

## **Pharmacy Grand Rounds**

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

# Heart-breaking Decisions: Controversies Following Surgical Management of Infective Endocarditis

**Session Date:** 08/26/2025

**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**

Infective endocarditis is a life-threatening condition, with up to 50% of patients requiring valve repair or replacement. Despite this, evidence-based guidance for post-surgical antimicrobial management is limited. In prosthetic valve endocarditis (PVE) due to staphylococcal infections, current guidelines recommend administration of a first line antimicrobial combined with rifampin and gentamicin and extended for 4-6 weeks if intraoperative cultures are positive. However, these recommendations are based largely on in-vitro data and expert opinions rather than robust, clinical evidence. Emerging evidence questions the benefits of combination therapy, suggesting that it may cause harm without improving mortality, and that shorter durations may be sufficient. This presentation aims to explore these questions with an evidence-based approach. By the end, learners will be equipped to critically evaluate the risks and benefits of adding rifampin and/or gentamicin to staphylococcal PVE treatment regimens, as well as outline key features to help guide post-operative antimicrobial durations.

## **Learning Objectives**

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

- Discuss current guideline recommendations and rationale for rifampin and gentamicin use in staphylococcal prosthetic valve endocarditis (PVE).
- Assess the safety and efficacy of adjunctive rifampin and gentamicin in staphylococcal PVE based on clinical evidence.
- Apply evidence-based recommendations to determine the appropriate duration of antibiotic therapy following post-surgical PVE.

## **Faculty Information**

Nirjan Bhattarai, PharmD, MS HIA PGY2 Infectious Disease Pharmacy Resident Mayo Clinic Hospital - Rochester, MN

Nirjan Bhattarai received a Doctor of Pharmacy degree from Drake University College of Pharmacy. He is a current PGY2 infectious diseases resident at Mayo Clinic Hospital – Rochester. His practice interests include infective endocarditis, mycobacterial infections and resistance mechanisms.



## **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 Credits<sup>TM</sup>. 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:

- Nirjan Bhattarai, PharmD, MS HIA
  - o Declares no financial relationship(s) pertinent to this session
  - o Will discuss the off-label use of rifampin for prosthetic valve endocarditis

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

- Sara Thompson, PharmD, MEd, BCACP
- Relevant financial relationship(s) with ineligible companies:
  - 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.