

Gastroenterology & Hepatology Board Review Online Course

Activity

The online Gastroenterology and Hepatology Board Review is designed for candidates preparing for certification and maintenance of certification (MOC) examinations in gastroenterology and hepatology. Case-based content delivered by Mayo Clinic faculty provides learners with the most time-efficient, comprehensive review to assist in successful preparation for the board exam. In addition, attendees receive up-to-date, practical information that can be applied immediately into daily clinical practice.

Target Audience

This online Gastroenterology and Hepatology Board Review is designed for candidates preparing for certification examinations in gastroenterology and hepatology.

Learning Objectives

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

- Identify common liver diseases including viral hepatitis, autoimmune and inherited.
- Recognize the management of complications of cirrhosis.
- Identify common esophageal disorders and correctly interpret esophageal testing including manometry and impedance pH testing.
- Recognize gastric acid physiology and common diseases of the stomach and duodenum.
- Identify micronutrient deficiencies and their manifestations.
- Recognize common malabsorptive disorders.
- Identify diseases of the pancreas and biliary tree including acute and chronic pancreatitis, gallstones, and pancreatic cystic lesions
- Identify colonic disorders including constipation, inflammatory bowel disease and hereditary polyposis syndromes.
- Recognize the management of gastrointestinal and hepatobiliary malignancies including cancers of the esophagus, stomach, colon, liver, bile duct and pancreas.
- Identify relevant areas of pathology, endoscopy, radiology, and nutrition.

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)

AMA

Mayo Clinic College of Medicine designates this enduring activity for a maximum of 34.75 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ABS

Successful completion of this CME activity, which includes participation in the evaluation component, enables the learner to earn credit toward the CME requirements of the American Board of Surgery's Continuous

Certification program. It is the CME activity provider's responsibility to submit learner completion information to ACCME for the purpose of granting ABS credit.

Other Healthcare Professionals

A record of attendance will be provided to all registrants for requesting credits in accordance with state nursing boards, specialty societies or other professional associations.

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...

Relevant financial relationship(s) with ineligible companies:

Name	Nature of Relationship	Company
Manal F. Abdelmalek, M.D.	Consultant Grant or Research Support	Inventiva, Madrigal, Intercept, Hanmi, 89 Bio, Merck, NovoNordisk, SonicIncytes, Theratechnologies Allergan, Boeringher-Ingelheim, Bristol-Myers Squibb, Celgene, Durect, Enanta, Enyo, Galmed, Genentech, Gilead, Hanmi, Intercept, Inventiva, Madrigal, Novo Nordisk, Poxel, TARGET Pharmaceuticals, Viking
Jeffrey A. Alexander, M.D.	Intellectual Property Consultant Stock Shareholder	Eurand Pharmaceuticals, Inc., Meritage Pharma, Inc Alimentiv, Roberts Clinical Trials Inc. Meritage
David H. Bruining, M.D.	Intellectual Property Other For-Profit Entities	Alimentiv Inc. Medtronics, Janssen
Vinay Chandrasekhara, M.D.	Consultant Stock Shareholder	Boston Scientific Corporation - Covidien LP. Nevakar Corporation
Nayantara Coelho-Prabhu, M.B.B.S.	Intellectual Property Consultant	GI Digital, Inc. Alexion Pharmaceuticals, Inc., Boston Scientific Corporation.
Francis A. Farraye, M.D., M.S.	Consultant	Sebela Pharmaceuticals Inc, Pfizer, Inc., Avalo Therapeutics, Ferring Pharmaceuticals, Inc., Lilly USA, LLC, Janssen Biotech, Inc., Braintree Laboratories, GlaxoSmithKline, Bristol-Myers Squibb Pharmaceutical, Pharmaceutical Research Associates, Inc., Arena Pharmaceuticals, Innovation Pharmaceuticals Inc, Theravance Biopharma, Inc., Mylan Inc, Sandoz Inc., Pharmacosmos, Iterative Scopes, Inc, Fresenius Kabi

		USA, LLC, AbbVie Inc., BMS Global, Inc.
Sahil Khanna, M.B.B.S., M.S.	Consultant	Niche Biopharmaceuticals LLC, Aimmune Therapeutics Inc., Aquilo Capital, Atheneum Partners LLC, Clarion Healthcare, Facile Therapeutics Inc., GlaxoSmithKline, Immuron, Jetson Health LLC, Nexilico Inc., Otsuka Pharmaceutical Development and Commercialization Inc., Probiotech LLC, Scaled Microbiomics, Seres Therapeutics (formerly Seres Health), Shire Human Genetic Therapies, Summit Plc, Syneos Health, Takeda Development Center Americas
Ryan J. Law, D.O.	Consultant	Boston Scientific Corporation, ConMed Endoscopic Technologies, Medtronic, Inc.
Shounak Majumder, M.D.	Intellectual Property	EXACT Sciences Corporation
Karthik Ravi, M.D.	Consultant	Sanofi Genzyme
Doug A. Simonetto, M.D.	Intellectual Property	Anumana, Inc.

All relevant financial relationships listed for these individuals have been mitigated.

No relevant financial relationship(s) with ineligible companies:

Name	
Glenn L. Alexander, M.D.	Victor G. Chedid, M.D., M.S.
Amindra S. Arora, M.B., B.Chir.	John E. Eaton, M.D.
Chamil C. Codipilly, M.D.	Amanda M. Johnson, M.D.
Stephanie L. Hansel, M.D., M.S.	Michael D. Leise, M.D.
Robert E. Kraichely, M.D.	Jody C. Olson, M.D.
Jason T. Lewis, M.D.	Diana L. Snyder, M.D.
William Sanchez, M.D.	Xiao Jing (Iris) Wang, M.D.
Seth R. Sweetser, M.D.	Corinne Irish
Bashar A. Aqel, M.D.	

References to off-label and/or investigational usage(s) of pharmaceuticals or instruments in their presentation:

Name	Manufacturer/Provider	Product/Device
Stephanie L. Hansel, M.D., M.S.	Multiple manufacture	anticholinergic medication
Sahil Khanna, M.B.B.S., M.S.	Multiple as generic drug none	Metronidazole Fecal microbiota transplantation
Robert E. Kraichely, M.D.	various	tricyclic antidepressants

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

Disclaimer

Participation in this Mayo Clinic educational activity does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course. You should be aware that substantive developments in the medical field covered by this recording may have occurred since the date of original release.

Prerequisites for Participation

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

Method of Participation

Participation in this activity consists of reviewing the educational material, completing the learner assessment and evaluation.

How to Obtain Credit

To obtain credit, complete the assessment, and submit.

Release and Expiration Dates

Release Date:	April 30, 2024
Renewal Date:	(If applicable)
Expiration Date:	April 29, 2027

Acknowledgement of Commercial Support

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

Faculty and Course Director Listing and Credentials

Course Director(s)

David Bruining, M.D.
Michael D. Leise, M.D.
Karthik Ravi, M.D.

Faculty

Amindra S. Arora, M.B., B.Chir.
Bashar A. Aqel, M.D.
Chamil C. Codipilly, M.D.
David H. Bruining, M.D.
Diana L. Snyder, M.D.
Doug A. Simonetto, M.D.
Francis A. Farraye, M.D., M.S.
Glenn L. Alexander, M.D.
Iris Wang, M.D.
Jason T. Lewis, M.D.
Jeffrey A. Alexander, M.D.
Jody C. Olson, M.D.
John E. Eaton, M.D.
Karthik Ravi, M.D.
Manal F. Abdelmalek, M.D.
Michael D. Leise, M.D.
Nayantara Coelho-Prabhu, M.B.B.S.
Robert E. Kraichely, M.D.
Ryan J. Law, D.O.
Sahil Khanna, M.B.B.S., M.S.
Seth R. Sweetser, M.D.

Shounak Majumder, M.D.
Stephanie L. Hansel, M.D., M.S.
Vinay Chandrasekhara, M.D.
William Sanchez, M.D.

Bibliographic Resources

Zerbib F, Bredenoord AJ, Fass R, Kahrilas PJ, Roman S, Savarino E, Sifrim D, Vaezi M, Yadlapati R, Gyawali CP. ESNM/ANMS consensus paper: Diagnosis and management of refractory gastro-esophageal reflux disease. *Neurogastroenterol Motil.* 2021 Apr;33(4):e14075. doi: 10.1111/nmo.14075. Epub 2020 Dec 28. PMID: 33368919.

Singh S, Proctor D, Scott FI, Falck-Ytter Y, Feuerstein JD. AGA Technical Review on the Medical Management of Moderate to Severe Luminal and Perianal Fistulizing Crohn's Disease. *Gastroenterology.* 2021 Jun;160(7):2512-2556.e9. doi: 10.1053/j.gastro.2021.04.023. PMID: 34051985

Acosta RD, Abraham NS, Chandrasekhara V, et al. The Management of Antithrombotic Agents for Patients Undergoing GI Endoscopy. *Gastrointest Endosc;* 2016; 83:3-16 / DOI: <http://dx.doi.org/10.1016/j.gie.2015.09.035>

Antibiotic Prophylaxis for GI Endoscopy. *Gastrointest Endosc* 2015;81:81-89 / DOI: <http://dx.doi.org/10.1016.j.gie.2014.08.008>

Hayward KL, Patel PJ, Valery PC, Horsfall LU, Li CY, Wright PL, Tallis CJ, Stuart KA, Irvine KM, Cottrell WN, Martin JH, Powell EE. Medication-Related Problems in Outpatients With Decompensated Cirrhosis: Opportunities for Harm Prevention. *Hepatol Commun.* 2019 Mar 18;3(5):620-631. doi: 10.1002/hep4.1334. PMID: 31061951; PMCID: PMC6492469.

Copyright

Mayo Foundation for Medical Education and Research. All rights reserved. Copyright 2024