



Pharmacy Grand Rounds

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

Beta To Know About It Now than Later: Understanding the Role of *CYP2D6* in Beta Blocker Therapy

Session Date: 03/04/2025

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

Beta blockers are one of the most prescribed medications and have a wide variety of indications. The *CYP2D6* enzyme is involved in metabolism of many commonly prescribed medications, including beta blockers. There has been literature investigating how *CYP2D6* polymorphisms affect the clinical response of beta blockers, however, it was not until 2024 that the Clinical Pharmacogenetics Implementation Consortium recently published guidelines regarding *CYP2D6* and beta blockers. This presentation will review drug-gene interactions of beta blockers, literature describing the association between *CYP2D6* and beta blockers, and current pharmacogenomic guidelines for beta blockers and *CYP2D6*.

Learning Objectives

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

1. Define actionable beta blocker drug-gene associations
2. Review primary literature regarding beta blockers and *CYP2D6*
3. Describe current pharmacogenomic guidelines for beta blockers and *CYP2D6*

Faculty Information

Tiffany Nguyen, PharmD
PGY2 Pharmacy Resident
Mayo Clinic Hospital - Rochester, MN

Tiffany received a Doctor of Pharmacy degree from South Dakota State University. She completed her PGY1 residency at Marshfield Clinic in Marshfield, WI and is a current PGY2 pharmacogenomics pharmacy resident at Mayo Clinic Hospital – Rochester. Her practice interests include pharmacogenomics and chronic disease state management.



Approved Provider Statement



JOINT ACCREDITATION™
INTERPROFESSIONAL CONTINUING EDUCATION

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*™. 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

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AAPA



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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:

- Tiffan Nguyen, PharmD
 - Declares no financial relationship(s) pertinent to this session
 - Declares off-label use of medications will not be discussed during this presentation

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