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Video Related article in CGH Hot Papers From New Investigators

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Prediction models that combine epidemiologic and genetic data for Barrett's esophagus and esophageal adenocarcinoma may more accurately identify patients at higher levels of risk to allow personalization of therapy.

1282 Development and Validation of a Model to Determine Risk of Progression of Barrett's Esophagus to Neoplasia

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S. Parasa, S. Vennalaganti, S. Gaddam, P. Vennalaganti, P. Young, N. Gupta, P. Thota, B. Cash, S. Mathur, R. Sampliner, F. Moawad, D. Lieberman, A. Bansal, K. F. Kennedy, J. Vargo, G. Falk, M. Spaander, M. Bruno, and P. Sharma

A new scoring system identified patients with Barrett's esophagus at low, intermediate, or high risk for developing high-grade dysplasia (HGD) and esophageal adenocarcinoma.

1290 No Significant Association Between Proton Pump Inhibitor Use and Risk of Stroke After Adjustment for Lifestyle Factors and Indication

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L. H. Nguyen, P. Lochhead, A. D. Joshi, Y. Cao, W. Ma, H. Khalili, E. B. Rimm, K. M. Rexrode, and A. T. Chan

Among participants in two large prospective cohorts, proton pump inhibitor use was not associated with risk for incident ischemic stroke after adjusting for clinical indications of use.

1298 Efficacy of Laparoscopic Nissen Fundoplication vs Transoral Incisionless Fundoplication or Proton Pump Inhibitors in Patients With Gastroesophageal Reflux Disease: A Systematic Review and Network Meta-analysis

e

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J. E. Richter, A. Kumar, S. Lipka, B. Miladinovic, and V. Velanovich

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When compared with laparoscopic Nissen fundoplication (LNF), transoral incisionless fundoplication cannot be recommended based on current evidence as a long-term alternative to PPIs or LNF for treatment of GERD.

1309 Effects of Weight-Loss Medications on Cardiometabolic Risk Profiles: A Systematic Review and Network Meta-analysis

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R. Khera, A. Pandey, A. K. Chandar, M. H. Murad, L. J. Prokop, I. J. Neeland, J. D. Berry, M. Camilleri, and S. Singh

Though several pharmacological weight loss agents have been approved, they only exert a modest impact on cardiometabolic risk profile in obese and overweight adults, even one year after therapy. Their impact on modifying long-term cardiovascular outcomes merits detailed evaluation.

1320 Glycosylation of Immunoglobulin G Associates With Clinical Features of Inflammatory Bowel Diseases

www

M. Šimurina, N. de Haan, F. Vučković, N. A. Kennedy, J. Štambuk, D. Falck, I. Trbojević-Akmačić, F. Clerc, G. Razdorov, A. Khon, A. Latiano, R. D'Incà, S. Danese, S. Targan, C. Landers, M. Dubinsky, The Inflammatory Bowel Disease Biomarkers Consortium, D. P. B. McGovern, V. Annesse, M. Wuhrer, and G. Lauc

This large multicentric study of >3,400 IBD patients and controls demonstrated potential for the IgG glycome to serve as a novel biomarker for stratification of IBD patients within a precision medicine treatment strategy.

1334 Long-term Efficacy and Safety of Stem Cell Therapy (Cx601) for Complex Perianal Fistulas in Patients With Crohn's Disease

J. Panés, D. García-Olmo, G. Van Assche, J. F. Colombel, W. Reinisch, D. C. Baumgart, A. Dignass, M. Nachury, M. Ferrante, L. Kazemi-Shirazi, J. C. Grimaud, F. de la Portilla, E. Goldin, M. P. Richard, M. C. Diez, I. Tagarro, A. Leselbaum, and S. Danese, for the ADMIRE CD Study Group Collaborators

The results of this study suggest that stem cell therapy is an effective, durable, and safe treatment for healing complex perianal fistulas in patients with Crohn's disease.

1343 Increasing Infliximab Dose Based on Symptoms, Biomarkers, and Serum Drug Concentrations Does Not Increase Clinical, Endoscopic, and Corticosteroid-Free Remission in Patients With Active Luminal Crohn's Disease

G. D'Haens, S. Vermeire, G. Lambrecht, F. Baert, P. Bossuyt, B. Pariente, A. Buisson, Y. Bouhnik, J. Filippi, J. vander Woude, P. Van Hootegeem, J. Moreau, E. Louis, D. Franchimont, M. De Vos, F. Mana, L. Peyrin-Biroulet, H. Brix, M. Allez, P. Caenepeel, A. Aubourg, B. Oldenburg, M. Pierik, A. Gils, S. Chevret, and D. Laharie, on behalf the GETAID

Increasing doses of infliximab based on a combination of symptoms and serum drug concentrations does not affect corticosteroid-free clinical remission compared to a strategy based on symptoms alone.

1352 Increasing Rates of Surgery for Patients With Nonmalignant Colorectal Polyps in the United States

A. F. Peery, K. S. Cools, P. D. Strassle, S. K. McGill, S. D. Crockett, A. Barker, M. Koruda, and I. S. Grimm

In a large, nationally representative sample, the authors found that surgery for non-malignant colorectal polyps is common and has significantly increased over the last 14 years.

Clinical—Liver**1361 Glycome Patterns of Perfusate in Livers Before Transplantation Associate With Primary Nonfunction**

X. Verhelst, A. Geerts, I. Jochmans, D. Vanderschaeghe, A. Paradissis, A. Vanlander, F. Berrevoet, G. Dahlqvist, F. Nevens, J. Pirenne, X. Rogiers, N. Callewaert, R. I. Troisi, and H. Van Vlierberghe

Analyzing the glycomic profile of perfusion fluid in which the liver is transported from donor to recipient can help predict the occurrence of primary non-function.

1369 Accuracy of the Enhanced Liver Fibrosis Test vs FibroTest, Elastography, and Indirect Markers in Detection of Advanced Fibrosis in Patients With Alcoholic Liver Disease

M. Thiele, B. S. Madsen, J. F. Hansen, S. Detlefsen, S. Antonsen, and A. Krag

In patients with alcoholic liver disease, a blood-based biomarker test, Enhanced Liver Fibrosis test, and FibroTest have excellent accuracy for diagnosing advanced liver fibrosis, the precursor of cirrhosis. However, liver stiffness with ultrasound elastography remains the most accurate marker.

Clinical—Pancreas**1380 Regular Use of Aspirin or Non-Aspirin Nonsteroidal Anti-Inflammatory Drugs Is Not Associated With Risk of Incident Pancreatic Cancer in Two Large Cohort Studies**

N. Khalaf, C. Yuan, T. Hamada, Y. Cao, A. Babic, V. Morales-Oyarvide, P. Kraft, K. Ng, E. Giovannucci, S. Ogino, M. Stampfer, B. B. Cochrane, J. E. Manson, C. B. Clish, A. T. Chan, C. S. Fuchs, and B. M. Wolpin

Regular aspirin or non-aspirin NSAID use was not associated with subsequent risk of pancreatic cancer.

Basic and Translational—Alimentary Tract

1391 *Helicobacter pylori* Depletes Cholesterol in Gastric Glands to Prevent Interferon Gamma Signaling and Escape the Inflammatory Response

www

P. Morey, L. Pfannkuch, E. Pang, F. Boccellato, M. Sigal, A. Imai-Matsushima, V. Dyer, M. Koch, H.-J. Mollenkopf, P. Schlaermann, and T. F. Meyer

Helicobacter pylori colonizes the gastric mucosa for decades. The authors identified a key step in the host immune response that is inhibited by the bacteria. This is mediated through extraction of cholesterol from host cells, which leads to failure of IFN receptor assembly and bactericidal responses.

1405 Villin-1 and Gelsolin Regulate Changes in Actin Dynamics That Affect Cell Survival Signaling Pathways and Intestinal Inflammation

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S. Roy, A. Esmailniakooshkghazi, S. Patnaik, Y. Wang, S. P. George, A. Ahrorov, J. K. Hou, A. J. Herron, H. Sesaki, and S. Khurana

These studies demonstrate the role of two actin binding proteins, villin-1 and gelsolin in stress signaling and their contribution to the pathogenesis of Crohn's disease.

Basic and Translational—Liver

1421 Knockdown of Anillin Actin Binding Protein Blocks Cytokinesis in Hepatocytes and Reduces Liver Tumor Development in Mice Without Affecting Regeneration

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S. Zhang, L. H. Nguyen, K. Zhou, H.-C. Tu, A. Sehgal, I. Nassour, L. Li, P. Gopal, J. Goodman, A. G. Singal, A. Yopp, Y. Zhang, D. J. Siegwart, and H. Zhu

See editorial on page 1229.

Cytokinesis inhibition through suppression of Anillin Actin Binding Protein in the liver can effectively suppress tumor development while sparing normal liver function and regeneration.

1435 Efficacy of NS5A Inhibitors Against Hepatitis C Virus Genotypes 1–7 and Escape Variants

www

J. M. Gottwein, L. V. Pham, L. S. Mikkelsen, L. Ghanem, S. Ramirez, T. K. H. Scheel, T. H. R. Carlsen, and J. Bukh

Among 7 clinically relevant hepatitis C virus NS5A inhibitors, pibrentasvir and velpatasvir exerted pangenotypic effects, with high efficacy against variants that harbor resistance-associated substitutions. Pre-existing resistance mutations facilitated the selection of variants with high fitness.

1449 Nuclear Receptor Subfamily 1 Group D Member 1 Regulates Circadian Activity of NLRP3 Inflammasome to Reduce the Severity of Fulminant Hepatitis in Mice

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B. Pourcet, M. Zecchin, L. Ferri, J. Beauchamp, S. Sitaula, C. Billon, S. Delhaye, J. Vanhoutte, A. Mayeuf-Louchart, Q. Thorel, J. T. Haas, J. Eeckhoutte, D. Dombrowicz, C. Duhem, A. Boulinguez, S. Lancel, Y. Sebti, T. P. Burris, B. Staels, and H. M. Duez

Anti-inflammatory actions of the biological clock protein Rev-erb α may prevent the onset of fulminant hepatitis by regulating the NLRP3 inflammasome, and increase survival rates.

1465 Hedgehog-YAP Signaling Pathway Regulates Glutaminolysis to Control Activation of Hepatic Stellate Cells

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K. Du, J. Hyun, R. T. Premont, S. S. Choi, G. A. Michelotti, M. Swiderska-Syn, G. D. Dalton, E. Thelen, B. S. Rizi, Y. Jung, and A. M. Diehl

See editorial on page 1231.

Excessive growth of liver stellate cells that produce fibrosis is a major factor in the development of cirrhosis. This study demonstrates that stellate cells must break down glutamine to generate energy for growth and inhibiting that process blocks scarring.

1480 JTC801 Induces pH-dependent Death Specifically in Cancer Cells and Slows Growth of Tumors in Mice

X. Song, S. Zhu, Y. Xie, J. Liu, L. Sun, D. Zeng, P. Wang, X. Ma, G. Kroemer, D. L. Bartlett, T. R. Billiar, M. T. Lotze, H. J. Zeh, R. Kang, and D. Tang

This study demonstrates that induction of alkaliptosis by agents such as JTC801 may represent a new therapeutic avenue for patients with pancreatic adenocarcinoma.

1494 Krüppel-like Factor 5, Increased in Pancreatic Ductal Adenocarcinoma, Promotes Proliferation, Acinar-to-Ductal Metaplasia, Pancreatic Intraepithelial Neoplasia, and Tumor Growth in Mice

P. He, J. W. Yang, V. W. Yang, and A. B. Bialkowska

Krüppel-like factor 5, a transcription factor overexpressed in pancreatic ductal adenocarcinoma, promotes acinar-to-ductal metaplasia, formation of pancreatic intraepithelial neoplasia, and tumor growth in genetic engineered mouse models.

1509 Loss of *Pten* and Activation of *Kras* Synergistically Induce Formation of Intraductal Papillary Mucinous Neoplasia From Pancreatic Ductal Cells in Mice

J. L. Kopp, C. L. Dubois, D. F. Schaeffer, A. Samani, F. Taghizadeh, R. W. Cowan, A. D. Rhim, B. L. Stiles, M. Valasek, and M. Sander

Loss of the tumor suppressor *Pten* in mouse pancreatic ductal cells results in the formation of intraductal papillary mucinous neoplasia that recapitulates several aspects of human pancreatic disease, including spontaneous mutations in the oncogene *Kras*.

1524 Galectin-3 Mediates Tumor Cell–Stroma Interactions by Activating Pancreatic Stellate Cells to Produce Cytokines via Integrin Signaling

W. Zhao, J. A. Ajani, G. Sushovan, N. Ochi, R. Hwang, M. Hafley, R. L. Johnson, R. S. Bresalier, C. D. Logsdon, Z. Zhang, and S. Song

GAL3 activates PSC cells to produce inflammatory cytokines via ITGB1 signaling to ILK and activation of NF- κ B. Inhibition of this pathway reduced growth and metastases of pancreatic orthotopic tumors in mice.

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R. M. Craig

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