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IN BRIEF

GASTROINTESTINAL CANCER

Ramucirumab plus paclitaxel as a second-line treatment for advanced gastric or gastro-oesophageal junction cancer

The efficacy of ramucirumab plus paclitaxel ($n = 330$) versus placebo plus paclitaxel ($n = 335$) was assessed in previously treated patients with advanced gastric or gastro-oesophageal junction adenocarcinoma. The RAINBOW double-blind randomized phase III clinical trial reported a higher incidence of adverse events in patients on ramucirumab than in those receiving placebo. However, overall survival was significantly longer in the ramucirumab than the placebo group (median 9.6 versus 7.4 months, respectively; $P = 0.017$).

Original article Wilke, H. *et al.* Ramucirumab plus paclitaxel versus placebo plus paclitaxel in patients with previously treated advanced gastric or gastro-oesophageal junction carcinoma (RAINBOW): a double-blind randomised phase 3 trial. *Lancet Oncol.* doi:10.1016/S1470-2045(14)70420-6

PANCREATITIS

The HLA-DQA1–HLA-DRB1 haplotype is linked to risk of thiopurine-induced pancreatitis in IBD

The development of thiopurine-induced pancreatitis in patients with IBD has been linked to the HLA-DQA1*02:01–HLA-DRB1*07:01 haplotype (rs2647087). The association was identified by genome-wide analysis of 172 patients and was validated in a separate cohort ($n = 78$). Patients with IBD who are heterozygous or homozygous at rs2647087 have a 9% and 17% risk of pancreatitis after thiopurine treatment, respectively.

Original article Heap, G. A. *et al.* HLA-DQA1–HLA-DRB1 variants confer susceptibility to pancreatitis induced by thiopurine immunosuppressants. *Nat. Genet.* doi:10.1038/ng.3093

HEPATITIS

HCV neutralizing antibodies eradicate HCV infection

Neutralizing antibodies are known to protect against HCV infection; however, their effect on existing infection is unclear. Jong *et al.* have shown that three broadly neutralizing antibodies (AR3A, AR3B and AR4A) can eradicate HCV infection in primary human hepatocytes and in a human chimeric mouse model.

Original article Jong, Y. P. *et al.* Broadly neutralizing antibodies abrogate established hepatitis C virus infection. *Sci. Transl. Med.* **6**, 254ra129 (2014)

COLORECTAL CANCER

The importance of inflammation in bacteria-induced CRC

A new study published in *Nature Communications* has reported an increased abundance of *Enterobacteriaceae* in *IL10*$^{-/-}$ mice (IL-10 deficiency results in spontaneous and chronic colitis) compared with healthy controls. Results from *Escherichia coli* RNA sequencing in *IL10*$^{-/-}$ mice revealed an altered expression profile, which was attributed to intestinal adaptation. Moreover, inflammation and carcinogenesis appeared to modify the expression of tumour-promoting genes in the *E. coli* pks island (a region encoding polyketide-peptide genotoxins). The authors believe that inflammation in these mice underpins *Enterobacteriaceae* colonization and affects expression of genes related to tumour development.

Original article Arthur, J. C. *et al.* Microbial genomic analysis reveals the essential role of inflammation in bacteria-induced colorectal cancer. *Nat. Commun.* doi:10.1038/ncomms5724