# **Pharmacogenomics in Clinical Practice**

# Activity Description

Pharmacogenomics (PGx), the study of how one's genes may affect an individual's response to\_medication, is an emerging field within patient care. This course aims to prepare today's clinician with the fundamentals of pharmacogenomics, including real-life case examples. Expert faculty provide the education needed to implement PGx into clinical practice.

- --Pharmacogenomics in Clinical Practice: Essential Concepts
- --Pharmacogenomics in Clinical Practice: Oncology
- --Pharmacogenomics in Clinical Practice: Applications in Clinical Care

# Target Audience

This activity has been designed for pharmacists, physicians, nurse practitioners, physician assistants, nurses, students, and other members of the health care team.

# Learning Objectives

Upon conclusion of this activity, participants should be able to:

- Describe what to consider when implementing pharmacogenomics in clinical practice
- Apply pharmacogenomics test results to make recommendations for an individualized medication management plan
- Identify barriers and challenges of considering pharmacogenomics in patient care

Attendance at this Mayo Clinic course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

# Accreditation Statement\*



In support of improving patient care, 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 Statement(s)\*

### <u>AMA</u>

The Mayo Clinic College of Medicine and Science designates this enduring material for a maximum of 17.75 AMA *PRA Category 1 Credit*(s)<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



# <u>ACPE</u>

Mayo Clinic College of Medicine and Science designates this educational activity for a maximum of 17.75 ACPE **Knowledge** contact hours. Participants should claim only the credit commensurate with the extent of their participation in the activity.

Pharmacogenomics in Clinical Practice:	
Essential Concepts	JA0000238-0000-21-087-H01-P
Pharmacogenomics in Clinical Practice:	
Oncology	JA0000238-0000-21-088-H01-P
Pharmacogenomics in Clinical Practice:	
Applications in Clinical Care	JA0000238-0000-21-089-H01-P

# <u>ANCC</u>

Mayo Clinic College of Medicine and Science designates this activity for a maximum of 17.75 contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

# **Learning Modules**

**Pharmacogenomics in Clinical Practice: Essential Concepts** Six Hours of Content = 6 Credits

# Oncology

Five and One Half Hours of Content = 5.5 Credits

# **Applications in Clinical Care**

Six and One Quarter Hours of Content = 6.25 Credits

### **Disclosure Summary\***

As a provider accredited by Joint Accreditation Interprofessional Continuing Education, Mayo Clinic College of Medicine and Science must ensure balance, independence, objectivity, and scientific rigor in its educational activities. Course Director(s), Planning Committee Members, Faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of these relevant financial relationships will be published in activity materials so those participants in the activity may formulate their own judgments regarding the presentation.

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

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Relevant financial relation	onship(s) with industry:

Name	Nature of Relationship	Company
John Logan Black, M.D.	Full-time/Part-time Employee	Mayo Clinic, Mayo Clinic Laboratories
	Other:	Intellectual Property/Royalties: AssureX Health (Myriad) and
Timothy B. Curry, M.D., Ph.D.	Consultant	OneOme LLC
		Geneticure
Edward V. Loftus, Jr. M.D.	Consultant	
	Grant/Research Support	Abbvie, Allergan, Amgen, Boehringer-Ingelheim, Bristol- Myers Squibb, Celgene, Celltrion Healthcare, Eli Lilly, Genentech, Gilead, Janssen, Pfizer, Takeda, UCB
	Stock/Shareholder	Abbvie, UCB, Amgen, Genentech, Janssen, Pfizer, Takeda, Robarts
	Other:	Clinical Trials, Gilead, Celgene, Receptos, Medimmune
Liewei Wang, M.D., Ph.D.	Stock/Shareholder	Exact Sciences
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Reference to off-label usage(s) of pharmaceuticals or instruments in their presentation:

Name	Manufacturer/Provider	Product/Device
Edward V. Loftus, Jr. M.D.	Various (generic)	Combination of azathioprine/6- meccopto-purine and allopurinol to minimize hepatotoxicity of thiopurines

For disclosure information regarding Mayo Clinic School of Continuous Professional Development accreditation review committee member(s) please visit: <u>https://ce.mayo.edu/content/disclosures</u>.

#### Mayo Disclaimer

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### **Prerequisites for Participation**

There are no prerequisites needed prior to participating in this education activity.

#### How to Obtain Credit

To obtain credit, complete the post-test, evaluation and submit.

#### Method of Participation

Participation in this activity consists of reviewing the video lectures and completing the post-test and evaluation.

#### **Release and Expiration Dates**\*

Release Date:	July 21, 2021
Expiration Date:	October 31, 2022

### Acknowledgement of Commercial Support (required when applicable\*)

No commercial support was received in the production of this activity.

### Faculty and Course Director Listing and Credentials

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#### **Bibliographic Resources**

Bibliographic resources are provided within the activity.

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