**M3 Literature Review**

**Period: 08/01/2025 – 08/02/2025**

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Scientific Highlights:

1. Nutritional optimization of fecal microbiota transplantation in humans: a scoping review.
2. Factors for Treatment Failure After Fecal Microbiota Transplantation in Clostridioides difficile Infection.
3. Pilot study of Clostridioides difficile infection (CDI) in hospitals, Italy, September to December 2022.
4. Clostridioides difficile infection and recurrence in cancer patients (CIRCA): a multicentre, international study.
5. Synergistic and off-target effects of bacteriocins in a simplified human intestinal microbiome: implications for Clostridioides difficile infection control.
6. Management of Recurrent Clostridioides difficile Infection (rCDI): A Systematic Literature Review to Assess the Feasibility of Indirect Treatment Comparison (ITC).
7. The evolving landscape of live biotherapeutics in the treatment of Clostridioides difficile infection.
8. Current trends in antimicrobial use and the role of antimicrobial stewardship in palliative oncology: a narrative review.
9. Phenotypic analysis of various Clostridioides difficile ribotypes reveals consistency among core processes.
10. Polysaccharide lyase PL3.3 possibly potentiating Clostridioides difficile clinical symptoms based on complete genome analysis of RT046/ST35 and RT012/ST54.
11. Cell Wall Protein 2 as a Vaccine Candidate Protects Mice Against Clostridioides difficile Infection.
12. Safety and Efficacy of Fecal Microbiota, Live-jslm (REBYOTA®), for the Prevention of Recurrent Clostridioides difficile Infection in Participants With Inflammatory Bowel Disease in PUNCH CD3-OLS.
13. A Review of Therapies for Clostridioides difficile Infection.
14. Prospective analysis of biomarkers associated with successful faecal microbiota transplantation in recurrent Clostridioides difficile Infection.
15. Identification of two glycosyltransferases required for synthesis of membrane glycolipids in Clostridioides difficile.
16. Impact of adjunct bezlotoxumab for preventing Clostridioides difficile infection recurrence in patients post - hematopoietic stem cell transplantation.
17. [The gastrointestinal microbiome - vision and mission].
18. [Nosocomial gastrointestinal infections and Clostridioides difficile].
19. Reactions of SleC, Its Structure and Inhibition in Mitigation of Spore Germination in Clostridioides difficile.
20. Clostridioides difficile recovered from hospital patients, livestock and dogs in Nigeria share near-identical genome sequences.
21. Gastroenterological Surgery and Management of Clostridioides difficile Infection: A Review.
22. Rare Presentation of Splenic Abscess Secondary to Clostridioides difficile Infection in a Patient With Systemic Sclerosis: A Case Report.
23. Correction to: A Randomized Controlled Trial of Efficacy and Safety of Fecal Microbiota Transplant for Preventing Recurrent Clostridioides difficile Infection.
24. Days of antibiotic spectrum coverage (DASC) as predictors of recurrent Clostridioides difficile infection: A retrospective cohort study.
25. Clostridioides difficile infection study models and prospectives for probing the microbe-host interface.
26. Detection of Human Y Chromosome and the SRY Gene in Fecal Samples of Female Patients Following Fecal Microbiota Transplantation.

Clostridioides difficile/ Clostridium difficile

1. Acetaminophen administration reduces acute kidney injury risk in critically ill patients with Clostridium difficile infection: A cohort study.
2. Whole-Genome Sequencing-Based Characterization of Clostridioides difficile Infection Cases at the University Hospital Centre Zagreb.
3. Investigating the Effects of Nosocomial Clostridioides difficile Infection Among Acute Leukemia Patients: Insights From the 2020 National Inpatient Sample.
4. Analysis of risk factors of Clostridioides difficile infection in patients with inflammatory bowel disease.
5. TRPV4 modulates inflammatory responses and apoptosis in enteric glial cells triggered by Clostridioides difficile toxins A and B.
6. Surveillance of Clostridioides difficile on hospital admission and outpatient antibiotic use in Germany-a 9 year ecological analysis.
7. Fiber- and acetate-mediated modulation of MHC-II expression on intestinal epithelium protects from Clostridioides difficile infection.
8. Does routine use of sporicidal disinfectants for all post-discharge hospital rooms reduce environmental contamination with Clostridioides difficile spores?
9. Impacts of perR on oxygen sensitivity, gene expression, and murine infection in Clostridioides difficile 630∆erm.
10. Inflammatory Markers and Severity in COVID-19 Patients with Clostridioides Difficile Co-Infection: A Retrospective Analysis Including Subgroups with Diabetes, Cancer, and Elderly.
11. Examining the impact of clinical features and built environment on risk of hospital onset Clostridioides difficile infection.
12. Major Systemic Lupus Erythematosus Exacerbation after Severe Clostridium Difficile Infection: A Case Report.

Fidaxomicin & Clostridium difficile

1. Fecal Microbiota Transplantation as an Alternative Method in the Treatment of Obesity.

Clostridioides difficile vaccine

1. Mapping C. difficile TcdB interactions with host cell-surface and intracellular factors using proximity-dependent biotinylation labeling.
2. The detection of Japanese encephalitis virus (JEV) in the Murray region, New South Wales: a public health investigation.

Vancomycin & CDI

1. Effectiveness of oral vancomycin as prophylaxis against Clostridioides difficile infection in hematopoietic stem cell transplant patients.
2. Phase I trial comparing bile acid and short-chain fatty acid alterations in stool collected from human subjects treated with omadacycline or vancomycin.
3. Subspecies phylogeny in the human gut revealed by co-evolutionary constraints across the bacterial kingdom.
4. Systemic Absorption of Oral and Rectal Vancomycin in a Critically Ill Patient: A Case Report.
5. Metronidazole and Vancomycin Have a Synergic Effect, with Plant Extracts as Helpful Tools to Combat Clostridioides difficile Infections.
6. Whole genome sequencing characterization of Clostridioides difficile from Bulgaria during the COVID-19 pandemic.
7. Global insights into the genome dynamics of Clostridioides difficile associated with antimicrobial resistance, virulence, and genomic adaptations among clonal lineages.

CDI

FMT/ Fecal Microbiota Transplant

1. Fecal Microbiota Transplantation as an Alternative Method in the Treatment of Obesity.

Competitors

1. Exploration of Cytokines and Microbiome Among Males and Females with Diarrhea-Predominant Irritable Bowel Syndrome.
2. Antiviral Stewardship in Transplantation.
3. Early-Life Antibiotic Exposures: Paving the Pathway for Dysbiosis-Induced Disorders.
4. Pilot Trial of a Transdiagnostic Cognitive Behavioral Therapy (CBT)-Based Group Intervention to Reduce Psychological Distress, Facilitate Positive Behavior Change, and Mitigate Inflammation in Older People with HIV.
5. Certolizumab Pegol Treatment in Patients With Crohn's Disease: Final Safety Data From the SECURE Registry.
6. Reporting standards in randomized controlled trials involving neuro-oncology caregivers: A systematic review report from the RANO-Cares working group.

CDAD

1. Characterization of heparin interactions with Clostridioides difficile toxins and its potential as anti-CDI therapeutics.
2. Clostridioides difficile Infections and Antibiotherapy: Results of Four Years of Observation in a Romanian Tertiary Hospital.
3. Study on the Efficacy and Safety of Tedizolid in Japanese Patients.
4. Access in all areas? A roundup of developments in market access and health technology assessment: part 6.
5. Natural History of Clostridioides difficile-related Disease Progression in the Two-Step Testing Era.
6. Global burden and trends of the Clostridioides difficile infection-associated diseases from 1990 to 2021: an observational trend study.
7. Fecal microbiota changes associated with pathogenic and non-pathogenic diarrheas in foals.
8. Can Gut Microbiota Analysis Reveal Clostridioides difficile Infection? Evidence from an Italian Cohort at Disease Onset.
9. Evaluation of Inflammatory Markers and Clinical Outcomes in COVID-19 Patients with Concurrent Clostridioides difficile Infection: A Comparative Cohort Analysis.
10. Subcutaneous Lower Pole Release as Double Bubble Prevention in Constricted Base Breasts: The "Plus One" Augmentation Technique.
11. Impact of Hepatoblastoma on Infectious Complications Following Pediatric Liver Transplantation.
12. Comparing Outcomes and Infection Risk in Medical, Surgical, and Trauma Intensive Care Patients with Alcohol Use Disorder.
13. Control of Clostridioides difficile virulence and physiology by the flagellin homeostasis checkpoint FliC-FliW-CsrA in the absence of motility.
14. Attributable Costs of Clostridioides difficile Infections in Korea.

CMC

1. SOLARIS project: a portable 3D-printed bioaerosol sampler for environmental bacterial collection.

Guidelines

1. Education strategies are the most commonly used in pediatric rehabilitation implementation research: a scoping review.
2. Micronutrient Status in Patients with Severe Obesity Before and After Laparoscopic Sleeve Gastrectomy.
3. Evaluating Harms Associated with Prolonged Antibiotic Duration of Therapy in Community Dwelling Older Adults: A Cohort Study using Instrumental Variable Analysis.
4. Impact of Clindamycin on the Oral-Gut Axis: Gastrointestinal Side Effects and Clostridium difficile Infection in 45 Patients.
5. A Comprehensive Approach to Reducing Patient Safety Indicators (PSI-90).
6. Oral vancomycin induced flushing syndrome in a multiple myeloma patient: A case report and review of the literature.
7. Clinical impacts of utilizing ceftriaxone and metronidazole versus piperacillin/tazobactam in patients diagnosed with complicated diverticulitis.
8. Impact of order set implementation on appropriate treatment of community-acquired pneumonia (CAP).
9. Development and Psychometric Validation of a Comprehensive Questionnaire to Assess Oncologists' Knowledge of Chemotherapy-Drug Interaction.
10. Development of a drug allergy alert tiering algorithm for penicillins and cephalosporins.
11. Comments and Illustrations of the European Federation of Societies for Ultrasound in Medicine Guidelines: Benign Pleura Lesions (Benign Pleura Thickening, Lesions and Masses)-What Can Be Seen on Transthoracic Ultrasound?
12. A community-based approach to address lung cancer screening disparities in the black community using the Witness Project(®) framework: development and pilot trial.
13. Antimicrobial susceptibility testing of Clostridioides difficile: a dual-site study of three different media and three therapeutic antimicrobials.
14. Use of Machine Learning to Assess the Management of Uncomplicated Urinary Tract Infection.
15. Improved Clinical Outcomes with Appropriate Meropenem De-escalation in Patients with Febrile Neutropenia.
16. Defining Fulminant Clostridioides difficile Infections: Assessing the Utility of Hypotension as a Diagnostic Criterion.
17. Multi-Matrix HPLC Investigation of Preservatives Employing a Recent Validated Method: A Monte Carlo Simulation Approach to Health Risks in Bangladeshi Processed Foods and Healthcare.
18. Two Conventional Implants versus Four Mini-Dental Implants to Retain Mandibular Overdentures: A Systematic Review of Clinical and Radiological Outcomes.
19. Abundant geographical divergence of Clostridioides difficile infection in China: a prospective multicenter cross-sectional study.

Non-toxigenic C. difficile

1. Regulatory workshop on standardisation of clinical procedures, endpoints and data robustness of human challenge studies - A stakeholder meeting report.

MGB

Other news of possible interest