**M3 Literature Review**

**Period: 08/02/2025 – 08/03/2025**

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Scientific Highlights:

1. Citrulline inhibits Clostridioides difficile infection with anti-inflammatory effects.
2. Extraintestinal Clostridium difficile infection presenting as spontaneous bacterial peritonitis.
3. Radiological Risk Factors for Osteochondral Fractures in Patients With First-Time and Recurrent Patellar Instability: Data From the JUPITER Cohort.
4. Corrigendum to "Live Biotherapeutic Products for the Prevention of Recurrent Clostridioides difficile Infection".
5. Integrating bulk RNA-seq and scRNA-seq data to explore diverse cell death patterns and develop a programmed cell death-related relapse prediction model in pediatric B-ALL.
6. Identification of two glycosyltransferases required for synthesis of membrane glycolipids in Clostridioides difficile.
7. Clinical Characteristics and Outcomes of Clostridioides difficile Infection in Cancer Patients From a Tertiary Care Hospital.
8. Higher disease activity of inflammatory bowel disease predisposes to Clostridioides difficile infection.
9. Fecal microbiota transplantation for Clostridioides difficile infection in a peritoneal dialysis patient: A case report.
10. Clinical and economic outcomes associated with fidaxomicin in comparison to vancomycin, metronidazole, and FMT: A systematic literature review.
11. Clostridioides difficile major toxins remodel the intestinal epithelia, affecting spore adherence/internalization into intestinal tissue and their association with gut vitronectin.
12. Efficacy and the underlying mechanisms of berberine in treatment of recurrent Clostridioides difficile infection.
13. Comparative effectiveness of different therapies for Clostridioides difficile infection in adults: a systematic review and network meta-analysis of randomized controlled trials.
14. Advancements in the Pathogenesis, Diagnosis, and Therapeutic Implications of Intestinal Bacteria.
15. Body mass index changes after fecal microbiota transplantation for recurrent Clostridioides difficile infection.
16. Advances in Fecal Microbiota Transplantation for Gut Dysbiosis-Related Diseases.
17. In vitro validation concept for lyophilized fecal microbiota products with a focus on bacterial viability.
18. Development of live biotherapeutic products: a position statement of Asia-Pacific Microbiota Consortium.
19. Case report of clostridium difficile infection after rectal resection with ileostomy.
20. Effects of clinical donor characteristics on the success of faecal microbiota transplantation for patients in Denmark with Clostridioides difficile infection: a single-centre, prospective cohort study.
21. Australasian Society of Infectious Diseases updated guidelines for the management of Clostridioides difficile infection in adults and children in Australia and New Zealand.
22. [The role of microbiological markers in the progression of Clostridioidesdifficile infection].
23. IL33 protects from recurrent C. difficile infection by restoration of humoral immunity.

Clostridioides difficile/ Clostridium difficile

1. Gut-Joint Axis: History of Clostridium Difficile Infection Increases the Risk of Periprosthetic Joint Infection After Total Knee Arthroplasty.
2. Surveillance of Clostridioides difficile in Canadian retail meat and genomic linkages to community-associated human clinical infections in Canada.
3. The Role of Clostridioides difficile Within the One Health Framework: A Review.
4. Recognition, Diagnosis, and Treatment of Clostridioides difficile Enterocolitis Presenting Without Diarrhea: A Literature Review.
5. Clinical characteristics and risk factors of Clostridioides difficile infection in children with diarrhoea.
6. Evaluating the risk of Clostridioides difficile infection from toilet flushing: A quantitative microbial risk assessment and implications for infection control.
7. Advantages of short-term antimicrobial treatment for pneumonia and aspiration pneumonia in older patients aged over 65: A nationwide inpatient database study.
8. Clostridioides difficile surveillance: 9-year comparison between automated surveillance and conventional surveillance in acute care hospitals.
9. Polymorphonuclear neutrophil depletion in ileal tissues reduces the immunopathology induced by Clostridioides difficile toxins.
10. Multicenter, retrospective cohort study of antimycobacterial treatment-related harms among patients with non-tuberculosis Mycobacterium infections in the United States.

Fidaxomicin & Clostridium difficile

1. Validation methods for encapsulated faecal microbiota transplantation: a scoping review.
2. Unlocking the secrets of the human gut microbiota: Comprehensive review on its role in different diseases.
3. The impact of ibezapolstat and other Clostridioides difficile infection-relevant antibiotics on the microbiome of humanized mice.
4. A designed synthetic microbiota provides insight to community function in Clostridioides difficile resistance.

Clostridioides difficile vaccine

1. Mn(3)O(4) Tetrahedral with Carbonyldiimidazole Nanoflower Deposition on Laser-Scribed Graphene for Selective Bio-Capture.
2. Enhanced immunogenicity of a Clostridioides difficile TcdB vaccine adjuvanted with a synthetic dual-TLR ligand adjuvant.

Vancomycin & CDI

1. Predominance of FQR1 NAP1/RT027 Clostridioides difficile Among Mexican Children and Adult Patients, and its Resistance to Eleven Antibiotics.
2. Impact of empiric antibiotics on risk of Clostridioides difficile-a causal inference observational analysis.
3. C. difficile Infection Complicated by a Large Pleural Effusion.
4. Five-Day Treatment with B. licheniformis Along with Classical Vancomycin Treatment Was Effective in Preserving Gut Microbiota in Patients with Clostridioides difficile Infection.
5. An Investigation into the Prevalence of Clostridioides difficile in Irish Pig Abattoirs and Pork Meat Products as a Potential Source of Human Infection.

CDI

1. Knowledge Assessment of Hospital Nursing Staff in Saudi Arabia Regarding Clostridioides difficile Infection: A Descriptive Cross-Sectional Study.

FMT/ Fecal Microbiota Transplant

1. Validation methods for encapsulated faecal microbiota transplantation: a scoping review.
2. Unlocking the secrets of the human gut microbiota: Comprehensive review on its role in different diseases.
3. The impact of ibezapolstat and other Clostridioides difficile infection-relevant antibiotics on the microbiome of humanized mice.
4. A designed synthetic microbiota provides insight to community function in Clostridioides difficile resistance.

Competitors

1. Therapeutic Drug Monitoring for Dose Optimization of Infliximab in Patients With Inflammatory Bowel Disease: An Analysis of Canadian Real-World Data.
2. Safety and efficacy of a defined bacterial consortium, VE303, to treat HE.
3. High-dose metformin treatment to inhibit complex I during early reperfusion protects the aged mouse heart via decreased mitochondrial permeability transition pore opening.
4. The microbiome-restorative potential of ibezapolstat for the treatment of Clostridioides difficile infection is predicted through variant PolC-type DNA polymerase III in Lachnospiraceae and Oscillospiraceae.
5. Tebipenem pivoxil as an alternative to ceftriaxone for clinically non-responding children with shigellosis: a randomised non-inferiority trial protocol.
6. Alterations in Methionine Cycle and Wnt/MAPK Signaling Associated with HMBi-Induced Cashmere Growth in Goats.
7. The combined dual β-lactams and diazabicyclooctane β-lactamase inhibitor is highly effective against Mycobacterium abscessus species in vitro.
8. [Guidelines for the prevention and management of bronchial asthma (2024 edition)].
9. Beta-lactam combination treatment overcomes rifampicin resistance in Mycobacterium tuberculosis.

CDAD

1. Risk factors for Clostridioides difficile infection among patients diagnosed with inflammatory intestinal and rheumatological diseases in the biologic era.
2. The effect of prophylactic antibiotics on second-stage breast reconstruction: A retrospective analysis.
3. Does luck always favor the prepared? Analysis of the NSQIP database shows benefits of combined bowel preparation on colostomy reversal outcomes.
4. Burden of bacterial antimicrobial resistance among hospitalised patients in Spain: findings from three nationwide prospective studies.
5. The potential of genomic epidemiology: capitalizing on its practical use for impact in the healthcare setting.
6. Risk factors and clinical characteristics of Clostridium difficile colonization and infection in patients with inflammatory bowel disease exposed to Vedolizumab: a multicenter retrospective study.
7. Perspective on equal and cross-frequency neural coupling: Integration and segregation of the function of brain networks.
8. Risk factors for the development of Clostridioides difficile infection in patients colonized with toxigenic Clostridioides difficile.
9. Perioperative Blood Transfusion and Infectious Complications Among Pediatric Patients with Cancer.
10. What Do We Know About Bacterial Infections in Hidradenitis Suppurativa?-A Narrative Review.
11. Risk Factors for Clostridium difficile Infection in Inpatients: A Four-Year (2017-2020) Retrospective Study.
12. Emergence and Spread of Clostridioides difficile Isolates With Reduced Fidaxomicin Susceptibility in an Acute Care Hospital.

CMC

Guidelines

1. IMPACT OF ULTRAVIOLET LIGHT DISINFECTION ON REDUCING HOSPITAL-ASSOCIATED INFECTIONS: A SYSTEMATIC REVIEW IN HEALTHCARE ENVIRONMENTS.
2. Clinical Characteristics and Optimization of Empirical Antimicrobial Therapy for Febrile Neutropenia in Patients With Hematologic Malignancies.
3. Healthy Eating Index (HEI-2020) score and colorectal cancer risk.
4. Predicting positive Clostridioides difficile test results using large-scale longitudinal data of demographics and medication history.
5. Australian National Enterovirus Reference Laboratory annual report, 2023.
6. Tuberculosis workforce policy and development framework in Australia.
7. Australian Gonococcal Surveillance Programme Annual Report, 2023.
8. Postura de la Sociedad Latinoamericana de Nutrición sobre la participación de actores comerciales y conflictos de intereses.
9. A comparison of empiric therapy with cefazolin versus ceftriaxone for patients with complicated urinary tract infections in a tertiary care veterans affairs medical center.

Non-toxigenic C. difficile

1. Clostridioides (Clostridium) difficile infection in hospitalized adult patients in Cambodia.

MGB

Other news of possible interest