



Newsletter Spring 2025

Message from the Study group Executive Committee

Dear colleagues, friends and ESGCD study group members,

Wow! Welcome to all of our new members, there are so many of you we haven't managed to keep up with the email notifications. It's wonderful to have so many new voices within the study group, and we look forward to working with you all in the future. We have a short newsletter this time, just to keep everyone up to date with ESCMID Global plans. Look forward to seeing you all in Vienna!

We are always interested in publications and research activities of our members, so please let us know when your *C. difficile*-related articles are published. When publishing your research, we would ask that you **add your ESGCD affiliation** to relevant papers that you submit. This helps highlight the impact of our study group to a wider audience.

As always, if you have any items for inclusion in our next newsletter or ideas for future study group activities, please email Dr Wiep Klaas Smits, Educational Officer; W.K.Smits@lumc.nl. This really is your study group! We really do want to hear your suggestions and ideas please don't be shy!

Please make sure you keep us up to date of any upcoming projects that you think the committee can help advise on. Check out our new LinkedIn page <https://www.linkedin.com/groups/13099388/> where we can all chat as a network.

With our very best wishes,

Kerrie Davies – (UK) – Chair,
Erik Dubberke (US) – Secretary,
John Coia- (DK) – Treasurer,
Benoit Guery – (Switzerland) - Science officer,
Wiep Klaas Smits– (NL) - Education officer,



John Heritage – (UK) – Patient Representative,
Andrea Marino- (Italy) – TAE Young Science Rep.

CDI sessions at ECCMID 2025

We are looking forward to seeing you at ESCMID Global 2025 and remind you of the two sessions led by our study group this year (below), plus two other *C. diff* dedicated sessions. There will also be more *C. diff* content in the posters and invited speakers sessions, plus the opportunity to come and meet the study group in person (see next section for details).

8:30 - 10:30 CEST Friday 11th April in Hall 5

Proposing Entity: ESCMID Study Group for Anaerobic Infections (ESGAI), ESCMID Study Group for *Clostridioides difficile* (ESGCD)

Session type: 2-hour Educational Session

Session title: Challenges in identification and relevance of slow-growing pathogens

8:30 - 10:30 CEST. Sunday 13th April in Hall 13

Proposing Entity: ESCMID Study Group for *Clostridioides difficile* (ESGCD)

Session type: 2-hour Symposium

Session title: Difficile to treat: advanced management strategies in difficult to treat CDI

13:30 – 14:30, Saturday 12th April, in Hall 11

Session type: 1-hour oral session

Session title: Battling the spore: *C. difficile* epidemiology and management

9:30- 10:30 CEST Tuesday 15th April in Arena 4

Session type: Flash poster session

Session title: *C. diff* challenges: insights into treatment, monitoring, and infection prevention

We look forward to seeing you in Vienna!

ESGCD meeting

ESGCD meeting in Vienna

Please come and meet the study group executive in Vienna. Our meeting is on **Saturday 12th April at 11:00 – 12:00 in Schubert 4+5**, with dial in also available [Launch Meeting - Zoom](#).

We will be presenting what the study group has done over the last year, and asking you all for your input, especially around what you would like to see at next years ESCMID Gloal on *C. difficile*.



With that in mind, here are the sessions that we submitted last year. Please come with your ideas of how we can improve those that were not accepted, or for additional topics. We will also need suggestions for speakers, which need to be balanced for gender, level of seniority and home country.

1. 1- hour symposium: 20 years after the emergence and global spread of *Clostridioides difficile* PCR ribotype 027 – what have we learned?

Category: 8. Healthcare-associated infections, infection prevention & control

Sub-category: 8f. Other healthcare associated infections (incl CDI, hospital outbreaks)

Organising study groups: ESGCD

Rationale: The emergence and rapid spread in North America and Europe of hypervirulent *C.difficile* PCR ribotype 027 20 years ago was the catalyst for resurgent interest in *C.difficile* infections (CDI). This resulted in an explosive growth of our knowledge regarding:

- Diagnosis and subtyping to manage individual patients and facilitate laboratory-based surveillance to estimate the burden of disease and effectiveness of control measures.
- Development of improved therapies for management of CDI including antimicrobial agents, antitoxin antibodies, FMT and non-FMT gut microbiome restoration.
- Development of infection prevention and control and antimicrobial stewardship strategies to control emergence and spread of CDI.

This symposium will consider lessons learned from the past 20 years, and whether these can inform efforts to tackle emerging CDI challenges with emergence of novel pathogenic subtypes, continued occurrence of healthcare-associated CDI, increased community-associated CDI, and concerns over environmental and animal reservoirs.

Talks

1. Title: What have we learned about detecting and monitoring the spread of pathogenic *Clostridioides difficile* strains?
2. Title: What have we learned about managing *Clostridioides difficile* infections?

2. Meet the expert; Antimicrobial susceptibility testing in anaerobes – what's new?



Category: 3. Bacterial susceptibility and resistance

Sub-category: 3c. Susceptibility testing methods

Organising study groups: ESGCD/ESGAI

Rationale: This session will provide an update on all elements of AST for anaerobic bacteria including the reference method (agar dilution) and the new EUCAST disk diffusion method. The challenges and pitfalls of the different methodologies will be reviewed and tips for ensuring that users achieve the most consistent and accurate results will be provided. This will be an opportunity to directly quiz a UK Anaerobe Reference Unit (UKARU) expert who has been instrumental in the weekly delivery of agar dilution results for 50-100 anaerobic bacteria, data from which continues to be utilised for the development of disk diffusion for anaerobes. In addition, there have been recent developments in susceptibility testing of *C. difficile*, the second speaker is an expert on developing these new *C. difficile* susceptibility methods.

- a. Update on susceptibility testing of Anaerobic Bacteria
- b. Susceptibility testing in *C. difficile* – what's changed?

3. Meet-the-expert: Live Biotherapeutic Products for *Clostridioides difficile* Infection

Category: 8. Healthcare-associated infections, infection prevention & control

Sub-category: 8f. Other healthcare associated infections (incl CDI, hospital outbreaks)

Organising study groups: ESGCD

Rationale: Live biotherapeutic products (LBP) have become part of the standard of care in the management of *C. difficile* infection (CDI), particularly for complicated cases. However, there remain many questions and controversies in regards to its use, such as optimal donor screening, route of administration, the number of CDI episodes before considering its use, use in refractory/fulminant CDI, its regulatory framework, and need to move beyond derivatives of feces to cultivated organisms/bacterial communities. Access to LBPs can also be challenging as well due to these issues. Experts in the field will provide their country's perspectives and recommendations, and necessary next steps to determine how to use LBPs to optimize patient outcomes.

Talks:

From preparation to administration: use of LBPs in the management of CDI

Getting beyond feces: cultivated single organism and bacterial consortia to prevent and treat CDI

4. Meet the expert- Optimal *C. difficile* infection diagnosis,- is it really that difficult?



Category: 4. Diagnostic bacteriology

Sub-category: 4a. Diagnostic bacteriology (incl culture based, traditional and general microbiology, serology, excluding AST methods)

Organising study groups: ESGCD

Rationale: Diagnosis of *C. difficile* is complicated; do you detect the bacterium, its DNA or its toxins, and as *C. difficile* can be carried asymptotically, what does all this mean for the patient? International guidelines differ in their approach, as although both ESCMID and IDSA/SHEA include an algorithmic approach, the use of rapid molecular tests is still a contentious point, with or without the inclusion of diagnostic stewardship. Future developments are focussing on more sensitive toxin assays and the use of biomarkers, including those generated by the gut microbiome.

This workshop will guide participants through the complicated world of laboratory diagnosis of *C. difficile* infection, describe how this impacts the clinical diagnosis of patients, discuss if antimicrobial resistance testing should be part of the diagnostic workup and finally describes how future breakthroughs in testing technology and incorporation of other laboratory investigations might simplify this complex clinical dilemma.

Talks

1. Optimal diagnosis: Why (NOT) perform PCR test in diagnostics of *C. difficile* infection?
2. New methodologies and alternatives for diagnostics and prediction of recurrence or severity of CDI

5. Session Type: Educational Session (120'). Title: "*Difficile* to treat: Advanced Management Strategies in real-life difficult-to-treat CDI"

Category: 8. Healthcare-associated infections, infection prevention & control

Sub-category: 8f. Other healthcare associated infections (incl CDI, hospital outbreaks)

Organising study groups: ESGCD

Rationale

This session delves into the complexities of managing challenging *Clostridioides difficile* infections, which remain a significant burden in healthcare settings. Featuring a blend of young investigators and seasoned experts, the session will explore advanced and unconventional approaches to managing cumbersome cases of CDI in real-life. Through interactive discussions centered around detailed case presentations, the session will highlight critical decision-making processes, innovative therapeutic strategies, and emerging research that could influence future guidelines. This



educational endeavor aims to enhance clinicians' capabilities in handling some of the most challenging scenarios in CDI management, ultimately improving patient care and outcomes.

Learning Objectives:

1. Identify and address the complexities involved in managing severe and recurrent cases of CDI.
2. Discuss innovative treatment strategies and their practical applications in complex CDI cases.
3. Evaluate the impact of emerging research on current and future CDI management practices.

Talks

1. Recurrent CDI: Breaking the Cycle
2. Severe CDI: When Standard Protocols Fail
3. Emerging Therapies for Complicated CDI
4. CDI in Patients with Multimorbidities: Key Focus Areas

Significance and Outcome: This session directly addresses the pressing challenges posed by difficult-to-manage *Clostridioides difficile* infections, which are associated with high morbidity, mortality, and healthcare costs. By focusing on severe and recurrent cases, the session aims to equip healthcare professionals with the latest and most effective strategies for managing these complex real-life infections. Participants will gain a comprehensive understanding of the obstacles and innovative solutions in CDI treatment, including the integration of new research findings and therapeutic approaches. The outcomes of this session are expected to not only enhance clinical practice by reporting real-life challenging situations but also stimulate further research and policy development to improve patient safety and care quality in managing CDI. Through this platform, we aim to foster a collaborative approach to tackling one of the most daunting challenges in infectious disease management today.

6. Keynote scientific interview. Models to study *C. difficile* infection: what do they really tell us?

Category: 9. FUNDAMENTAL MICROBIOLOGY, PATHOGENESIS & IMMUNITY TO INFECTION

Subcategory: 9a. Microbial pathogenesis & virulence

Organising study groups: ESGCD

Rationale: Over the decades, *Clostridioides difficile* has emerged as a devastating pathogen with significant associated morbidity and mortality for patients and outbreak potential in healthcare facilities. Despite major advances in understanding this disease, *C. difficile* infection (CDI) can still be difficult to diagnose, prevent and treat, despite several effective agents and modalities, recurrence after initial resolution of symptoms remains a hallmark of this infection.

In this presentation, several key discoveries in the pathogenesis, and treatment of CDI will be reviewed through the lens of laboratory models. In addition, the role of models in establishing risk for CDI from antimicrobial agents and the elucidation of dysbiosis. Areas where understanding is



incomplete will be highlighted and future directions to leverage models to control and manage this persistent and well-adapted pathogen will be discussed.

7. Novel antimicrobials for *C. difficile* and the challenges in bringing them to market

Type of session: Symposia (120 min)

Category: 5. NEW ANTIBACTERIAL AGENTS, PK/PD & STEWARDSHIP

Subcategory: 5c. New or repurposed antibacterial agents: Clinical studies and randomised trials

Organising study groups: ESGCD

Description: *Clostridioides difficile* infection (CDI) is a disease that can both result from and be treated by antimicrobial therapy. However the high relapse rate and potential the increasingly reported reduced susceptibility towards current first-line therapeutics means that new, antimicrobial agents need to be developed. This symposium will highlight such antimicrobial agents that are in various stages of preclinical and clinical development. As such, it will provide a framework for compounds that may enter the anti-*C. difficile* armamentarium in the future.

Talk 1: Mode of action and phase 3 clinical trial results for ridinilazole

Talk 2: Mode of action and phase 2 clinical trial results for ibezapolstat

Talk 3: Screening for novel antimicrobials against *C. difficile*

Talk 4: A preclinical semisynthetic glycopeptide antimicrobial against *C. difficile*

8. 1- hour symposium: One Health beyond AMR: The Challenge of *Clostridioides difficile* infection Control outside the hospital walls

Category: 8. Healthcare-associated infections, infection prevention & control

Sub-category: 8f. Other healthcare associated infections (incl CDI, hospital outbreaks)

Organising study groups: ESGCD and ESGVM

Rationale: The One Health concept recognises that the health of people is connected to the health of animals and the environment. A principal feature is to increase collaboration between physicians, veterinarians, environmental science professionals and policy-makers, with the aim of enhancing surveillance and research, and developing integrative policy frameworks. *C. difficile* infection has been traditionally viewed through the lens of hospital-acquired infections, however focus has now moved outside this setting, with Whole-genome sequencing suggesting that community and hospital *C. difficile* strains are genetically distinct. *C. difficile* has been isolated from a diverse array of reservoirs including food animals, seafood, vegetables, and the household and natural environments. The aim of this one-hour symposium is to review the most up to date, novel information on epidemiology, diagnosis and management of CDI in the community through the One



Health lens and propose interventions that cut across human health, animal health and the wider environment.

Talk 1 *Clostridioides difficile* in extrahuman sources

Talk 2 Dynamics of Transmission of *Clostridioides difficile* within and outside the hospital

Bring your ideas and suggestions!

No winter lasts forever; no spring skips its turn

Hal Borland