

Pharmacy Grand Rounds

200 First Street SW Rochester, Minnesota 55905 https://ce.mayo.edu/pharmacy-grandrounds2023

On Another Level: The Role of Therapeutic Drug Monitoring in Inflammatory Bowel Disease

Session Date: 03/14/2023 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

Biologics are effective and safe treatment options for inflammatory bowel disease (IBD) including Crohn's disease and ulcerative colitis. However, many patients with IBD may not respond to biologic therapy, primary loss of response, or will have biologic therapy lose effectiveness over time, secondary loss of response. Loss of response to medication may lead to disease relapse and progression. Traditionally, poor treatment response required dose escalation or a change in therapy. Biologic therapeutic drug level and auto-antibody monitoring is a growing area of practice and may present a more cost-effective approach to evaluate therapy and optimize dosing strategies compared to empiric escalation of therapy. Ensuring that therapeutic drug monitoring (TDM) is utilized and interpreted appropriately based on current evidence is key in optimizing biologic therapy. This presentation will review the role of therapeutic drug monitoring for biologics used in IBD, the available evidence evaluating clinical outcomes based on drug level targets, the appropriate timing of drug level measurement, and therapy optimization based on TDM results.

Learning Objectives

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

- 1. Review the pathophysiology and current treatment strategies for inflammatory bowel disease
- 2. Define the clinical application of therapeutic drug monitoring of biologic therapies used in inflammatory bowel disease.
- 3. Discuss biologic therapy optimization based on therapeutic drug monitoring.

Faculty Information

Sarah A. Chase, PharmD PGY2 Internal Medicine Pharmacy Resident Mayo Clinic Hospital - Rochester, MN

Sarah received her Doctor of Pharmacy degree from North Dakota State University in Fargo, ND. Last year, she completed her PGY1 pharmacy residency at the Nebraska-Western Iowa VA in Omaha, NE. She is the current PGY2 Internal Medicine Pharmacy Resident at Mayo Clinic Hospital in Rochester, MN. Her practice interests include internal medicine, gastroenterology, and infectious disease.



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*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACPE



ACPE Universal Activity Number (UAN): JA0000238-0000-23-007-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 attendance: Rochester, Saint Mary's Campus, ALF_MN_459 Live virtual attendance via Zoom link

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:

The faculty report the following relationships:

- Sarah A. Chase, PharmD
 - o Declares no financial relationship(s) pertinent to this session
 - Declares off-label use of medications will be discussed during this presentation, including:
 - Infliximab
 - Adalimumab
 - Golimumab
 - Certolizumab
 - Ustekinumab
 - Vedolizumab

Course Director and Planning Committee Members declare no relevant financial relationship(s) pertinent to this session. Members include:

- Jennifer Elmer, DNP, APRN, CCNS
- Andrew Herber, PA-C
- Sarah Jane Kotval, BSW
- Scott Nei, PharmD, BCPS, BCCCP, FCCM, FMSHP

All relevant financial relationships have been mitigated.

- Wayne Nicholson, MD, PharmD, BCPS
- Garrett Schramm, PharmD, FASHP, FCCP

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.**