Gastroenterology and Hepatology Research Newsletter

Fall 2024 Newsletter

Welcome to the TPMG

Gastroenterology and Hepatology Research Newsletter!

Here, we present current or recently completed research projects led by the TPMG GI/Liver researchers as well as ongoing studies led by investigators at the Division of Research (DOR) that involve our GI/Liver clinician researchers and our outstanding GI fellows.

Conducting research to improve care is important to many TPMG clinicians. The Delivery Science and Applied Research (DARE) program is proud to provide our physicians with research collaboration opportunities through several <u>DARE</u> <u>funding mechanisms.</u>

In this issue, we will provide you a list of the recently published articles by the TPMG GI/Liver clinician researchers.



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A Deeper Look Inside This Update:

- Research Highlights
- Upcoming Events

& Funding

- Active and Recent Research projects
- Recent Peer Reviewed
 Publications

Research Highlights - Congratulations to our hepatology researchers!

A chronic hepatitis B identification and surveillance program improves care in an integrated health plan

Krisna P. Chai, MD, Varun Saxena, MD, MA., Suk Seo, MD, Brandon H. Horton, MPH, Andrew L. Avins, MD, MPH, Mai Sedki, MD, Joanna B Ready, MD. *The American Journal of Gastroenterology*. Oct, 2024. *DOI:* 10.14309/ajg.00000000003116. PMID: 39364887

Abstract

Objective: Optimal management of patients with chronic hepatitis B (CHB) requires surveillance for hepatocellular carcinoma (HCC) and identification of antiviral-therapy candidates, but few dedicated CHB-surveillance models have been described. Kaiser Permanente Northern California (KPNC) developed a systematic CHB surveillance-and-management program in 2012. We report the results of the program's performance over the initial 8-year period.

Methods: We conducted a retrospective cohort study of all patients with CHB meeting guideline criteria for HCC surveillance. Eligible patients were invited into the KPNC Liver Care Program (LCP), wherein patients receive reminders to obtain semiannual laboratory and imaging surveillance, which are reviewed by nurse practitioners. Treatment-eligible patients are provided antiviral medications.

Results: Since its inception, 14,630 patients met study criteria and 9,373 (64.1%) enrolled in the LCP. Adherence to imaging recommendations was higher in the LCP-managed group (41.5% of patients in the LCP received ≥80% of recommended imaging compared to 10.9% among patients not enrolled (risk ratio = 3.8; p<.001)). Approximately 63% of treatment-eligible patients in both groups received medication, though full-adherence rates were higher in patients managed in the LCP (72.3% vs 63.4%, respectively, p<.001). Among the 197 patients who developed HCC, recommended surveillance imaging was performed more frequently among LCP-managed patients (71.4% vs. 53.8%, respectively, p<.05) who were also significantly more likely to be diagnosed at Barcelona Clinic Liver Cancer Stage 0/A (95.9% vs. 74.6%; p<.001).

Conclusions: In this integrated healthcare system, a systematic program for surveilling and managing patients with CHB appeared beneficial for both process and clinical endpoints.



Hepatocellular Carcinoma in Metabolic Dysfunction-Associated Steatotic Liver Disease

Luis A. Rodriguez, PhD; Julie A. Schmittdiel, PhD; Liyan Liu, MS; Brock A. Macdonald, MD; Sreepriya Balasubramanian, MD; Krisna P. Chai, MD; Suk I. Seo, MD; Nizar Mukhtar, MD; Theodore R. Levin, MD; Varun Saxena, MD. *JAMA Netw Open*. 2024 Jul 1;7(7):e2421019. doi: 10.1001/jamanetworkopen.2024.21019. PMID: 38990573

Abstract

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Conclusions: In this integrated healthcare system, a systematic program for surveilling and managing patients with CHB appeared beneficial for both process and clinical endpoints.



Upcoming Events

ACG Annual Scientific Meeting 2024

Dates: October 25-30, 2024 **Location:** Pennsylvania Convention Center Philadelphia, Pennsylvania **For more information:** acgmeetings.gi.org

The Liver Meeting

Dates: November 15-19, 2024 **Location:** San Diego, CA **For more information:** aasld.org

Digestive Disease Week

Dates: May 3-6, 2025 Location: San Diego, CA For more information: www.ddw.org

Internal Funding & Research Resources

- General Funding Opportunities
- Delivery Science and Applied Research
- Specialty Research Networks
- Getting Started with Research
- **Division of Research**



Active Research Projects and Collaborations

An Organized Hepatitis B Surveillance Program increases Patient Identification and Optimizes Management

Krisna Chai, Joanna Ready, Andy Avins | RAU | Ongoing

Colorectal cancer screening decisions based on predicted risk: the PREcision ScreENing randomized controlled Trial (PRESENT) Jeff Lee | NCI | Ongoing

Comprehensive Colorectal Cancer Risk Prediction To Inform Personalized Screening Doug Corley, Jeff Lee | NCl | Ongoing

Contemporary Probability of Occult Colorectal Cancer in Patients with Colitis-Related Dysplasia undergoing Colectomy Fernando Velayos | Other | Ongoing

COVID-19 Pandemic: Impact on Colorectal Cancer Screening and Adenoma Surveillance Outcomes (PICASO) Theodore Levin | Other | Ongoing

Crossing the Quality Chasm for Men Under 50 (CQCMU50) Theodore Levin | PRP | Ongoing

De-implementation of Outdated Colonoscopy Surveillance Interval Recommendations Among Patients with Low-risk Adenomas (DESIRE)

T.R. Levin, Jeffrey Fox, Jeffrey Lee | DSGP | Ongoing

Effectiveness of Screening for Colorectal Cancer in Average Risk Adults: Colonoscopy vs. FIT (SCOLAR2)

Doug Corley, T.R. Levin | NCI | Ongoing

Esophageal adenocarcinoma risk in patients with Barrett's Esophagus without dysplasia. Is ongoing surveillance endoscopy warranted? Tanaaz Baldawala | CH | Ongoing

Hepatocellular Carcinoma Biomarker Study with Glycotest® Varun Saxena | Other | Ongoing

Identifying Baseline Risk Factors for Advanced Disease at Diagnosis and Treatment-Resistant Subtypes of Autoimmune Hepatitis in a Contemporary, Multi-ethnic and Aging Cohort



Kavita Radhakrishnan | CH | Ongoing

Improving health outcomes and reducing healthcare costs in individuals with Helicobacter pylori infection in a large, community-based population Dan Li | PRP | Ongoing

Incidence and predictors of hospital readmission for ulcerative colitis Abhik Roy | CH | Ongoing

International Travel for Liver and/or Kidney Transplantation Joanna Ready | Other | Ongoing

K Award Jeff Lee | NCI | Ongoing

Optimizing Colorectal Cancer Screening PREcision and Outcomes in Community-baSEd Populations (PRECISE) Doug Corley, T.R. Levin | NCI | Ongoing

Phase III, randomized, double blind, parallel group, placebo controlled, multicentre study to assess efficacy & safety to adult allogeneic expanded adipose-derived stem cells (eASCs) for treatement of complex perianal fistulising Crohn's disease Fernando Velayos | Other | Ongoing

PICASO study of pandemic related impact on colorectal cancer screening outcomes TR Levin | Other | Ongoing

PREDICT PCCC: PREDICTing Post Colonoscopy Colorectal Cancer T.R. Levin, Jeffrey Lee, Vincent Liu, Charles Quesenberry, Oleg Sofrygin | PRP | Ongoing

PREDICT: Predicting advanced neoplasia on surveillance colonoscopy TR Levin | Other | Ongoing

Predicting Serious Colonic Growths to Risk Stratify People Coming Due for Surveillance Colonoscopy TR Levin | PRP | Ongoing

Prednisone, but not biologics or immunomodulators are associated with severe COVID-19 outcomes: A community-based study Fernando Velayos, Jennifer Dusendang, Julie Schmittdiel | Other | Ongoing

PREEMPT CRC screening trial. Multicenter study of a multi-omics based blood based screening test

TR Levin, Aasma Shaukat | Industry | Ongoing



Prior immunosuppressive therapy and severe illness among patients diagnosed with SARS-CoV-2: a community-based study

Fernando Velayos | Other | Ongoing

Reproductive Health Following Liver Transplant

Sreepriya Balasubramanian | Other | Ongoing

Retreatment of Hepatitis C Infection in Patients who Previously Failed Sofobuvir/Velpatasvir/Voxilpravir

Varun Saxena | Other | Ongoing

Retrospective Validation of MeScore for Identification of Colorectal Cancer (CRC) Doug Corley, T.R. Levin | Industry | Ongoing

Sarcopenia and Frailty Among Liver Transplant Recipients Sreepriya Balasubramanian | Other | Ongoing

SARS-CoV-2 Serological Antibody Testing for Disease Surveillance and Clinical Use Jacek Skarbinski, Larry Kushi, Douglas Corley | NIH | Ongoing

System-Level Capture of Family History Data to Assess Risk of Cancer and Provide Longitudinal Care Coordination Doug Corley | PCORI | Ongoing

Understanding the Risk of Advanced Colorectal Neoplasia in Patients with 3-4 Nonadvanced Adenomas Compared to Those with 1-2 Non-advanced Adenomas Jeff Lee, Theodore Levin | DSGP | Ongoing

Volumetric Lase Endomicroscopy in dysplastic Barrett's esophagus: Can we see the invisible lesions? Ben Hassid | Other | Ongoing



Recent Peer Reviewed Gastroenterology/Liver -Authored Publications between Jan- June 2024

* KPNC Authors listed in alphabetical order below; for details on full list of authors and order, click on the link included to the PubMed Abstract

Risk of Gastric and Small Intestinal Cancer in Patients With Lynch syndrome - Data From a Large, Community-Based U.S. Population [PubMed Abstract] Carwana, Holly E; Jiang, Sheng-Fang; Li, Dan | 6/26/2024 | Clinical And Translational Gastroenterology

Randomized trial of patient outreach approaches to de-implement outdated colonoscopy surveillance intervals [PubMed Abstract] Boparai, Eshandeep S; Chang, Suyi; Dang, Christian H; Fox, Jeffrey M; Leung, Lawrence J; Badalov, Jessica M; Jensen, Christopher D; Lee, Jeffrey K; Levin, Theodore R; Merchant, Sophie A; Quesenberry, Charles P; Velayos, Fernando | 6/1/2024 | Clinical Gastroenterology And Hepatology : The Official Clinical Practice Journal Of The American Gastroenterological Association

Population-Level Identification of Patients With Lynch Syndrome for Clinical Care, Quality Improvement, and Research [PubMed Abstract] Corley, Douglas; Li, Dan; Udaltsova, Natalia | 6/1/2024 | Jco Clinical Cancer Informatics

A Response-able Diagnosis: Type 2 Autoimmune Pancreatitis in the Setting of Ulcerative Colitis [PubMed Abstract] Cherny, Sarah C; Karia, Kunal; Lee, Jeffrey K; Velayos, Fernando | 6/1/2024 | Digestive Diseases And Sciences

Patterns of Care Following a Positive Fecal Blood Test for Colorectal Cancer: A Mixed Methods Study [<u>PubMed Abstract</u>] Jensen, Christopher D; Levin, Theodore R | 5/21/2024 | Journal Of General Internal Medicine

Lead Time and Immortal Time Biases Impact the Calculation of Post-Colonoscopy Colorectal Cancer Survival [PubMed Abstract] Jensen, Christopher D; Lee, Jeffrey K; Merchant, Sophie A | 5/21/2024 | Clinical Gastroenterology And Hepatology : The Official Clinical Practice Journal Of The American Gastroenterological Association

Association of Ultra-Processed Food and Unprocessed or Minimally Processed Food Consumption With Bowel Habits Among US Adults [PubMed Abstract] Lee, Jeffrey K | 5/15/2024 | Clinical Gastroenterology And Hepatology : The Official Clinical Practice Journal Of The American Gastroenterological Association

Colorectal Cancer Screening After Sequential Outreach Components in a Demographically Diverse Cohort [PubMed Abstract] Jensen, Christopher D; Levin, Theodore R; Zhao, Wei K | 4/1/2024 | JAMA Network Open



Surveillance Colonoscopy Findings in Older Adults With a History of Colorectal

Adenomas [PubMed Abstract] Chan, Jennifer T; Jensen, Christopher D; Lee, Jeffrey K; Levin, Theodore R; Roy, Abhik; Udaltsova, Natalia; Zhao, Wei K | 4/1/2024 | JAMA Network Open

Screening for Colorectal Cancer in Asymptomatic Average-Risk Adults [PubMed Abstract] Levin, Theodore R | 4/1/2024 | Annals Of Internal Medicine

Cost-Effectiveness and the Economics of Genomic Testing and Molecularly Matched Therapies [PubMed Abstract] Banerjee, Sudeep | 4/1/2024 | Surgical Oncology Clinics Of North America

EUS-Guided Cholecystoduodenostomy for a Poor Surgical Candidate With Chronic Octreotide-Associated Gallstones From Metastatic Neuroendocrine Tumor [PubMed Abstract] Gupta, Suraj; Hamerski, Christopher M; Karia, Kunal; Leung, Lawrence J | 3/1/2024 | Acg Case Reports Journal

Predicting Risk of Colorectal Cancer After Adenoma Removal in a Large, Communitybased Setting [PubMed Abstract] Jensen, Christopher D; Lee, Jeffrey K; Levin, Theodore R; Udaltsova, Natalia | 2/14/2024 | The American Journal Of Gastroenterology

Implementation of a hepatocellular carcinoma surveillance program in a communitybased integrated health system in patients with hepatitis C cirrhosis [PubMed Abstract] Balasubramanian, Sripriya; Bui, Hien T; Mukhtar, Nizar; Saxena, Varun | 2/9/2024 | The American Journal Of Gastroenterology

Utility and impact of magnetic resonance elastography in the clinical course and management of chronic liver disease [PubMed Abstract] Patel, Roshan D | 1/20/2024 | Scientific Reports

Relative contribution of COVID-19 vaccination and SARS-CoV-2 infection to populationlevel seroprevalence of SARS-CoV-2 spike antibodies in a large integrated health system [PubMed Abstract] Schapiro, Jeffrey M; Amsden, Laura B; Chervo, Tyler C; Corley, Douglas; Elkin, Eric P; Ergas, Isaac J; Flores, Monica; Habel, Laurel; Hsiao, Crystal; Kushi, Larry; Munneke, Julie R; Nugent, Joshua R; Quesenberry, Charles P; Skarbinski, Jack; Valice, | 1/1/2024 | Plos One

Primary Care Utilization, Preventative Screening, and Control of Metabolic Syndrome in Metabolic Dysfunction-Associated Steatohepatitis Liver Transplant Recipients [PubMed Abstract] Saxena, Varun | 1/1/2024 | Journal Of Primary Care & Community Health

Helicobacter pylori-Induced Gastroduodenal Stricture in a Child [PubMed Abstract] Chang, Albert J | 1/1/2024 | Acg Case Reports Journal



