological Infection Guidelines Panel. [European Urology](#)

Allergy Testing in Children With Low-Risk Penicillin Allergy Symptoms. [Pediatrics](#)

Effect of azithromycin on asthma exacerbations and quality of life in adults with persistent uncontrolled asthma (AMAZES): a randomised, double-blind, placebo-controlled trial. [Lancet](#)

Bad bacteria in acute appendicitis: rare but relevant. [International Journal of Colorectal Disease](#)

The antibiotic course has had its day. [British Medical Journal](#)

Bedaquiline and Delamanid Combination Treatment of 5 Patients with Pulmonary Extensively Drug-Resistant Tuberculosis [Emerging Infectious Diseases](#)

Bedaquiline and Linezolid for Extensively Drug-Resistant Tuberculosis in Pregnant Woman [Emerging Infectious Diseases](#)

Effect of appropriate combination therapy on mortality of patients with bloodstream infections due to carbapenemase-producing *Enterobacteriaceae* (INCREMENT): a retrospective cohort study [Lancet infectious diseases](#)

Ceftazidime-Avibactam Is Superior to Other Treatment Regimens against Carbapenem-Resistant *Klebsiella pneumoniae* Bacteremia [Antimicrobial Agents and Chemotherapy](#)

Too much of a good thing: a retrospective study of β -lactam concentration–toxicity relationships
[Journal of Antimicrobial Chemotherapy](#)

Determination of alternative ceftolozane/tazobactam dosing regimens for patients with infections due to *Pseudomonas aeruginosa* with MIC values between 4 and 32 mg/L [Journal of Antimicrobial Chemotherapy](#)

Prevention and intervention

PIRATE project: point-of-care, informatics-based randomised controlled trial for decreasing overuse of antibiotic therapy in Gram-negative bacteraemia. [BMJ Open](#)

Antibiotic stewardship in the retail clinic setting: Implementation in 1100 clinics nationwide. [Healthcare](#)

Investigating the ways in which health information technology can promote antimicrobial stewardship: a conceptual overview. [Journal of the Royal Society of Medicine](#)

Procalcitonin-guided antibiotic stewardship from newborns to centenarians. [Lancet](#)

Procalcitonin-guided decision making for duration of antibiotic therapy in neonates with suspected early-onset sepsis: a multicentre, randomised controlled trial (NeoPIns). [Lancet](#)

A systematic review of clinical decision support systems for antimicrobial management: are we failing to investigate these interventions appropriately? [Clinical Microbiology and Infection](#)

Diagnostic Stewardship—Leveraging the Laboratory to Improve Antimicrobial Use [JAMA](#)

Addressing Antimicrobial Resistance and Stewardship The Priority Antimicrobial Value and Entry (PAVE) Award [JAMA](#)

Contact Precautions for Endemic MRSA and VRE Time to Retire Legal Mandates [JAMA](#)

The economic evaluation of an antibiotic checklist as antimicrobial stewardship intervention
[Journal of Antimicrobial Chemotherapy](#)

Microbiology

mcr-1 and *blaKPC-3* in *Escherichia coli* Sequence Type 744 after Meropenem and Colistin Therapy, Portugal. [Emerging Infectious Diseases](#)

Occurrence of Carbapenemase-Producing *Enterobacteriaceae* Isolates in the Wildlife: First Report of OXA-48 in Wild Boars in Algeria. [Microbial drug resistance](#)

Co-occurrence of colistin-resistance genes *mcr-1* and *mcr-3* among multidrug-resistant *Escherichia coli* isolated from cattle, Spain, September 2015. [Eurosurveillance](#)

Novel plasmid-mediated colistin resistance *mcr-4* gene in *Salmonella* and *Escherichia coli*, Italy 2013, Spain and Belgium, 2015 to 2016. [Eurosurveillance](#)

In vitro activity of plazomicin against β -lactamase-producing carbapenem-resistant *Enterobacteriaceae* (CRE) [Journal of Antimicrobial Chemotherapy](#)

Using metagenomics to investigate human and environmental resistomes [Journal of Antimicrobial Chemotherapy](#)

Antimicrobial susceptibility of clinical isolates of *Neisseria gonorrhoeae* to alternative antimicrobials with therapeutic potential [Journal of Antimicrobial Chemotherapy](#)

Other

To the G20: incentivising antibacterial research and development. [Lancet Infectious Diseases](#)

What makes an essential medicine? WHO's new list focuses on antibiotic resistance, adds expensive drugs, and downgrades Tamiflu. [British Medical Journal](#)

The study of microbiota needs both microbiologists and medical doctors [Clinical Microbiology and Infection](#)

Addressing the key communication barriers between microbiology laboratories and clinical units: a qualitative study [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.