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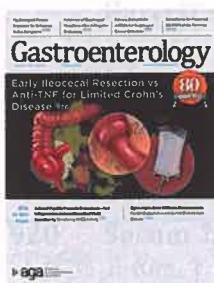
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L. Guadagnoli, A. Geeraerts, H. Geysen, A. Pauwels, T. Vanuytsel, J. Tack, and L. Van Oudenhove

This study found that psychological symptoms are significantly and independently associated with symptom severity reporting in a sample of patients with refractory heartburn/regurgitation symptoms. Meanwhile, physiological reflux variables showed no association.

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- 861 Genome-Wide Association Study Identifies 4 Novel Risk Loci for Small Intestinal Neuroendocrine Tumors Including a Missense Mutation in LGR5**
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Missense variant in LGR5, a canonical intestinal stem cell marker associates with small intestinal-neuroendocrine tumor risk.

- 874 Transforming Growth Factor- β Blockade in Pancreatic Cancer Enhances Sensitivity to Combination Chemotherapy**
L. Qiang, M. T. Hoffman, L. R. Ali, J. I. Castillo, L. Kageler, A. Temesgen, P. Lenehan, S. J. Wang, E. Bello, V. Cardot-Ruffino, G. A. Uribe, A. Yang, M. Dougan, A. J. Aguirre, S. Raghavan, M. Pelletier, V. Cremasco, and S. K. Dougan

Blockade of the cytokine transforming growth factor- β enhances pancreatic tumor cell chemotherapy sensitivity by promoting a basal-like to classical cell state transition. Transforming growth factor- β blockade and combination chemotherapies are currently in clinical trials.

891 **Spatially Resolved Multi-Omics Single-Cell Analyses Inform Mechanisms of Immune Dysfunction in Pancreatic Cancer**

 *S. Yousuf, M. Qiu, L. Voith von Vothenberg, J. Hulkkonen, I. Macinkovic, A. R. Schulz, D. Hartmann, F. Mueller, M. Mijatovic, D. Ibbsen, K. T. AlHalabi, J. Hetzer, S. Anders, B. Brüne, H. E. Mei, C. D. Imbusch, B. Brors, M. Heikenwälder, M. M. Gaida, M. W. Büchler, A. Weigert, T. Hackert, and S. Roth*

An in-depth characterization of the immune landscape in pancreatic cancer, highlighting features that diverge from other solid cancers, especially lung cancer.

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 *S. Wani, D. Holmberg, G. Santoni, J. H. Kauppila, M. Farkkila, M. von Euler-Chelpin, N. J. Shaheen, and J. Lagergren*

A high proportion of esophageal cancers was found in patients after what seemed to be a normal endoscopy and before the next recommended endoscopy. These "missed" cancers are an attractive target for improving quality of patient care.

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 *Y. Kim, Y. Chang, Y. Cho, J. Chang, K. Kim, D.-I. Park, S.-K. Park, H.-K. Joh, M. K. Kim, C. Kim, S. H. Wild, C. D. Byrne, and S. Ryu*

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Individuals with sufficient vitamin D levels may have a lower likelihood of developing colorectal cancer.

932 **Salivary Extracellular MicroRNAs for Early Detection and Prognostication of Esophageal Cancer: A Clinical Study**

 *K. Li, Y. Lin, Y. Zhou, X. Xiong, L. Wang, J. Li, F. Zhou, Y. Guo, S. Chen, Y. Chen, H. Tang, X. Qiu, S. Cai, D. Zhang, E. Bremer, S.-C. Jim Yeung, and H. Zhang*

A new salivary extracellular vesicle and particle microRNA panel can sensitively detect early-stage esophageal cancer. This saliva test may reduce the health care burden of esophageal cancer by avoiding unnecessary procedures.

Inflammatory Bowel Disease**946** **HLA-DP on Epithelial Cells Enables Tissue Damage by NKp44⁺ Natural Killer Cells in Ulcerative Colitis**

 *M. E. Baumdick, A. Niehrs, F. Degenhardt, M. Schwerk, O. Hinrichs, A. Jordan-Paiz, B. Padoan, L. H. M. Wegner, S. Schloer, B. F. Zecher, J. Malsy, V. R. Joshi, C. Illig, J. Schröder-Schwarz, K. J. Möller, Hamburg Intestinal Tissue Study Group, M. P. Martin, Y. Yuki, M. Ozawa, J. Sauter, A. H. Schmidt, D. Perez, A. D. Giannou, M. Carrington, R. S. Davis, U. Schumacher, G. Sauter, S. Huber, V. G. Puelles, N. Melling, A. Franke, on behalf of International Inflammatory Bowel Disease Genetics Consortium, M. Altfeld, and M. J. Bunder*

Specific subsets of HLA-DP molecules associated with ulcerative colitis and expressed on intestinal epithelial cells under inflammatory conditions can activate natural killer cells, resulting in intestinal epithelial damage.

963 **Higher Intra-Abdominal Visceral Adipose Tissue Mass Is Associated With Lower Rates of Clinical and Endoscopic Remission in Patients With Inflammatory Bowel Diseases Initiating Biologic Therapy: Results of the Constellation Study**

 *A. J. Yarur, A. Bruss, A. Moosreiner, P. Beniwal-Patel, L. Nunez, B. Berens, J. F. Colombel, S. R. Targan, C. Fox, G. Y. Melmed, M. T. Abreu, and P. Deepak*

Patients with moderate to severe inflammatory bowel disease; a high intra-abdominal visceral adipose tissue burden; and who started infliximab, vedolizumab, or ustekinumab had a lower rate of clinical and endoscopic response compared with those with a lower intra-abdominal visceral adipose tissue burden. These findings could be related to high tumor necrosis factor and interleukin-6 overexpression, but does not seem to be explained by differences in drug pharmacokinetics or changes in the microbiota.

976 Early Ileocecal Resection for Crohn's Disease Is Associated With Improved Long-term Outcomes Compared With Anti-Tumor Necrosis Factor Therapy: A Population-Based Cohort Study*M. Agrawal, A. C. Ebert, G. Poulsen, R. C. Ungaro, A. S. Faye, T. Jess, J.-F. Colombel, and K. H. Allin*

Using nationwide data with long-term follow up of an unselected population-based cohort from Denmark, we report improved long-term outcomes with ileocecal resection compared with anti-tumor necrosis factor as primary treatment for early ileal and ileocecal Crohn's disease and that a substantial subset of patients was on no medication 5 years after ileocecal resection.

Intestinal Inflammation**986 A Novel Peptide Prevents Enterotoxin- and Inflammation-Induced Intestinal Fluid Secretion by Stimulating Sodium-Hydrogen Exchanger 3 Activity***N. C. Zachos, H. Vaughan, R. Sarker, S. Est-Witte, M. Chakraborty, N. W. Baetz, H. Yu, V. Yarov-Yarovoy, G. McNamara, J. J. Green, C.-M. Tse, and M. Donowitz*

Pharmacologic stimulation of sodium-hydrogen exchanger 3 activity via a novel peptide improved fluid absorption in murine and human diarrheal disease models and may be an efficacious approach for the treatment of moderate/severe diarrheal diseases.

Pancreas**999 Amphipathic Liponecrosis Impairs Bacterial Clearance and Causes Infection During Sterile Inflammation***S. Kostenko, B. Khatua, S. Trivedi, A. N. Pillai, B. McFayden, M. Morsy, P. Rajalingamgari, V. Sharma, P. Noel, K. Patel, B. El-Kurdi, H. Borges da Silva, X. Chen, V. Chandan, S. Navina, S. Vela, R. Cartin-Ceba, C. Snozek, and V. P. Singh*

Infections develop during sterile illnesses due to impaired bacterial clearance. This impairment results from the release of excessive unbound fatty acids that kill our protective, phagocytic inflammatory cells. The principal unbound fatty acids, oleic and linoleic acid enter cell membranes amphipathically, injure mitochondria, cause liponecrosis, and impair bacterial clearance.

1016 Surveillance for Presumed BD-IPMN of the Pancreas: Stability, Size, and Age Identify Targets for Discontinuation*G. Marchegiani, T. Pollini, A. Burelli, Y. Han, H.-S. Jung, W. Kwon, D. M. Rocha Castellanos, S. Crippa, G. Belfiori, P. G. Arcidiacono, G. Capurso, L. Apadula, P. Zaccari, J. L. Noia, M. Gorris, O. Busch, A. Ponweera, K. Mann, I. E. Demir, V. Phillip, N. Ahmad, T. Hackert, M. Heckler, A. M. Lennon, E. Afghani, D. Vallicella, T. Dall'Olio, A. Nepi, C. M. Vollmer, H. Friess, P. Ghaneh, M. Besselink, M. Falconi, C. Bassi, B. K.-P. Goh, J.-Y. Jang, C. Fernández-Del Castillo, and R. Salvia*

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Surveillance discontinuation is feasible in branch duct intraductal papillary mucinous neoplasm of the pancreas stable for at least 5 years in patients older than 75 years with cysts <30 mm or older than 65 years with cysts ≤15 mm.

Hepatobiliary**1025 Prevalence of Liver Steatosis and Fibrosis in the General Population and Various High-Risk Populations: A Nationwide Study With 5.7 Million Adults in China***S. Man, Y. Deng, Y. Ma, J. Fu, H. Bao, C. Yu, J. Lv, H. Liu, B. Wang, and L. Li*

See editorial on page 825.

A considerable burden of liver steatosis and fibrosis exists in China, especially in populations with cardiovascular and chronic liver disease risk factors, such as obesity, diabetes, metabolic syndrome, and hepatitis B virus infection.

1041 Dynamics in Liver Stiffness Measurements Predict Outcomes in Advanced Chronic Liver Disease

 
G. Semmler, Z. Yang, L. Fritz, F. Köck, B. S. Hofer, L. Balcar, L. Hartl, M. Jachs, K. Stopfer, A. Schedlbauer, D. Neumayer, J. Maurer, T. Müllner-Bucsics, B. Simbrunner, B. Scheiner, M. Trauner, M. Mandorfer, T. Reiberger, and D. J. M. Bauer

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Dynamics in liver stiffness measurement provide updated prognostic information in patients with compensated and decompensated advanced chronic liver disease, and are superior to single time-point assessment and other measures of liver disease severity.

1053 Incidence and Risk Factors for Hepatocellular Carcinoma in Cirrhosis: The Multicenter Hepatocellular Carcinoma Early Detection Strategy (HEDS) Study


K. R. Reddy, D. McLerran, T. Marsh, N. Parikh, L. R. Roberts, M. Schwartz, M. H. Nguyen, A. Befeler, S. Page-Lester, R. Tang, S. Srivastava, J. A. Rinaudo, Z. Feng, and J. A. Marrero

The multicenter (HEDS) Hepatocellular Carcinoma Early Detection Strategy study uses the largest, multicenter, geographically diverse and prospective U.S. patient cohort to validate several risk factors for hepatocellular carcinoma.

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