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Proton pump inhibitor use was not associated with higher risk of death after accounting for reverse causation. Longer duration of proton pump inhibitor use did not confer higher mortality risks.

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K. Arima, R. Zhong, T. Ugai, M. Zhao, K. Haruki, N. Akimoto, M. C. Lau, K. Okadome, R. S. Mehta, J. P. Väyrynen, J. Kishikawa, T. S. Twombly, S. Shi, K. Fujiyoshi, K. Kosumi, Y. Ogata, H. Baba, F. Wang, K. Wu, M. Song, X. Zhang, C. S. Fuchs, C. L. Sears, W. C. Willett, E. L. Giovannucci, J. A. Meyerhardt, W. S. Garrett, C. Huttenhower, A. T. Chan, J. A. Nowak, M. Giannakis, and S. Ogino

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A Western-style diet (rich in red and processed meat and sugar) increased the risk of colorectal cancer containing high amounts of specific toxin-producing *Escherichia coli* bacterium.

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METTL3 is a potential therapeutic target for colorectal cancer whose inhibition reverses immune suppression through the m⁶A-BHLHE41-CXCL1 axis.

908 Altered Mycobiota Signatures and Enriched Pathogenic *Aspergillus rambellii* Are Associated With Colorectal Cancer Based on Multicohort Fecal Metagenomic Analyses

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Multipopulation analyses were conducted to identify signature colorectal cancer-associated fungal species, including *Aspergillus rambellii*, and these fungi can be used for the noninvasive diagnosis of patients with colorectal cancer.

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- The CORE-IBD international multidisciplinary consensus establishes the core outcomes that should always be measured in randomized controlled trials for adult patients with Crohn's disease or ulcerative colitis.
- 965** **Exhaustion of CD39-Expressing CD8⁺ T Cells in Crohn's Disease Is Linked to Clinical Outcome**
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This study identifies the exhaustion status of a population of CD8⁺ immune cells that express the regulating molecule CD39 as linked to the clinical course of Crohn's disease.

Functional GI Disease

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M. El-Salhy, R. Winkel, C. Casen, T. Hausken, O. H. Gilja, and J. G. Hatlebakk
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- This study applied a protocol for fecal microbiota transplantation to irritable bowel syndrome with high response rates and sustained effects. Ten possible were identified, who were correlated to fecal microbiota transplantation effects.
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This comprehensive systematic review assessed multiple risk and protective factors for abdominal pain disorders of gut-brain interaction and symptom persistence in both adults and children.

1024 Integrated Analysis of Colorectal Cancer Reveals Cross-Cohort Gut Microbial Signatures and Associated Serum Metabolites

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R. Gao, C. Wu, Y. Zhu, C. Kong, Y. Zhu, Y. Gao, X. Zhang, R. Yang, H. Zhong, X. Xiong, C. Chen, Q. Xu, and H. Qin

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1038 Population-level Metagenomics Uncovers Distinct Effects of Multiple Medications on the Human Gut Microbiome

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N. Nagata, S. Nishijima, T. Miyoshi-Akiyama, Y. Kojima, M. Kimura, R. Aoki, M. Ohsugi, K. Ueki, K. Miki, E. Iwata, K. Hayakawa, N. Ohmagari, S. Oka, M. Mizokami, T. Itoi, T. Kawai, N. Uemura, and M. Hattori

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