

## IN BRIEF

## IBS

Probiotics are significantly better than placebo at improving the symptoms of IBS in adults, according to the findings of a systematic review. The review included parallel group randomized clinical trials that compared at least 1 week of probiotic treatment with placebo or no treatment in adults with IBS. There was significant heterogeneity in the results, however, so the extent of the benefit that patients gained from taking probiotics is not known.

**Original article** Moayyedi, P. *et al.* The efficacy of probiotics in the treatment of irritable bowel syndrome: a systematic review. *Gut* **59**, 325–332 (2010)

## GENETICS

Metagenomic sequencing of gut microbes in fecal samples taken from 124 individuals has established a catalog of nonredundant human intestinal microbial genes. Qin *et al.* found that 99% of the genes identified were bacterial, with each individual having at least 160 bacterial species in their gut, many of which were shared among individuals. These data support the view that the prevalent human microbiome is of finite size and is not overly large.

**Original article** Qin, J. *et al.* A human gut microbial gene catalogue established by metagenomic sequencing. *Nature* **464**, 59–65 (2010)

## HEPATITIS

Targeted anti-hepatitis C drugs are needed with better efficacy and fewer side effects than currently approved therapies. The macrocyclic HCV NS3/4A protease inhibitor TMC435 was first tested in 49 healthy volunteers in a phase I first-in-human randomized controlled trial, and then tested in an open-label, noncontrolled trial in six patients infected with HCV genotype 1. There were no serious adverse events and the pharmacokinetic profile of the drug supported a once-daily dosing regimen. Plasma HCV levels dropped rapidly in the patients with HCV who were given TMC435 and these low levels were maintained over the dosing period.

**Original article** Reesnik, H. W. *et al.* Rapid HCV-RNA decline with once daily TMC435: a phase I study in healthy volunteers and hepatitis C patients. *Gastroenterology* **138**, 913–921 (2010)

## IBD

Visilizumab, a humanized IgG2 monoclonal anti-CD3 antibody, was tested for safety and dose response in a dose-escalation study that included 104 patients with severe steroid-refractory ulcerative colitis. The drug induced a symptomatic and clinical response. Symptomatic response rates and remission rates were similar regardless of the dose given (5 µg/kg per day to 12.5 µg/kg per day). All patients experienced adverse events, some of which were serious.

**Original article** Baumgart, D. C. *et al.* Prospective randomized open-label multicenter phase I/II dose escalation trial of visilizumab (HuM291) in severe steroid-refractory ulcerative colitis. *Inflamm. Bowel Dis.* **16**, 620–629 (2010)