

Pharmacy Grand Rounds

200 First Street SW Rochester, Minnesota 55905 https://ce.mayo.edu/pharmacy-grandrounds-2025

From Drips to Scripts: Oral Step-down Therapy in Uncomplicated Gram-negative Bacteremia

Session Date: 02/11/2025

Session Time: 11:00 – 11:45 AM (CST)

Target Audience

This continuing education (CE) session was planned to meet the needs of professional staff who deal with the selection and monitoring of medication(s) as part of their patient care duties, including pharmacists, RNs, APRNs, PAs, MDs.

Activity Overview

The 2016 IDSA guidelines for catheter-related bloodstream infections recommend a 7-14 day duration of antibiotics for gram-negative infections, while the IDSA 2016 stewardship guidelines emphasize a timely transition from intravenous to oral antibiotics. However, these guidelines provide limited guidance on the duration of intravenous antibiotics and the selection of oral antibiotics. In recent years, multiple studies have explored the efficacy and safety of shorter overall antibiotic durations, early transitions to oral antibiotics, and the use of oral antibiotics for uncomplicated gram-negative bloodstream infections. This presentation will review the literature on antibiotic duration and the effectiveness of low and highly bioavailable oral antimicrobials for the treatment of uncomplicated gram-negative bloodstream infections.

Learning Objectives

At the conclusion of this knowledge-based CE session, participants should be able to:

- 1. Describe clinical characteristics of uncomplicated gram-negative bacteremia.
- 2. List appropriate oral antibiotics for step-down therapy from IV antibiotics for uncomplicated gram-negative bacteremia.
- 3. Establish an appropriate antibiotic duration to effectively treat gram-negative bacteremia based on recent literature.

Faculty Information

Tominee Sorenson, PharmD PGY1 Pharmacy Resident Mayo Clinic Health System – Eau Claire, WI

Tominee received a Doctor of Pharmacy degree from South Dakota State University College of Pharmacy and is a current PGY1 pharmacy resident at Mayo Clinic Health System – Eau Claire. Her practice interests include critical care and infectious diseases.



Approved Provider Statement



In support of improving patient care, this activity is planned and implemented by Mayo Clinic College of Medicine and Science. Mayo Clinic College of Medicine and Science is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

Credit Statements

AMA

Mayo Clinic College of Medicine and Science designates this live activity for a maximum of 0.75 AMA PRA Category 1 CreditsTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACPE



ACPE Universal Activity Number (UAN): JA0000238-0000-25-035-L01-P Mayo Clinic College of Medicine and Science designates this educational activity for a maximum of 0.75 ACPE Knowledge-based contact hours. Participants should claim only the credit commensurate with the extent of their participation in the activity

ANCC

Mayo Clinic College of Medicine and Science designates this activity for a maximum of 0.75 ANCC contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

AAPA



Mayo Clinic College of Medicine and Science has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. This activity is designated for 0.75 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

Educational Format and CE Requirements

This CE session is available as a live presentation, including live webcast. Participants must complete the following to record attendance and obtain CE credit:

- 1. Attend the entire session.
- 2. Text the session code to 507-200-3010 within 48 hours of the live presentation to record attendance.
 - a. This number is only used for receiving text messages related to tracking attendance
 - b. Employees are encouraged to create a contact in their mobile phone, as the same number is used to record attendance for every session
- 3. Complete the online evaluation for the respective session within 2 weeks of live presentation.

Pharmacist CE credit is electronically transferred to the National Association of Boards of Pharmacy CPE Monitor. To track CE, please go to NABP CPE Monitor.

Non-pharmacist attendees can print out a record of attendance at ce.mayo.edu after completing the evaluation and claiming credit.

Live Webcast – Register from the Education SharePoint site

Disclosure Summary

As a provider accredited by Joint Accreditation for Interprofessional Continuing Education, Mayo Clinic College of Medicine and Science must ensure balance, independence, objectivity and scientific rigor in its educational activities. All who are in a position to control the content are required to disclose all financial relationships with any ineligible company. Faculty will also identify any off-label and/or investigational use of pharmaceuticals or instruments discussed in their content for FDA compliance.

Listed below are individuals with control of the content of this program who have disclosed:

The faculty report the following relationships:

- Tominee Sorenson, PharmD
 - o Declares no financial relationship(s) pertinent to this session
 - o Declares off-label use of medications will be discussed during this presentation.
 - Fluroquinolones (ciprofloxacin, levofloxacin, and moxifloxacin), trimethoprim sulfamethoxazole, amoxicillin, amoxicillin clavulanate, and cephalosporins (cephalexin, cefdinir, cefuroxime, cefadroxil, cefuroxime, cefixime, and cefprozil) will be discussed for the use of BSI in the setting of study trials.

Course Director and Planning Committee Members declare the following relevant financial relationship(s) pertinent to this session.

- No relevant financial relationship(s) with ineligible companies:
 - o Jennifer Elmer, DNP, APRN, CCNS
- o Scott Nei, PharmD, BCPS, BCCCP, FCCM, FMSHP

- o Andrew Herber, PA-C
- Sarah Jane Kotval, BSW, RSS Coordinator

- o Sara Thompson, PharmD, MEd, BCACP
- Relevant financial relationship(s) with ineligible companies:
 - o Wayne Nicholson, MD, PharmD, BCPS Intellectual Property Anivive Lifesciences, Inc.

All relevant financial relationships have been mitigated.

For additional disclosure information regarding Mayo Clinic School of Continuous Professional Development accreditation review committee members visit ce.mayo.edu, About Us, Disclosures - or - https://ce.mayo.edu/content/disclosures

System and Technical Requirements

For participants viewing the webcast, sessions are delivered via Mayo Clinic intranet web browser and Adobe® PDF. For participants viewing outside the Mayo Clinic firewall, a VPN connection is required for remote access. Recommended web browser includes Google Chrome. This session is planned and coordinated by **the Department of Pharmacy, Mayo Clinic.**