

Episode 1 show notes: COVID & cancer, ACLF, and the downfall of biomarkers

Episode recap - what have we learnt?

- COVID-19 pandemic has had major impacts on CRC pathways in the NHS, with huge reductions in referrals and procedures in the first wave, leading to a 22% reduction in diagnoses, 3,500 fewer patients diagnosed than expected.
 - Morris E, et al. Impact of the COVID-19 pandemic on the detection and management of colorectal cancer in England: a population-based study. Lancet Gastro Hep (2021).
 https://doi.org/10.1016/S2468-1253(21)00005-4
- Acute on chronic liver failure is associated with changes in gene expression in immune cell
 populations, particularly associated with immunometabolism, which may help us develop new
 biomarkers and potentially treatments.
 - o Li J, et al. PBMC transcriptomics identifies immune-metabolism disorder during the development of HBV-ACLF. Gut (2021). https://doi.org/10.1136/gutjnl-2020-323395
- Disappointingly, a previously reported gene expression biomarker of IBD progression could not be validated in two further cohorts. We need to be cautious, even sceptical, about novel transcriptional biomarkers for disease and prognosis, and seek out multiple independent validation studies.
 - Gasparetto M, et al. Transcription and DNA Methylation Patterns of Blood-Derived CD8+ T Cells Are Associated With Age and Inflammatory Bowel Disease But Do Not Predict Prognosis.
 Gastroenterology (2021). https://doi.org/10.1053/j.gastro.2020.08.017
- Microscopic colitis is associated with a small increased risk of lung cancer and lymphoma at diagnosis, but a lower risk of CRC over time.
 - Bergman D, et al. Microscopic Colitis and Risk Of Cancer—A Population-Based Cohort Study.
 Journal of Crohn's and Colitis (2021). https://doi.org/10.1093/ecco-jcc/jjaa156
- In the real world setting, vedolizumab for IBD shows decent performance in terms of clinical remission, even in patients several years post-diagnosis, and who have been previously exposed to multiple anti-TNF agents.
 - Mühl L, et al. Clinical experiences and predictors of success of treatment with vedolizumab in IBD patients: a cohort study. BMC Gastroenterol (2021). https://doi.org/10.1186/s12876-021-01604-z
- Treatment of patients with minimally raised ALT and high viral load in CHB reduces the risk of fibrosis progression
 - Hsu Y-C, et al. Once-daily tenofovir disoproxil fumarate in treatment-naive Taiwanese patients with chronic hepatitis B and minimally raised alanine aminotransferase (TORCH-B): a multicentre, double-blind, placebo-controlled, parallel-group, randomised trial. Lancet Inf Dis (2021). https://doi.org/10.1016/S1473-3099(20)30692-7
- Treatment of individuals with PBC resistant to UDCA with add on budesonide does not improve liver histology, but may improve biochemical outcome measures. More trials and novel therapeutics for AI liver diseases are urgently required! This study also underlines the problem of evidence-based medicine in rare diseases.
 - Hirschfield G, et al. A placebo-controlled randomised trial of budesonide for PBC following an insufficient response to UDCA. Journal of Hepatology (2021). https://doi.org/10.1016/j.jhep.2020.09.011

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