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IN BRIEF

GASTRIC CANCER

Breath test for gastric cancer

The need exists for a simple and noninvasive test to diagnose gastric cancer. In this study by Xu *et al.*, alveolar exhaled breath samples from 130 patients with gastric complaints were analysed using nanomaterial-based sensors. Results from this pilot study show that the breath test was able to identify gastric cancer and distinguish it from other gastric diseases. A large multicentre trial has now been initiated to confirm these encouraging findings.

Original article Xu, Z.-Q. *et al.* A nanomaterial-based breath test for distinguishing gastric cancer from benign gastric conditions. *Br. J. Cancer* **108**, 941–950 (2013)

IBD

Combination of adalimumab and ciprofloxacin in perianal fistulizing Crohn's disease

A randomized, double-blind, placebo-controlled trial has investigated whether the combination of adalimumab and ciprofloxacin is more effective than adalimumab alone in perianal fistulizing Crohn's disease. 76 patients from eight Dutch hospitals were included in the trial, which lasted 12 weeks. The primary end point (a 50% reduction in fistulas from baseline to week 12) was achieved in 71% of patients who received combination therapy and in 47% of patients receiving adalimumab plus placebo ($P=0.047$).

Original article Dewint, P. *et al.* Adalimumab combined with ciprofloxacin is superior to adalimumab monotherapy in perianal fistula closure in Crohn's disease: a randomised, double-blind, placebo controlled trial (ADAFI). *Gut* doi:10.1136/gutjnl-2013-304488

VIRAL HEPATITIS

New treatment strategy for HCV infection—targeting microRNA-122?

HCV survival and replication is dependent on microRNA-122 (miR-122). A phase IIa study, including 36 patients, has been conducted evaluating the safety and efficacy of miravirsin; this molecule is an antisense oligonucleotide that is able to enter liver cells and bind tightly to miR-122 to inhibit its action. Treatment with miravirsin was shown to reduce HCV RNA levels in a dose-dependent manner in these patients. Caution is required, however, as miR-122 is a tumour suppressor gene for hepatocellular carcinoma so long-term administration could prove problematic.

Original article Janssen, H. L. A. *et al.* Treatment of HCV infection by targeting microRNA. *N. Engl. J. Med.* doi:10.1056/NEJMoa1209026

GENETICS

Mutational signature of oesophageal adenocarcinoma revealed

Dulak *et al.* performed exome sequencing in 149 oesophageal adenocarcinoma samples, and 15 of these samples were subjected to whole-genome sequencing. 26 significantly mutated genes were identified (of which five were already known to have a role in this cancer). The newly identified genes include chromatin-modifying factors as well as upstream modulators of the RAC1 GTPase. These results could help in the quest for new therapeutic targets for oesophageal adenocarcinoma.

Original article Dulak, A. M. *et al.* Exome and whole-genome sequencing of oesophageal adenocarcinoma identifies recurrent driver events and mutational complexity. *Nat. Genet.* doi:10.1038/ng.2591