

ABR-Scan Science Week 25-26

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

First report of an *E. coli* strain from swine carrying an OXA-181-carbapenemase and colistin resistance determinant MCR-1. [International Journal of Antimicrobial Agents](#)

First environmental sample containing plasmid-mediated colistin-resistant ESBL-producing *Escherichia coli* detected in Norway. [APMIS](#)

Global emergence of the widespread *Pseudomonas aeruginosa* ST235 clone. [Clinical Microbiology and Infection](#)

Antibiotic exposure in neonates and early adverse outcomes: a systematic review and meta-analysis. [Journal of Antimicrobial Chemotherapy](#)

WGS-based surveillance of third-generation cephalosporin-resistant *Escherichia coli* from bloodstream infections in Denmark. [Journal of Antimicrobial Chemotherapy](#)

Impact of recurrent *Clostridium difficile* infection: hospitalization and patient quality of life. [Journal of Antimicrobial Chemotherapy](#)

Decreased Azithromycin Susceptibility of *Neisseria gonorrhoeae* Isolates in Patients Recently Treated with Azithromycin. [Clinical Infectious Diseases](#)

The first nationwide surveillance of antibacterial susceptibility patterns of pathogens isolated from skin and soft-tissue infections in dermatology departments in Japan. [Journal of Infection and Chemotherapy](#)

Epidemiology of pediatric multidrug-resistant tuberculosis in the United States, 1993-2014. [Clinical Infectious Diseases](#)

Antimicrobial susceptibility and genotyping of *Staphylococcus aureus* isolates collected between 1986 and 2015 from ovine mastitis. [Veterinary Microbiology](#)

Antibiotic susceptibility profiles among *Campylobacter* isolates obtained from international travelers between 2007 and 2014. [European Journal of Clinical Microbiology & Infectious Diseases](#)

Treatment and diagnosis

Chorioamnionitis and Management of Asymptomatic Infants ≥ 35 Weeks Without Empiric Antibiotics. [Pediatrics](#)

Dose optimization of piperacillin/tazobactam in critically ill children. [Journal of Antimicrobial Chemotherapy](#)

The role of Tigecycline in the management of *Clostridium difficile* infection: a retrospective cohort study. [Clinical Microbiology and Infection](#)

Comparative Effectiveness of Cefazolin versus Nafcillin or Oxacillin for Treatment of Methicillin-Susceptible *Staphylococcus aureus* Infections Complicated by Bacteremia: A Nationwide Cohort Study. [Clinical Infectious Diseases](#)

Ceftolozane-Tazobactam for the Treatment of Multidrug-Resistant *Pseudomonas aeruginosa* Infections: Clinical Effectiveness and Evolution of Resistance. [Clinical Infectious Diseases](#)

Short-Course Adjunctive Gentamicin as Empirical Therapy in Patients With Severe Sepsis and Septic Shock: A Prospective Observational Cohort Study. [Clinical Infectious Diseases](#)

Prevention and intervention

Management: from antibiotic stewardship to clinical microbiology. [Clinical Microbiology and Infection](#)

A mixed-method evaluation of peer-education workshops for school-aged children to teach about antibiotics, microbes and hygiene. [Journal of Antimicrobial Chemotherapy](#)

Sparing carbapenem usage. [Journal of Antimicrobial Chemotherapy](#)

Is Antimicrobial Stewardship Cost-Effective? A Narrative Review of the Evidence. [Clinical Microbiology and Infection](#)

Outcomes of multisite antimicrobial stewardship programme implementation with a shared clinical decision support system. [Journal of Antimicrobial Chemotherapy](#)

Impact of an Integrated Antibiotic Allergy Testing Program on Antimicrobial Stewardship: A Multicenter Evaluation. [Clinical Infectious Diseases](#)

Effect of antibiotic stewardship on the incidence of infection and colonisation with antibiotic-resistant bacteria and *Clostridium difficile* infection: a systematic review and meta-analysis. [Lancet Infectious Diseases](#)

Antibiotic stewardship hits a home run for patients. [Lancet Infectious Diseases](#)

Microbiology

Prevalences of antimicrobial resistance and the *cfiA* resistance gene in danish bacteroides fragilis group isolates since 1973. [International Journal of Antimicrobial Agents](#)

The emerging metabolic view of *Clostridium difficile* pathogenesis. [Current Opinion in Microbiology](#)

Evaluation of vancomycin MIC Creep in Methicillin resistant *Staphylococcus aureus* infections – a systematic review and meta-analysis. [Clinical Microbiology and Infection](#)

Clinical sensitivity and specificity of the Check-Points Check-Direct ESBL Screen for BD MAX, a real-time PCR for direct ESBL detection from rectal swabs. [Journal of Antimicrobial Chemotherapy](#)

A combination of mecillinam and amoxicillin/clavulanate can restore susceptibility of high-level TEM-1-producing *Escherichia coli* to mecillinam. [Journal of Antimicrobial Chemotherapy](#)

Emergence of ceftazidime/avibactam non-susceptibility in an MDR *Klebsiella pneumoniae* isolate. [Journal of Antimicrobial Chemotherapy](#)

Other

Consequence of prioritising pathogens for global antibiotic research. [Lancet Infectious Diseases](#)

How artificial is the antibiotic resistance definition? [Lancet Infectious Diseases](#)

New and improved? A review of novel antibiotics for Gram-positive bacteria. [Clinical Microbiology and Infection](#)

Antibiotic innovation for future public health needs. [Clinical Microbiology and Infection](#)

Progress in the Fight Against Multidrug-Resistant Bacteria 2005–2016: Modern Noninferiority Trial Designs Enable Antibiotic Development in Advance of Epidemic Bacterial Resistance. [Clinical Infectious Diseases](#)

Contact Precautions for Endemic MRSA and VRE - Time to Retire Legal Mandates. [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.