Nature Reviews Gastroenterology & Hepatology 12, 188 (2015); published online 10 March 2015; doi:10.1038/nrgastro.2015.41;

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## **IN BRIEF**

#### **IBS**

## Experimental stress mimics the constricted small bowel experienced in stressed patients with IBS

Pritchard et al. have mimicked the effect of stress on the small bowel experienced by patients with IBS. Healthy volunteers were subject to stress-inducing stimuli: either injection with corticotrophin releasing hormone (CRH) or hand immersion in cold water, after which bowel measurements were recorded. Both stimuli reduced small bowel water content. CRH injection increased ascending colon volume. The authors speculate that stress speeds up water transfer from the small bowel into the ascending colon.

Original article Pritchard, S. E. et al. Effect of experimental stress on the small bowel and colon in healthy humans. Neurogastroenterol. Motil. doi:10.1111/nmo.12529

### COLORECTAL CANCER

## Engineering carcinogenesis in intestinal organoids

Mutations in tumour suppressor genes (APC, SMAD4 and TP53) and oncogenes (KRAS and PI3KCA) were introduced using the CRISPR-Cas9 system into organoids derived from normal intestinal epithelium. Organoids with all five mutations grew independently of *in vitro* growth factors and formed tumours in mice, but did not metastasize to the liver after injection into mouse spleens. Mutations introduced into organoids derived from chromosome-instable adenomas did form macrometastatic colonies.

Original article Matano, P. et al. Modeling colorectal cancer using CRISPR-Cas9mediated engineering of human intestinal organoids. *Nat. Med.* doi:10.1038/nm.3802

### **HEPATITIS**

## Solid organ transplantation from HBV positive donors

The American Society of Transplantation have published consensus guidelines for the management of patients who receive solid organs from donors with HBV. Antiviral treatment reduces the rate of transmission in liver recipients from donors positive for HBV core antibodies and should be prescribed based on the recipient's immunity. Given the appropriate consent, the Society suggests that solid organs from donors who are positive for anti-HBV core antibodies should be considered for transplantation after individual assessment of the associated risks and benefits.

**Original article** Huprikar, S. et al. Solid organ transplantation from hepatitis B viruspositive donors: consensus guidelines for recipient management. *Am. J. Transplant.* doi:10.1111/ajt.13187

## **COELIAC DISEASE**

# Larazotide acetate improves symptoms of coeliac disease more than gluten-free diet alone

A randomized, double-blind, placebo-controlled trial has assessed the efficacy of larazotide acetate in controlling symptoms of coeliac disease. 342 patients with coeliac disease were treated with either placebo, 0.5, 1.0 or 2.0 mg larazotide acetate for 12 weeks in addition to maintaining their gluten-free diet. The 0.5 mg dose was more effective than placebo at reducing symptoms; safety was comparable to that of the placebo group. The higher doses of larazotide acetate were no better than placebo.

**Original article** Lefdfler, D. A. Larazotide acetate for persistent symptoms of celiac disease despite a gluten-free diet: a randomized controlled trial. *Gastroenterology* doi:10.1053/j.gastro.2015.02.008